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Management of urinary incontinence in cats and dogs

Search strategy

Database: CAB Abstracts <2000 to 2018 Week 11>
Search Strategy:

- 1 (Cats or dogs or canine* or feline*).mp.
- 2 (kidney or renal or urine or urinary).mp.
- 3 (diagnos* or biomarker* or stage or staging or treat* or therap* or nutrition* or diet* or manag*).mp.
- 4 incontinence.mp.
- 5 1 and 2 and 3 and 4
- 6 limit 5 to yr="2008 -Current"

[mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]

References of relevance from CAB Abstracts database

<1>
Accession Number
20183059307
Author
Deroy-Bordenave, C.; Irubetagoiena, I.
Title
Urological surgery: Ectopic ureter surgery in dogs and long-term urinary incontinence. [French]
Source
Point Veterinaire; 2018. 49(382 (Part 1)):6-7. 5 ref.
Publisher
Newsmed
Location of Publisher
Paris
Country of Publication
France
Abstract
The clinical aspects, classification, diagnosis, epidemiology, and treatment of ectopic ureter in dogs were discussed.
Publication Type
Journal article.

<2>
Accession Number
20183052186

Author

Santos, I. O. V. dos; Souza, H. J. M. de; Silva, R. S. da

Title

Orthotopic ureterocele in bitch (Canis familiaris) - a case report. [Portuguese]

Source

Clinica Veterinaria; 2017. 22(129):64-72. 28 ref.

Publisher

Editora Guara

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

Ureterocele is a dilation of the final portion of the ureter, which results from an embryological failure of unknown cause. This article describes the case of a three-month-old female poodle with complaints of urinary incontinence. Imaging exams helped establish the diagnosis by disclosing an orthotopic cystic dilation. The surgical technique employed to treat the condition was resection of the ureterocele with marsupialization of the edges. Complete remission of clinical signs was achieved two months post-surgery; the dog remains continent two years after the procedure.

Publication Type

Journal article.

<3>

Accession Number

20183051966

Author

Byron, J. K.

Title

Drugs used to manage urinary incontinence in dogs & cats.

Source

NAVJ Clinician's Brief; 2017. (December):53-58. 23 ref.

Publisher

Educational Concepts LLC

Location of Publisher

Tulsa

Country of Publication

USA

Publication Type

Journal article.

<4>

Accession Number

20183021344

Author

Kilpatrick, S.; Hill, T.

Title

Submucosal collagen injection for management of urinary incontinence following urethral stent placement. (Special Issue: Urinary and cardiac disease: selected studies and case reports.)

Source

Topics in Companion Animal Medicine; 2017. 32(2):55-57.

Publisher

Elsevier Inc

Location of Publisher

Orlando

Country of Publication

USA

Abstract

An 8-year-old, entire, male British Bulldog was referred for a week-long history of severe stranguria and dysuria. A prostatic wash was diagnostic of prostatic carcinoma. A transluminal urethral stent was placed in the proximal urethra, which resulted in resolution of the urinary obstruction, however, the dog developed severe urinary incontinence after the procedure. Cystoscopically-guided submucosal collagen injections were performed immediately proximal to the os penis. The dog's incontinence resolved with a single collagen injection for the 10-month follow-up period.

Publication Type

Journal article.

<5>

Accession Number

20173356310

Author

Vandenberghe, H.; Blot, S.

Title

Urinary incontinence of neurological origin in dogs and cats: physiopathology, diagnosis and treatment.

[French]

Source

Le Nouveau Praticien Veterinaire Canine - Feline; 2017. (67):26-33. 20 ref.

Publisher

NEVA Europarc

Location of Publisher

Creteil

Country of Publication

France

Abstract

The physiopathology, clinical signs, diagnosis and treatment of the different types of neurological urinary incontinence, subsequent complications and prognosis in cats and dogs are described.

Publication Type

Journal article.

<6>

Accession Number

20173359931

Author

Palerme, J. S.; Mazepa, A.; Hutchins, R. G.; Ziglioli, V.; Vaden, S. L.

Title

Clinical response and side effects associated with testosterone cypionate for urinary incontinence in male dogs.

Source

Journal of the American Animal Hospital Association; 2017. 53(5):285-290.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

Urethral sphincter mechanism incompetence (USMI) is reported much more seldom in male dogs than in female dogs. The few existing reports evaluating the efficacy of medical therapy in controlling USMI in males have demonstrated limited success. In this case series, we report the effect of testosterone cypionate, given at a median dose of 1.5 mg/kg intramuscularly every 4 wk, in eight male dogs with USMI. Response was evaluated through the review of medical records and telephone interviews with the clients. Based on owners' assessments, a good to excellent response was reported in three of eight dogs (38%), a slight response was reported in one of eight dogs (12%), and a poor response was reported in four of eight dogs (50%). Adverse effects were not reported, and benefit was judged sufficient to continue therapy in two cases. The results reported in this case series suggest that testosterone cypionate might be an effective and safe treatment option for male dogs with USMI.

Publication Type

Journal article.

<7>

Accession Number

20173317809

Author

Jeong InSeong; Rahman, M. M.; Kim HwangMin; Kim SeHoon

Title

Surgical management of extramural ectopic ureter by modified colposuspension following ureteroneocystostomy in a young female Siberian Husky dog.

Source

Journal of Advanced Veterinary and Animal Research; 2017. 4(3):301-306. 10 ref.

Publisher

Network for the Veterinarians of Bangladesh

Location of Publisher

Mymensingh

Country of Publication

Bangladesh

Abstract

Objective: Postoperative complication of extramural ectopic ureters (EEUs) with persistent urinary incontinence (UI) is common in Siberian Huskies. This case report was aimed at reporting the successful correction procedure of EEU in Siberian Huskies by surgical procedure. Materials and methods: A three-month-old and weighing 7.9 kg Siberian Husky dog was presented with history of an acute dermatitis around the genitals, swelling of the genitals and dribbling urination. Abdominal radiographs, ultrasonography, and 3D computed tomography scanning revealed presence of the ectopic ureter with urinary incontinence. Ureteroneocystostomy was applied as the first choice of corrective procedure in this case, and clinical signs were corrected apparently after surgery. Unfortunately, UI with cystitis was developed two months postoperatively. To correct the condition, surgical procedure of colposuspension with ovarian hysterectomy and cystopexy was opted. Results: Post-operative progression showed good prognosis and the dog recovered fully. Follow up checkup of the patient after 4 months postoperative and follow up phone call 27 months later did not reveal any abnormalities. Conclusion: This case report recommends surgical procedure

of modified colposuspension following ureteroneocystostomy to correct EEU and its postoperative complication.

Publication Type
Journal article.

<8>

Accession Number
20173218439

Author

Byron, J. K.; Taylor, K. H.; Phillips, G. S.; Stahl, M. S.

Title

Urethral sphincter mechanism incompetence in 163 neutered female dogs: diagnosis, treatment, and relationship of weight and age at neuter to development of disease.

Source

Journal of Veterinary Internal Medicine; 2017. 31(2):442-448. 34 ref.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background: Urethral sphincter mechanism incompetence (USMI) is the most common cause of urinary incontinence in neutered bitches and is most common in dogs weighing >20 kg. Objectives: To describe a population of neutered bitches with USMI and investigate their initial presentation, the relationship between weight and age at neuter, and treatment. Animals: One hundred and sixty-three female dogs with USMI (UI) diagnosed between January 2009 and December 2012, and 193 continent neutered control (C) bitches. Methods: Retrospective data were collected from neutered female dogs with USMI and healthy, continent neutered females presented between January 2009 and December 2012. Results: Urinary incontinent dogs weighed more than C dogs ($P=0.003$), and there was no difference in age at neuter. The relationship between weight at diagnosis and age at neuter was found to impact the hazard of USMI. A decrease in the hazard of USMI was found in dogs weighing >25 kg for every month delay of neuter in the first year. The hazard did not change for dogs <15 kg. Median time from neuter to development of incontinence was 3.73 years. Phenylpropanolamine was prescribed in 75.5%, diethylstilbestrol in 21.5%, and both in 3.1% of dogs. Conclusions and Clinical Importance: Neutering bitches expected to be >25 kg adult weight later in their first year may decrease the hazard of developing USMI, whereas age at neutering of bitches <25 kg may not impact continence. Heavier dogs have increased risk of USMI, and onset occurs within a few years of neuter.

Publication Type

Journal article.

<9>

Accession Number
20173175696

Author

Hnizdo, J.

Title

Cystoscopically-guided laser ablation of an ectopic ureter in a bitch - a case report. [Czech]

Source

Veterinarstvi; 2017. 67(5):335-340. 37 ref.

Publisher

Profi Press, s.r.o.

Location of Publisher

Praha 2

Country of Publication

Czech Republic

Abstract

The article describes the case of a five-month-old, female labrador retriever puppy presented for urinary incontinence. Based on clinical history and CT findings, an unilateral intramural ectopic ureter (EU) was diagnosed. As a method of treatment, cystoscopically-guided laser ablation (CGLA) was applied. A diode laser was utilized to ablate the luminal wall of the ectopic ureter through the working portal of the sheath of a rigid 2.7 mm endoscope. A new opening was successively achieved to the level of trigonum. Therapy was assessed as a successful. The bitch has currently no relevant signs of incontinence. The technique described is a completely non-invasive and outpatient procedure. It is relatively simple and appears to be safe. Among the risks of laser ablation, perforation of the urethra or bladder wall or urethral stricture has to be mentioned. The only drawback is a need for expensive instrumentation and expected experience with interventional endoscopy. The discussion presents an update on the prevalence and etiopathogenesis of ectopic ureters in dogs and therapeutic options including a summary of recent publications on the application of CGLA in veterinary medicine.

Publication Type

Journal article.

<10>

Accession Number

20173013360

Author

Stilwell, C.; Tappin, S.

Title

Approach to canine urinary incontinence.

Source

Companion Animal; 2016. 21(12):692-699. many ref.

Publisher

MA Healthcare Limited

Location of Publisher

London

Country of Publication

UK

Abstract

Canine urinary incontinence is a common presentation in small animal practice. The care required by the owners at home should not be underestimated, as a number of these dogs present with a request for euthanasia. Many of the causes of incontinence are treatable; it is therefore the role of the veterinary surgeon to perform a thorough investigation in order to obtain a diagnosis and instigate appropriate therapy. This article outlines the initial approach to an incontinent dog and discusses the specific diagnostics and treatment options available.

Publication Type

Journal article.

<11>

Accession Number

20173007747

Author

Kohlhauer, M.; Tissier, R.; Mallem, Y.

Title

Medical treatment of urinary incontinence in male dogs. [French]

Source

Point Veterinaire; 2016. 47(371 (Part 1)):9.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

The clinical aspects, diagnosis, and pharmacological management of urinary incontinence in male dogs were discussed.

Publication Type

Journal article.

<12>

Accession Number

20173011714

Author

Maurey-Guenec, C.; Manassero, M.

Title

Medical treatment for urinary incontinence. (Urologie et nephrologie en pratique chez le chien et le chat) [French]

Source

Point Veterinaire; 2016. 47(Numero Special):118-121. 15 ref.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

Sphincter incompetence related to sterilisation is the most common acquired form of incontinence in bitches. The symptoms can be eliminated in about 60% of cases with the use of oestrogen. The alpha -adrenergics help restore continence in 90% of cases as a first-line treatment or in cases of failure of oestrogen therapy. In cases of refractory incontinence, it is important to check for other functional abnormalities, such as a lack of bladder compliance that can be treated with the use of anticholinergics. In cases of incontinence related to urinary retention, cholinergics, alpha -lytics and muscle relaxants are used to promote bladder emptying.

Publication Type

Journal article.

<13>

Accession Number

20173011713

Author

Manassero, M.; Maurey-Guenec, C.

Title

Surgical treatment for urinary incontinence. (Urologie et nephrologie en pratique chez le chien et le chat)

[French]

Source

Point Veterinaire; 2016. 47(Numero Special):110-117. 23 ref.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

In cases of urinary incontinence, surgical indications relate mainly to ureteral ectopia and sphincter incompetence. The treatment of ureteral ectopia is surgical and consists of a neo-urethrostomy or ureterovesical reimplantation. Full resolution of incontinence is achieved in about half the cases and a significant improvement with associated medical treatment in the majority of the remaining cases. The treatment of sphincter incompetence is based on administration of oestrogen or alpha 1-adrenergics in the first instance. Surgical techniques to strengthen the sphincter such as colposuspension, urethropexy or placement of a hydraulic peri-urethral artificial sphincter may be considered as second-line treatment.

Publication Type

Journal article.

<14>

Accession Number

20173056057

Author

Karabagli, M.

Title

An evaluation of post-operative urinary incontinence in dogs with intramural ectopic ureter treated with neoureterocystostomy.

Source

Kafkas Universitesi Veteriner Fakultesi Dergisi; 2017. 23(1):145-154. 32 ref.

Publisher

Kafkas Universitesi, Veteriner Fakultesi Dergisi

Location of Publisher

Kars

Country of Publication

Turkey

Abstract

The main motivation in the treatment of ectopic ureter (EU) is achieving complete urinary continence. Although, new neoureterostomy techniques were developed for the surgical treatment of intramural ectopic ureters, it was determined that postoperative incontinence scores achieved with the latest techniques have no distinct superiority over those achieved with older techniques. Therefore, we aim to determine the post-operative urinary incontinence scores in dogs with intramural EU that were treated with neoureterocystostomy and compared with older reports which neoureterostomy techniques were used. Seven female dogs which were brought to our clinic with a complaint of constant urine dribbling since they were born or adopted were included the study. The radiographic diagnosis was made by excretory urography

in four dogs, excretory urography and retrograde vagino-urethrography in 2 dogs and MRI in 1 dog. Definitive diagnosis was made by cystotomy. Ectopic ureters were intramural character in all cases. Neoureterocystostomy technique was used for the surgical treatment and incontinence scores at post-operative 1st and 2nd months were recorded. For the purpose of complete elimination of the postoperative urinary incontinence, phenylpropalamine were used in 4 cases and oxybutynin were used in 1 case as additional medical therapy. Urinary incontinence was completely disappeared, 5 out of 7 patients (71%) at the end of the study. In conclusion, the results suggest that EU is most successfully treated with a surgical method that does not involve urethrotomy and it should be performed simultaneously with a surgical method used in the treatment of urethral sphincter mechanism incompetence and should be combined with a treatment involving the use of post-operative alpha adrenergic medications.

Publication Type
Journal article.

<15>

Accession Number
20173116773

Author

Blondel, M.; Decambron, A.; Delpont, V.; Maurey, C.; Manassero, M.

Title

Bilateral ectopic ureteroceles in a female dog. [French]

Source

Revue Veterinaire Clinique; 2017. 52(1):17-25.

Publisher

Elsevier Masson

Location of Publisher

Issy-les Moulineaux Cedex

Country of Publication

France

Abstract

A ureterocele is a cystic dilatation of the intravesicular submucosal distal portion of the ureter. This article focuses on bilateral ectopic ureteroceles in a young female dog suffering from urinary incontinence, treated by partial bilateral ureterocelelectomy. Should this case be rare, the clinical presentation is typical. In order to distinguish this disease from an intramural ureteral ectopy, diagnostic imaging, and especially ultrasonography, is essential. The surgical technique, simple, used for this case, has hardly ever been employed. It results from other techniques reported and from clinical findings during surgery, and enabled a complete resolution of the dog's urinary incontinence.

Publication Type
Journal article.

<16>

Accession Number
20173149392

Author

Albernaz, V. G. P.; Quitzan, J. G.; Conceicao, R. T.; Paiva, B. R.; Fabris, I. de A.; Rocha, P. B. da

Title

Primary surgical repair of prostatic urethral rupture following multiple pelvic fracture in a dog.

Source

Acta Veterinaria Brasilica; 2017. 11(1):73-78. 19 ref.

Publisher

Universidade Federal Rural do Semi-Arido (UFERSA)

Location of Publisher

Mossoro

Country of Publication

Brazil

Abstract

Abdominal urethral rupture commonly occurs in male dogs after traumatic pelvic fractures and can lead to uroperitoneum, causing peritonitis and azotemia. The primary complications of urethral damage include strictures, incontinence and innervation injury. Here, we describe a case report of prostatic urethral rupture, treated by primary suture repair, that yielded early healing and recovery in a ten-year-old, male, mixed-breed dog who visited our facility within 24 hours of being struck by a car. Positive contrast urethrocytography resulted in leakage of the contrast medium into the abdominal cavity in a point caudal to the urinary bladder. Additional radiography revealed multiple pelvic fractures. During surgery, we found a laceration of the right prostatic lobe causing urethral rupture. We performed a full thickness simple continue suture with 7-0 polyglactin 910 to reestablish urethral continuity. The prostate capsule was also sutured in a simple continue pattern. A previously placed indwelling urinary catheter was kept inside to divert urine flow. On the third postoperative day, the animal withdrew the urinary catheter and started to urinate by himself. The conservative treatment of pelvic fractures enabled complete return to function on the 55th day. One hundred and fifty days after the trauma, no evidence of urinary stricture or another clinical sign was observed. Urethral wounds can be treated surgically by primary suturing and urinary diversion. A short healing time was experienced, and the indwelling urinary catheter was removed three days after surgery since there was no more urine leakage and the animal began voiding normally.

Publication Type

Journal article.

<17>

Accession Number

20173185210

Author

Astudillo-Gajardo, M. G.; Agurto-Merino, M. K.; Issotta-Contardo, C. M.; Lara-Luna, J. I.; Weinborn-Astudillo, R. M.

Title

Case report: a clinical approach in a dog with unilateral and intramural ectopic ureter with combined surgical techniques. [Spanish]

Source

Revista Científica, Facultad de Ciencias Veterinarias, Universidad del Zulia; 2017. 27(2):103-109. 12 ref.

Publisher

Facultad de Ciencias Veterinarias, Universidad del Zulia

Location of Publisher

Maracaibo

Country of Publication

Venezuela

Abstract

A canine, mixed female, 4 months old, attended a medical consultation at the Veterinary Clinical Teaching Hospital (HCVD) Santo Tomas University (UST), Talca-Chile, because present urinary incontinence from the time exposed adoption, 2 months ago. The reason for the visit was the presentation of urinary incontinence from the time of its adoption, 2 months ago. Physical examination evidenced perivulvar urination drip and dermatitis. It was considered as the main pre-diagnosis ectopic ureter, so additional tests were requested, including an abdominal ultrasound and excretory urography, confirming the presence of unilateral ectopic ureter, intramural, which it was resolved surgically, performing a combined neoureterostomy and ureteroneocystostomy this because the income of the ureter site was lateral trigone, so had to change the

intra-operatively technique. The results were successful, 100% correcting incontinent patient. It is important to know more than one surgical technique because the situation can change during the surgical procedure, as occurred in this case.

Publication Type

Journal article.

<18>

Accession Number

20163019230

Author

Roundell, C. D. G.; Friend, E. J.

Title

Resolution of incontinence using an artificial urethral sphincter in feline genitourinary dysplasia.

Source

Veterinary Record Case Reports; 2015. 3(1):e000249. 12 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

Limited information exists about surgical techniques to treat incontinence in cats. In this case, a four-month-old female entire domestic shorthair cat was presented with a history of severe urinary incontinence. Contrast studies supported a diagnosis of genitourinary and urethral dysplasia with urethral sphincter mechanism incompetence (USMI). The incontinence was unresponsive to medical treatment. At 10 months old, an artificial urethral sphincter (AUS) was surgically placed, restoring urinary continence completely. This case report demonstrates that an AUS - a technique previously described only for treatment in dogs with refractory incontinence - may be suitable for the management of refractory USMI in cats with congenital urinary incontinence. Also, in cases of persistent or recurrent incontinence, and at any time subsequent to the surgery, an increase in pressure around the urethra can be achieved, non-invasively, by inflating the AUS's percutaneous occluder.

Publication Type

Journal article.

<19>

Accession Number

20163019196

Author

Vessieres, F.; Selgas, A. G.; Rasotto, R.; Raffan, E.

Title

Primary hyperparathyroidism associated with hyperplasia of multiple parathyroid glands in a dog.

Source

Veterinary Record Case Reports; 2015. 3(1):e000191. 12 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

A nine-year-old Italian Spinone dog presented with a history of urinary incontinence associated with polyuria/polydipsia (PUPD). Haematology and serum biochemistry identified hypercalcaemia. Subsequently, thoracic radiographs, abdominal ultrasound, urinalysis, serum assay of parathyroid hormone (PTH) and PTH-related protein concentrations and ultrasound of the parathyroid glands were consistent with a diagnosis of primary hyperparathyroidism. Unusually, however, all four parathyroid glands were noted to be enlarged on ultrasound, as opposed to a single parathyroid nodule (commonly an adenoma) as is normal in primary hyperparathyroidism. This presented a dilemma as to how best treat the dog; ultimately, two out of four parathyroid glands were removed. Postoperatively, normocalcaemia returned, and PUPD and incontinence resolved. Histopathological examination of the two removed glands was consistent with nodular hyperplasia of chief cells for one gland and nodular hyperplasia of chief cells and oxyphilic cells for the other gland, confirming a diagnosis of parathyroid hyperplasia.

Publication Type

Journal article.

<20>

Accession Number

20163059645

Author

Thude, T. R.

Title

Chiropractic abnormalities of the lumbar spine significantly associated with urinary incontinence and retention in dogs.

Source

Journal of Small Animal Practice; 2015. 56(12):693-697. 23 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objectives: To retrospectively summarise chiropractic findings in dogs presented in a veterinary practice with urinary incontinence and urinary retention over a 6-year period, and compare these to non-urinary patients presented during the same time period. Methods: Twenty-two cases were included in the study. They all first underwent a standard clinical examination to rule out or treat other possible causes of their urinary problems. They then underwent chiropractic examination and hypomobility findings were recorded using Gonstead listings. Odds ratios (ORs) were calculated for the occurrence of chiropractic findings in urinary versus non-urinary patients for each vertebra in the lumbar, sacral and ilial regions. Results: All patients had chiropractic findings in the lumbar region that differed from non-urinary patients. The urinary patients were significantly more likely to have chiropractic findings in L3 (OR=4.81; 95%CI: 2.02 to 11.44; P=0.0004), L4 (OR=6.85; 95%CI: 2.63 to 17.84; P=0.0001) and L5 (OR=3.98; 95%CI: 1.64 to 9.69; P=0.0023). In addition, urinary patients were significantly less likely to have chiropractic findings associated with the ilium (OR=0.26; 95%CI: 0.11 to 0.66; P=0.0043). Clinical Significance: This is the first report of an association between chiropractic findings in the lumbar vertebrae and urinary incontinence and retention in dogs.

Publication Type

Journal article.

<21>

Accession Number

20163112629

Author

Wilson, K. E.; Berent, A. C.; Weisse, C. W.

Title

Use of a percutaneously controlled hydraulic occluder for treatment of refractory urinary incontinence in three female cats.

Source

Journal of the American Veterinary Medical Association; 2016. 248(5):544-551. 23 ref.

Publisher

American Veterinary Medical Association

Location of Publisher

Schaumburg

Country of Publication

USA

Abstract

CASE DESCRIPTION: 3 cats were referred for evaluation of chronic urinary incontinence. **CLINICAL FINDINGS** A presumptive diagnosis of urethral sphincter mechanism incompetence (USMI) was made in all 3 cats. Preoperatively, incontinence was mild in 1 cat (incontinence during sleep) and moderate to severe (incontinence while awake and at rest) in 2. Structural abnormalities noted during cystoscopy included urethrovestibular junction stenosis (n=1), vaginal stenosis (1), short urethra (1), and intrapelvic bladder (1). **TREATMENT AND OUTCOME:** All 3 cats were treated by means of implantation of an inflatable silicone hydraulic occluder (HO) via a ventral midline celiotomy. Immediately prior to HO implantation, patients underwent cystoscopy to detect any anatomic abnormalities and confirm the absence of ureteral ectopia. Following surgery, all 3 patients attained complete continence, needing 0 or 1 inflation of the device. Complications included cystoscopy-associated urethral tear (n=1), constipation (1), stranguria (1), hematuria (2), and urinary tract infection (2). Device explantation was performed 14 weeks after surgery in 1 cat because of postoperative constipation. Constipation persisted and urinary incontinence recurred but was markedly improved following device removal in this cat (leakage of urine only when sleeping at follow-up 29 months after surgery [26 months after device explantation]). At the time of last follow-up, 2 of the 3 cats remained fully continent approximately 3 and 6 years after device implantation. **CLINICAL RELEVANCE:** Findings suggested that implantation of an HO may be a safe and effective long-term treatment for some cats with USMI. Further studies are necessary to evaluate the potential for treatment-related complications and the long-term outcome.

Publication Type

Journal article.

<22>

Accession Number

20163127878

Author

Berent, A. C.

Title

Interventional radiology of the urinary tract. (Special Issue: Diagnostic radiology.)

Source

Veterinary Clinics of North America, Small Animal Practice; 2016. 46(3):567-596.

Publisher

Saunders, An Imprint of Elsevier

Location of Publisher
Philadelphia
Country of Publication
USA

Abstract

Minimally invasive treatment options using interventional radiology and interventional endoscopy for urologic disease have become more common over the past decade in veterinary medicine. Urinary tract obstructions and urinary incontinence are the most common reasons for urinary interventions. Ureteral obstructions are underdiagnosed and a common clinical problem in veterinary medicine. Ureteral obstructions should be considered an emergency, and decompression should be performed as quickly as possible. Diagnostic imaging is the mainstay in diagnosing a ureteral obstruction and has changed in the last few years, with ultrasound and radiographs being the most sensitive tools in making this diagnosis preoperatively.

Publication Type
Journal article.

<23>

Accession Number
20163136399

Author

Ogawa, T.; Sakano, F.; Yamada, Y.; Ogawa, H.

Title

Cellophane banding for treatment of urethral dilation in a dog. [Japanese]

Source

Japanese Journal of Veterinary Anesthesia & Surgery; 2015. 46(3):53-57. 7 ref.

Publisher

Japanese Society of Veterinary Anesthesia & Surgery

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

A 5-month-old male Shih Tzu was diagnosed with a lateral ectopic ureter. The disorder was surgically treated; however, the dog's urinary incontinence was not resolved. Several subsequent medical therapies were ineffective. Therefore, cellophane tape banding was applied around the dilated urethra 2 months postoperatively. After this surgery, the urinary incontinence completely disappeared and had not recurred at the time of this writing. However, an asymptomatic cystic diverticulum was found 1 month after cellophane tape banding. This method might be a therapeutic option for repairing urethral dilatation.

Publication Type
Journal article.

<24>

Accession Number
20163149399

Author

Gultekin, C.; Ozgencil, E.; Seyrek-Intas, D.

Title

The effect of deslorelin acetate in the treatment of persistent urinary incontinence after operation of ectopic ureter in a Golden Retriever bitch.

Source

Kafkas Universitesi Veteriner Fakultesi Dergisi; 2016. 22(3):465-468. 18 ref.

Publisher

Kafkas Universitesi, Veteriner Fakultesi Dergisi

Location of Publisher

Kars

Country of Publication

Turkey

Abstract

In this report, deslorelin acetate (suprelorin) implant, a GnRH depot analogue, was used for the first time in postoperatively observed urinary incontinence treatment of one year old female Golden Retriever puppy which came to our hospital with urinary incontinence complaint, diagnosed with left unilateral extramural ectopic ureter, treated for her ectopic ureter with ureteroneocystostomy operation and undergone ovariohysterectomy operation at the same time. In the examination at the end of eight months of postoperative period, it was observed that urinary incontinence which was thought to be due to urinary sphincter deficiency following the ectopic ureter surgery has been completely disappeared. The positive effect of deslorelin acetate on the treatment of urinary incontinence after ovariohysterectomy, which was reported in the literature in a limited number, was also found to be effective in the treatment of urinary sphincter deficiency, which was frequently observed following the ectopic ureter surgery.

Publication Type

Journal article.

<25>

Accession Number

20163136185

Author

Lorenzo, L. M.; Bernard, F.

Title

Sphincter incompetence in a male dog treated using an artificial urethral sphincter implant. [French]

Source

Point Veterinaire; 2016. 47(364(Part 1)):66-70. 39 ref.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

A 6-year old Jack Russell terrier dog had permanent urinary incontinence that did not respond to medical treatment. The diagnosis was made after other causes of sphincter incompetence were excluded by clinical and radiographic examinations. The condition was managed by placement of an artificial urethral sphincter, with pressure on the urethra adjustable. Clinical improvement was observed after two injections of sterile physiological solution into the system, and performed at 6 to 7 weeks postoperatively. Diagnosis and postoperative surveillance are essentially by clinical examination and ultrasonography. Complications are rare and the prognosis appears to provide better control of incompetence in the male than the surgical techniques described previously.

Publication Type

Journal article.

<26>

Accession Number

20163199869

Author

Martinez, C.; Bennaim, M.; Shiel, R.

Title

Urinary incontinence in dogs: pathophysiology and medical management.

Source

The Veterinary Nurse; 2015. 6(8):470-480.

Publisher

MA Healthcare Limited

Location of Publisher

London

Country of Publication

UK

Abstract

Urinary incontinence is a disorder of micturition characterised by the inappropriate leakage of urine. Increasing attention has been brought to this disorder over the past 30 years as dogs have been increasingly living indoors with their owners. Several diagnostic tests and treatment options are available nowadays. This review focuses on the pathophysiology, investigations and medical management of urinary incontinence.

Publication Type

Journal article.

<27>

Accession Number

20163283018

Author

Dinesh Kumar; Behl, S. M.; Prem Singh; Madan Pal; Chandolia, R. K.

Title

Diagnosis and surgical management of urolithiasis in dogs.

Source

Intas Polivet; 2016. 17(1):164-166. 7 ref.

Publisher

Intas Pharmaceuticals Ltd

Location of Publisher

Ahmedabad

Country of Publication

India

Abstract

Three dogs of age 6-12 years were presented with history of urine incontinence, anorexia and frequent straining for micturition since two to three days. The condition was diagnosed as urolithiasis after radiography and ultrasonography. The blood urea and serum creatinine levels were elevated in two dogs. In ultrasonography, acoustic shadowing distal to calculi confirmed the diagnosis. In one case ultrasonography showed hypoechoic pus along with anechoic urine. The calculi were removed after cystotomy and obstruction to urine was relieved. The dog with pus filled urinary bladder didn't survive. Rest two dogs showed uneventful recovery and restoration of normal urination in 12 days.

Publication Type

Journal article.

<28>

Accession Number

20163283013

Author

Gokul Krishanan; Nagarajan, L.; Harish Kulkarni

Title

Surgical management of perineal hypospadias in a dog.

Source

Intas Polivet; 2016. 17(1):151-152. 7 ref.

Publisher

Intas Pharmaceuticals Ltd

Location of Publisher

Ahmedabad

Country of Publication

India

Abstract

A three year old, crossbred intact dog was presented with history of urinary incontinence for past 3 days. On physical examination, external urethral orifice was opening at the ventral surface of the penis rather than the tip of glans with bifid scrotum, hence the case was diagnosed as hypospadias. The cause of the hypospadias is not known, it is presumed that the affected foetus may secrete inadequate quantities of testosterone or that there may be inadequate conversion of testosterone to dihydrotestosterone in the target tissues of the urogenital sinus and external genitalia. In the present case, prepupal sheath was incomplete hence reconstructive surgery of the penile prepupal sheath was performed to cover the exposed dry penis and animal recovered uneventfully.

Publication Type

Journal article.

<29>

Accession Number

20163282868

Author

Dinesh Dehmiwal; Behl, S. M.; Prem Singh; Rishi Tayal; Madan Pal; Sandeep Saharan; Chandolia, R. K.

Title

Diagnosis and surgical management of cystolith in dogs.

Source

Haryana Veterinarian; 2016. 55(1):103-105. 6 ref.

Publisher

College of Veterinary Sciences, Haryana Agricultural University

Location of Publisher

Hisar

Country of Publication

India

Abstract

A study was conducted on three dogs of 6 to 12 years of age that were presented to the Teaching Veterinary Clinical Complex of this university with the history of urine incontinence, anorexia and stranguria since two to three days. Based on radiography and ultrasonography, the dogs were diagnosed to be suffering from cystoliths. On ultrasonography acoustic shadowing distal to the calculi confirmed the diagnosis in all cases. In one case ultrasonography revealed hypoechoic pus along with anechoic urine. Blood urea

and serum creatinine levels were elevated in two of the three dogs. The calculi were removed after cystotomy and obstruction to urine was relieved. The dog with pus filled urinary bladder did not survive. Remaining two dogs showed uneventful recovery and restoration of normal urination in 12 days.

Publication Type

Journal article.

<30>

Accession Number

20163321173

Author

Lappin, M. R.

Title

Medical management of urethral sphincter mechanism incompetence.

Source

Proceedings of the NAVC Conference, 16-20 January 2016, Orlando, Florida, USA. Volume 30, Small Animal and Exotics; 2016. :589-590. 10 ref.

Publisher

North American Veterinary Community (NAVC)

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<31>

Accession Number

20163326082

Author

James, D. R.; Collins, D.; Johnson, P. J.; Marchevsky, A. M.

Title

Chronic urinary bladder torsion causing urinary incontinence in a cat.

Source

Journal of Feline Medicine and Surgery Open Reports; 2015. 1(2):2055116915603384. 15 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

Case summary: A 10-month-old female spayed domestic shorthair cat was presented for urinary incontinence. The cat was azotaemic, and ultrasound examination identified hydroureter and hydronephrosis. Subsequent computed tomography (CT) contrast pyelography allowed a diagnosis of urinary bladder torsion. Surgical findings and treatment are described. Postoperatively, incontinence and azotaemia resolved, and marked improvements were documented with ultrasound and CT in urinary tract structural abnormalities. Relevance and novel information: To our knowledge, urinary bladder torsion has not been previously reported in the cat. This case most probably occurred as a complication of

ovariohysterectomy, as has been reported in the dog; however, the presenting sign of chronic urinary incontinence is unique. Response to surgical correction was favourable.

Publication Type
Journal article.

<32>

Accession Number
20163329448

Author

Roundell, C. D. G.; Friend, E. J.

Title

Surgical resolution of urinary incontinence in a cat with genitourinary dysplasia using an artificial urethral sphincter. [Spanish]

Source

Argos - Informativo Veterinario; 2016. (181):50, 52. 12 ref.

Publisher

ASIS Biomedica s.l.

Location of Publisher

Zaragoza

Country of Publication

Spain

Abstract

This article discusses the application, advantages, relative simplicity of the technique and effectiveness of artificial urethral implant in managing urinary incontinence due to genitourinary dysplasia in a 10-month-old cat.

Publication Type

Journal article.

<33>

Accession Number
20163365313

Author

Bottero, E.; Pastore, L.; Lorenzi, D. de

Title

Urinary incontinence due to a urethral-vaginal fistula in a spayed adult female dog. [Italian]

Source

Veterinaria (Cremona); 2016. 30(3):187-192. 15 ref.

Publisher

Edizioni SCIVAC

Location of Publisher

Cremona

Country of Publication

Italy

Abstract

A spayed 5-year-old female Shih-Tzu dog was examined for urinary incontinence not responding to medical treatment and for recurrent vaginitis. An urethro-vaginal fistula was diagnosed by genito-urinary endoscopy and was treated by vaginectomy, which resolved the incontinence.

Publication Type

Journal article.

<34>

Accession Number
20153050387

Author

Yoon HunYoung; Shin DongWook; Jeong SoonWuk

Title

Cystopexy to treat urinary incontinence due to urethral sphincter mechanism incompetence in a male dog.

Source

Journal of Veterinary Clinics; 2014. 31(6):515-518. 15 ref.

Publisher

Korean Society of Veterinary Clinics

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

A castrated male Yorkshire Terrier dog was presented for urinary incontinence and constipation. On physical examination, the dog showed difficult urination. There were no neurological abnormalities and no bacterial detection on urinalysis. Rectal examination revealed a regular, normal-sized prostate. Urethral catheterization was performed easily. Excretory urography and retrograde positive contrast urethrocytography showed displacement of the urinary bladder to the intrapelvic region. There was no evidence of an ectopic ureter. A tentative diagnosis of urethral sphincter mechanism incompetence accompanied with a pelvic bladder was made. Cystopexy was decided to place the urinary bladder to its normal position. The neck of the urinary bladder was anchored to the body wall and prepubic tendon using mattress sutures. Additional sutures were placed to appose the lateral part of the urinary bladder and abdominal wall. A simple interrupted suture was placed to tack the apex of the urinary bladder on the abdominal incision line. A urinary catheter was placed in the urinary bladder to provide post-operative evacuation. The catheter was removed when the dog was able to urinate with minimal straining at 3 days post-operatively. The owner reported that the dogs showed normal urination without straining at 3 days after the catheter was removed. Excretory urography revealed that the urinary bladder was located on its normal position at 2 months post-operatively. Subsequent communication with the owner by telephone revealed that the dog was in good urination at 3 years 11 months post-operatively.

Publication Type

Journal article.

<35>

Accession Number
20153021597

Author

Kucera, J.

Title

Urinary incontinence in geriatric dogs. [Czech]

Source

Veterinarstvi; 2014. 64(12):927-930. 11 ref.

Publisher

Profi Press, s.r.o.



Location of Publisher

Praha 2

Country of Publication

Czech Republic

Abstract

Group of 45 geriatric dogs of both gender with signs of urinary incontinence has been subjected to retrospective analysis. Studied were age, gender, gonadal status, breeding affiliation, type of incontinence, comorbidity and the effect of therapy. Involvement has been more frequently observed in male and castrated individuals of both sexes. Type sphincter mechanism incompetence prevailed. Common comorbidities were prostatopathy, urinary infections or conditions leading to the syndrome of polyuria/polydipsia. The success of treatment was generally high and amounted to 85%.

Publication Type

Journal article.

<36>

Accession Number

20153057232

Author

Westropp, J. L.

Title

Diagnostics and management of canine urinary incontinence.

Source

2013 Ontario Veterinary Medical Association Conference Proceedings. January 24-26, 2013, Toronto, Canada; 2013. :99-101.

Publisher

Ontario Veterinary Medical Association (OVMA)

Location of Publisher

Milton

Country of Publication

Canada

Publication Type

Conference paper.

<37>

Accession Number

20153118842

Author

Klett, M.; Dunie-Merigot, A.; Poujol, L.

Title

Use of an urinary hydraulic sphincter as a treatment of a refractory urinary incontinence after ectopic uretera surgery on a bitch. [French]

Source

Revue Veterinaire Clinique; 2015. 50(1):19-26.

Publisher

Elsevier Masson

Location of Publisher

Issy-les Moulineaux Cedex

Country of Publication

France

Abstract

An 8-month-old Labrit was referred for urinary incontinence since the adoption. A bilateral ectopic ureters is diagnosed and a neo-ureterostomia is performed. The persistence of incontinence leads to a urethral sphincter incompetence suspicion and a medical treatment (phenylpropanolamine) is prescribed with a partial remission of the urinary incontinence. An artificial urethral sphincter is then proposed and installed surgically. Fifteen months later, the dog is still continent and no complications are noted. This article describes the different treatments available in veterinary medicine for urinary incontinence. Medical or surgical treatments can be proposed, depending on the cause of urinary incontinence. As far as the ectopic ureters is concerned, 40 to 67% of the animals remain incontinent after surgery. The association of a surgical and a medical treatment tend to improve continence scoring. For refractory cases, new surgical techniques have to be proposed. Since 2004, hydraulic urethral sphincters have shown very promising results (improvement of urinary incontinence in 100% of the cases, three months after surgery). They are an interesting alternative for refractory cases to classical treatments of urethral sphincter incompetence.

Publication Type

Journal article.

<38>

Accession Number

20153125908

Author

Deschamps, J. Y.; Roux, F. A.

Title

Transobturator vaginal tape for treatment of urinary incontinence in spayed bitches.

Source

Journal of the American Animal Hospital Association; 2015. 51(2):85-96.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

This study investigated the long-term effectiveness and safety of a variant of the transobturator vaginal tape inside-out technique for acquired urinary incontinence. Twelve spayed female dogs were operated over a 2 yr period. No intraoperative complications were encountered. Transient dysuria was the most common postoperative complication (7 out of 12 dogs). On the 12th day postoperatively, incontinence was completely cured in 11 out of 12 dogs (92%). At the time of the second evaluation (median follow-up time was 21 mo), patients classified as "cured," "greatly improved," or "improved" were 25, 50, and 25% of the total, respectively. At the time of either the fourth evaluation or at the time of death (median follow-up time was 52 mo), 50% of the bitches (6 out of 12) had the same results as previously but the other 50% had leakage that reappeared sporadically. A fistula appeared on the path of the tape in two bitches at 28 and 32 mo postsurgically. The technique presented is effective and more cost effective than the standard technique and could constitute an attractive alternative; however, it could be associated with an immediate postoperative dysuria, delayed fistula formation, and a partial recurrence of clinical signs.

Publication Type

Journal article.

<39>

Accession Number

20153132918

Author

Byron, J. K.

Title

Injectable bulking agents for treatment of urinary incontinence.

Source

Veterinary image-guided interventions; 2015. :410-414.

Publisher

Wiley-Blackwell

Location of Publisher

Ames

Country of Publication

USA

Publication Type

Book chapter.

<40>

Accession Number

20153192732

Author

Bartges, J. W.; Callens, A. J.

Title

Congenital diseases of the lower urinary tract. (Special Issue: Urology.)

Source

Veterinary Clinics of North America, Small Animal Practice; 2015. 45(4):703-719.

Publisher

Saunders, An Imprint of Elsevier

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Congenital lower urinary tract diseases occur with variable frequency and may result in clinical signs of urinary incontinence, urinary obstruction, or urination through abnormal openings. This article discusses diagnosis of congenital diseases of the urinary bladder and urethra and describes treatment of these disorders.

Publication Type

Journal article.

<41>

Accession Number

20153198954

Author

Watanabe, T.; Suzuki, K.; Mishina, M.

Title

Common urogenital sinus in a dog. [Japanese]

Source

Journal of the Japan Veterinary Medical Association; 2015. 68(5):306-310. 12 ref.

Publisher

Japan Veterinary Medical Association

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

A 6-month-old, intact female Papillon dog with a body weight of 1.46 kg was referred to our hospital for examination due to persistent incontinence. At the initial visit, bacterial cystitis, urethral sphincter mechanism incompetence and vaginal/uterine aplasia were suspected following urine examination and retrograde urethrography. Since the incontinence did not respond to pharmacological therapy, transvulvar endoscopy and exploratory laparotomy were performed. We found that both of the uterine horns were connected to the dorsal part of the urinary bladder neck, where they merged with the urethra to form a single tubular structure that opened to the vulva. Based on these intraoperative findings, common urogenital sinus was diagnosed. To control the incontinence, urethral plication was performed. The surgical course was favorable, with a reduction in incontinence symptoms.

Publication Type

Journal article.

<42>

Accession Number

20153214777

Author

Oliveira, N. A.; Bittar, I. P.; Oliveira, T. A.; Gouveia, T. C.; Rodrigues, D. F.; Mendes, F. F.; Fioravanti, M. C. S.

Title

Bilateral ectopic ureter in a female dog: case report.

Source

Online Journal of Veterinary Research; 2015. 19(5):349-356.

Publisher

Online Journal of Veterinary Research

Location of Publisher

Toowoomba

Country of Publication

Australia

Abstract

A 4-month-old female Siberian Husky was presented for evaluation of urinary incontinence. Abdominal ultrasonography suggested bilateral mega-ureter but visualization of the final segment of the ureter for insertion was not possible. Excretory tests confirmed bilateral ureteral ectopia with the left ureter being extramural and right intramural, both opening onto the urethra. Neuro-heterocystotomy was performed and by 15 days of surgery, miction control improved. Antibiotic treatment for an adjacent cystitis resolved urinary incontinence. The findings show that an early diagnosis of ureteral ectopia can avoid problems with lower and upper urinary tract. Because treatment is by surgical correction, the owner should be advised beforehand to avoid postoperative complications such as permanent urinary incontinence. Ureteral ectopia is a congenital defect, so animals with this anomaly should be excluded from reproduction through elective castration.

Publication Type

Journal article.

<43>

Accession Number
20153170748

Author
Westropp, J. L.

Title
Urethral sphincter mechanism incompetence.

Source
Proceedings of the NAVC Conference, 17-21 January 2015, Orlando, Florida, USA. Volume 29, Small animal and exotics edition, Book 1 & Book 2; 2015. :536-537. 8 ref.

Publisher
North American Veterinary Community (NAVC)

Location of Publisher
Gainesville

Country of Publication
USA

Publication Type
Conference paper.

<44>

Accession Number
20153213415

Author
Pratschke, K. M.

Title
Urinary incontinence in veterinary patients: not just a medical problem.

Source
Veterinary Ireland Journal; 2015. 5(6):285-290.

Publisher
Veterinary Ireland

Location of Publisher
Dublin

Country of Publication
Irish Republic

Publication Type
Journal article.

<45>

Accession Number
20153282573

Author
Kim HyeYoung; Hong EunJi; Park HyungJin; Kwon HyoJung; Song KunHo; Seo KyoungWon

Title
Multiple subcutaneous nodular metastasis from transitional cell carcinoma of the urinary bladder in a dog.

Source

Journal of Veterinary Clinics; 2015. 32(3):247-250. 9 ref.

Publisher

Korean Society of Veterinary Clinics

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

A 10-year-old spayed female Pomeranian dog weighing 3.65 kg was presented with a 7-month history of urinary incontinence, stranguria and hematuria. The patient had mass lesions at left prescapular region (3 cm x 3 cm) and left axillary region (5 cm x 4 cm). Diagnosis of transitional cell carcinoma (TCC) with multiple cutaneous metastasis was made. Dog was treated with chemotherapy using mitoxantrone and piroxicam for 5 months. Although TCC size of urinary bladder was decreased during chemotherapy, there was no change of subcutaneous tumor size and mild relief of clinical signs. Partial anorexia for 3 weeks and multiple masses were noted at left caudal abdominal wall and left medial thigh (203 days after first presentation) and assessed as chronic kidney disease and additional subcutaneous metastasis of urinary bladder TCC by post-mortem and histopathological findings.

Publication Type

Journal article.

<46>

Accession Number

20153431729

Author

White, R. A. S.

Title

Improvements in the surgical management of bitches with urinary incontinence.

Source

Companion Animal; 2014. 19(8):423-427. 47 ref.

Publisher

MA Healthcare Limited

Location of Publisher

London

Country of Publication

UK

Abstract

The combination of urethropexy and colposuspension for the management of urinary incontinence associated with urethral sphincter mechanism in bitches has recently been described. The success rate for this procedure (70%) is considerably more favourable than has been reported for either individual technique, and is associated with a low rate of complications.

Publication Type

Journal article.

<47>

Accession Number

20153399867

Author

Hohmann, M.

Title

Multimodal therapy. [German]

Source

Zeitschrift fur Ganzheitliche Tiermedizin; 2015. 29(4):118-130. 21 ref.

Publisher

Sonntag Verlag GmbH

Location of Publisher

Stuttgart

Country of Publication

Germany

Abstract

Animal incontinence, affecting mainly she-dogs and rarely male-dogs or cats, is part and parcel of day-to-day diagnoses in veterinary practice. The therapy involves clarifying whether the incontinence occurs continuously or intermittently. This could be caused by several factors. A temporarily occurring incontinence could be a consequence of bladder or urethral injury or caused by fright, shock, stress, anxiety, excitement or by poor animal care conditions, especially regarding cats. There could be an overactive bladder, kidney and/or bladder disease. Incontinence can also occur from time to time when the dog is fed on raw diet. Continuous incontinence, which can partially exhibit some small continents phases, has the following possible causes: old-age, spayed she-dog, uncastrated male-dog, a neurological problem (cauda equine syndrome, spinal cord infarction, and herniated disc), bladder stones, Diabetes insipidus, deformity or tumor.

Publication Type

Journal article.

<48>

Accession Number

20133424325

Author

Grand, J. G.; Bureau, S.; Monnet, E.

Title

Effects of urinary bladder retroflexion and surgical technique on postoperative complication rates and long-term outcome in dogs with perineal hernia: 41 cases (2002-2009).

Source

Journal of the American Veterinary Medical Association; 2013. 243(10):1442-1447. 28 ref.

Publisher

American Veterinary Medical Association

Location of Publisher

Schaumburg

Country of Publication

USA

Abstract

Objective - To evaluate the effects of urinary bladder retroflexion (UBR) and surgical technique on postoperative complication rates and long-term outcome in dogs with perineal hernia. Design - Retrospective case series. Animals - 41 client-owned dogs with perineal hernia that underwent surgery between November 2002 and November 2009. Procedures - Medical records were reviewed for information on dog signalment, history, physical examination findings, ultrasonographic findings, surgical techniques, intraoperative complications, duration of hospital stay, postoperative complications, and long-term outcome. Results - 31 dogs had no UBR, and 10 dogs had UBR. Internal obturator muscle transposition (IOMT) was performed in 20 dogs, and a cystopexy or colopexy was performed before the IOMT (LapIOMT) in 21. Postoperative complications included tenesmus (n=8) and urinary incontinence (1). Rates of postoperative complications were not significantly different between the no-UBR and UBR groups or between the IOMT and LapIOMT groups. Thirty-two dogs were free of clinical signs at the time of the study. The median disease-free interval did not differ significantly between dogs in the no-UBR and UBR groups, but it was significantly lower in the

LapIOMT group than in the IOMT group. None of the 7 dogs with UBR that were treated without cystopexy developed recurrence of UBR. Conclusions and Clinical Relevance - UBR was not associated with an increased rate of postoperative complications relative to no UBR and had no effect on the long-term outcome in dogs with perineal hernia. The use of IOMT alone may be recommended for clinical use because LapIOMT offered no clear advantage.

Publication Type
Journal article.

<49>

Accession Number
20143026835

Author
Berent, A.

Title

New techniques on the horizon: interventional radiology and interventional endoscopy of the urinary tract ('endourology'). (Special Issue: Endoscopy and endosurgery, part 2.)

Source

Journal of Feline Medicine and Surgery; 2014. 16(1):51-65. 41 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

Practical relevance: Interventional radiology and interventional endoscopy (IR/IE) uses contemporary imaging modalities, such as fluoroscopy and endoscopy, to perform diagnostic and therapeutic procedures in various body parts. The majority of IR/IE procedures currently undertaken in veterinary medicine pertain to the urinary tract, and this subspecialty has been termed 'endourology'. This technology treats diseases of the renal pelvis, ureter(s), bladder and urethra. In human medicine, endourology has overtaken traditional open urologic surgery in the past 20-30 years, and in veterinary medicine similar progress is occurring. Aim: This article presents a brief overview of some of the more common IR/IE procedures currently being performed for the treatment of urinary tract disease in veterinary patients. These techniques include percutaneous nephrolithotomy for lithotripsy of problematic nephrolithiasis, mesenchymal stem cell therapy for chronic kidney disease, sclerotherapy for the treatment of idiopathic renal hematuria, various diversion techniques for ureteral obstructions, laser lithotripsy for lower urinary tract stone disease, percutaneous cystolithotomy for removal of bladder stones, hydraulic occluder placement for refractory urinary incontinence, percutaneous cystostomy tube placement for bladder diversion, urethral stenting for benign and malignant urethral obstructions, and antegrade urethral catheterization for treatment of urethral tears. Evidence base: The majority of the data presented in this article is solely the experience of the author, and some of this has only been published and/or presented in abstract form or small case series. For information on traditional surgical approaches to these ailments readers are encouraged to evaluate other sources.

Publication Type
Journal article.

<50>

Accession Number
20143025519

Author

Lane, I. F.

Title

Diagnosing canine urinary incontinence.

Source

NAVC Clinician's Brief; 2013. (December):18-19.

Publisher

Educational Concepts LLC

Location of Publisher

Tulsa

Country of Publication

USA

Publication Type

Journal article.

<51>

Accession Number

20143036141

Author

Martinoli, S.; Nelissen, P.; White, R. A. S.

Title

The outcome of combined urethropexy and colposuspension for management of bitches with urinary incontinence associated with urethral sphincter mechanism incompetence.

Source

Veterinary Surgery; 2014. 43(1):52-57. 48 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To report (1) a combined technique of urethropexy and colposuspension; (2) intra- and postoperative complications; and (3) medium term outcome. Study design: Retrospective case series. Animals: Female dogs (n=30) with urinary incontinence associated with urethral sphincter mechanism incompetence (USMI) unresponsive to medical management. Methods: Through a ventral median celiotomy, the bladder was positioned abdominally to permit the urethra to be anchored with single interrupted polypropylene sutures to the prepubic tendon and linea alba. The vagina was freed from the vesicovaginal and rectovaginal attachments and advanced cranially by traction before attachment to the prepubic tendon with polypropylene mattress sutures. Bitches were re-examined 2 weeks postoperatively; medium term outcome (>6 months) was evaluated by telephone interview of owners. Results: At a median follow up of 39.5 months, 21 bitches (70%) were considered to have an "excellent" medium term outcome with complete resolution of their urinary signs; 8 (26.6%) had a "good" outcome, and 3 (10%) had mild transient dysuria postoperatively. Conclusion: Combined urethropexy and colposuspension resulted in complete resolution of urinary incontinence in 70% of bitches with USMI and was not associated with major complications.

Publication Type

Journal article.

<52>

Accession Number

20143055848

Author

Oliveira, D. M. M. C. de; Reusing, M. S. de O.; Silva, D. M. da; Sanson, B. C.; Oliveira, D. R. de; Froes, T. R.; Guerios, S. D.

Title

Bilateral ureteral ectopia in female dogs: diagnosis, surgical treatment, and clinical outcomes. [Portuguese]

Source

Acta Scientiae Veterinariae; 2013. 41(Suppl. 1):33. 12 ref.

Publisher

Universidade Federal do Rio Grande do Sul, Faculdade de Veterinaria

Location of Publisher

Porto Alegre

Country of Publication

Brazil

Abstract

Background: Ectopic ureter is the most common cause of congenital urinary incontinence in dogs. Intramural ectopic ureter occurs when the ureter runs within the urinary bladder wall, while extramural ectopic ureter occurs when the distal ureter is not associated with the bladder wall. Ectopic ureters are diagnosed using different techniques and/or combinations of various imaging studies. Surgical correction is the standard treatment for dogs with an ectopic ureter, and these surgical techniques include neoureterostomy, ureteroneocystostomy, and nephroureterectomy. The aim of this report is to describe two cases of ectopic ureter successfully treated with surgery. Cases: In case 1, a 2-month-old female poodle, weighing 1.3 kg, with urinary incontinence since birth was presented to our veterinary service. Excretory urography revealed an ectopic ureter, and ureteroneocystostomy was performed. Abdominal ultrasonography performed 30 days after surgery revealed left renal pyelectasis and ureteral dilatation. Based on these findings, nephrectomy was performed. In case 2, a 3-month-old Golden Retriever, weighing 13.5 kg, with urinary incontinence since birth was brought to our veterinary service (in Brazil). Abdominal ultrasonography revealed a small left kidney and left ureteral dilation. Laparotomy was performed and revealed bilateral intramural ectopic ureters. Based on these findings, bilateral neoureterostomy was performed. 30 days after surgery, patient presented with urinary infection that was controlled with antibiotics. Both dogs were continent one year after treatment. Discussion: Imaging results of the urinary tract can be useful in diagnosing ectopic ureter. Image modalities used for detecting ectopic ureter include excretory urography, pneumocystography, vaginography, retrograde urethrography, ultrasonography, computed tomography, and magnetic resonance imaging. The difference between extra and intramural ureteral ectopia, in some cases, can only be determined during exploratory laparotomy. Surgical complications vary due to several factors, such as whether the ureteral ectopia is uni- or bilateral, intra or extramural, and also the surgical treatment used. Ureteroneocystostomy complications include hydroureter, hydronephrosis, cystitis, transient stenosis, anastomotic dehiscence, persistent dysuria, and loss of normal ureteric peristalsis. Complications of neoureterostomy include persistent dysuria, cystitis, and reflex dyssynergia. Recanalization is a possible cause of postoperative incontinence if the distal ureter is not completely resected. Unilateral hydronephrosis was observed in the first reported case, and nephroureterectomy was performed. A nephroureterectomy is indicated when severe pathologic findings are present, such as severe hydronephrosis, hydroureter, or renal dysplasia and when the contralateral kidney and ureter are functioning normally. In the second case, bacterial cystitis was diagnosed during the postoperative period and was controlled with antibiotic therapy. After surgery, 44-67% of dogs had persistent urinary incontinence. Although residual incontinence can occur after incomplete intramural ureteral remnant or ureteral trough resection, incontinence has also been reported after ureteral reimplantation and nephroureterectomy. Bilateral disease and concurrent urogenital abnormalities often contribute to treatment failure. Therapeutic success was reported in both cases without signs of urinary incontinence one year after surgery.

Publication Type

Journal article.

<53>

Accession Number

20143083897

Author

Davidson, A. P.; Westropp, J. L.

Title

Diagnosis and management of urinary ectopia. (Special Issue: Pediatrics.)

Source

Veterinary Clinics of North America, Small Animal Practice; 2014. 44(2):343-353.

Publisher

W.B. Saunders

Location of Publisher

Philadelphia

Country of Publication

USA

Abstract

Ectopic ureters are the most common cause of urinary incontinence in young dogs but should be considered as a differential in any incontinent dog for which the history is not known. Ectopic ureters can be diagnosed with excretory urography, fluoroscopic urethrography or ureterography, abdominal ultrasonography, cystoscopy, helical computed tomography, or a combination of these diagnostic procedures. Other congenital abnormalities can also occur in dogs with ectopic ureters, including renal agenesis or dysplasia, hydronephrosis, and/or hydroureter and vestibulovaginal anomalies; therefore, the entire urinary system must be evaluated with ultrasonography if cystoscopy is the only other diagnostic tool used before surgery. Novel surgical techniques and adjunctive medical management have improved the prognosis for dogs with urinary ectopia.

Publication Type

Journal article.

<54>

Accession Number

20143129110

Author

Pisu, M. C.; Veronesi, M. C.

Title

Effectiveness of deslorelin acetate subcutaneous implantation in a domestic queen with after-spaying urinary incontinence.

Source

Journal of Feline Medicine and Surgery; 2014. 16(4):366-368. 8 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

A 2-year-old female ovariectomised Norwegian Forest cat with a history of post-spaying urinary incontinence was diagnosed with acquired urinary sphincter mechanism incompetence (USMI) after complete clinical and laboratory examination. Although there is no literature regarding the treatment of post-spaying USMI in cats, deslorelin acetate is successful in the treatment of post-spaying USMI in dogs. Deslorelin acetate implants have been shown previously to be effective for contraception and oestrus

suppression in queens, and suppression of reproductive function in tomcats. Therefore, deslorelin acetate implant treatment was chosen for treatment of post-spaying USMI in this queen. Follow-up examinations were performed on days 8, 15 and 30 after deslorelin implant insertion. Urinary continence was restored about 25 days after implantation and maintained for at least 15 months, without treatment-related negative effects. In the present case report, the post-spaying urinary incontinence related to the acquired USMI was successfully treated with a deslorelin acetate implant. In addition, safe implantation was easy in cats and the single injection resulted in long-lasting efficacy. Further studies are needed to confirm the usefulness of deslorelin acetate treatment for post-spaying USMI in queens and to better delineate the duration of efficacy.

Publication Type

Journal article.

<55>

Accession Number

20143185214

Author

Byron, J. K.

Title

Drippy dogs: causes and treatment of urinary incontinence.

Source

Proceedings of the NAVC Conference, 18-22 January 2014, Orlando, Florida, USA. Volume 28, Small Animal & Exotics; 2014. :unpaginated.

Publisher

North American Veterinary Community (NAVC)

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<56>

Accession Number

20143159942

Author

Noel, S.; Hamaide, A.

Title

Surgical management of ectopic ureters: clinical outcome and prognostic factors for long-term continence.

Source

BSAVA Congress 2014, Birmingham, UK, 3-6 April, 2014. Scientific Proceedings Veterinary Programme; 2014. :576.

Publisher

British Small Animal Veterinary Association

Location of Publisher

Quedgeley

Country of Publication

UK

Publication Type

Conference paper.



<57>

Accession Number

20143159709

Author

Friend, E.

Title

Update on treatment for USMI (urinary sphincter mechanism incompetence).

Source

BSAVA Congress 2014, Birmingham, UK, 3-6 April, 2014. Scientific Proceedings Veterinary Programme; 2014. :119-122.

Publisher

British Small Animal Veterinary Association

Location of Publisher

Quedgeley

Country of Publication

UK

Publication Type

Conference paper.

<58>

Accession Number

20143159708

Author

Oechtering, G.

Title

Advances in ectopic ureter management in dogs.

Source

BSAVA Congress 2014, Birmingham, UK, 3-6 April, 2014. Scientific Proceedings Veterinary Programme; 2014. :118.

Publisher

British Small Animal Veterinary Association

Location of Publisher

Quedgeley

Country of Publication

UK

Publication Type

Conference paper.

<59>

Accession Number

20143250060

Author

Reichler, I. M.; Hubler, M.

Title

Urinary incontinence in the bitch: an update.

Source

Reproduction in Domestic Animals; 2014. 49(s2):75-80. many ref.

Publisher

Wiley-Blackwell

Location of Publisher

Berlin

Country of Publication

Germany

Abstract

Urinary incontinence (UI), defined as the involuntary loss of urine during the filling phase of the bladder (Abrams et al. 2002), is a commonly seen problem in veterinary practice. Urinary sphincter mechanism incompetence (USMI) after spaying is the most common micturition disorder, and its medical treatment is normally successful, even though the underlying pathophysiological mechanism is not fully understood. Hormonal changes inducing structural and functional alterations in the bladder, as well as in the urethra composition, are discussed. To manage incontinent patients successfully, possible underlying abnormalities besides USMI should be ruled out. In the majority of cases, history, physical examination and simple tests including urinalysis and urine bacterial culture lead to a presumed aetiology. If USMI is the most likely cause, then the advantage of further diagnostic tests should be discussed with the owner before starting a trial therapy with alpha-adrenergic drugs. Potential side effects of this therapy have to be mentioned even though they rarely occur. It is important to thoroughly evaluate the success of the initial treatment. Its failure should lead to further diagnostic testing. Specialized clinical assessments may provide an aetiological diagnosis, and this could serve as a basis for discussing further treatment options. Surgical procedures, which may in rare cases cause irreversible side effects, may be instituted. If incontinence reoccurs after initial treatment was successfully performed, the diagnostic work-up including urinalysis should always be repeated. As results of urinalysis did not correlate well with results of bacterial culture, a urine culture is recommended (Comer and Ling 1981). Cystocentesis is the preferred method of urine collection (Bartges 2004). Equivocal results of quantitative cultures of urine samples obtained during midstream voiding or by catheterization require repeat collection by cystocentesis (Comer and Ling 1981).

Publication Type

Journal article

Conference paper.

<60>

Accession Number

20143323881

Author

Newman, M.; Landon, B.

Title

Surgical treatment of a duplicated and ectopic ureter in a dog.

Source

Journal of Small Animal Practice; 2014. 55(9):475-478. 23 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

An eight-month old female bull mastiff was referred for evaluation of urinary incontinence. Contrast-enhanced computed tomography identified complete duplication of the left ureter with ectopic insertion of the

duplicate ureter into the proximal urethra. Ureteroneocystostomy was performed, which improved but did not resolve urinary continence. To the authors' knowledge, this report details only the second reported case of duplicated ectopic ureter in the dog and the first documenting surgical reimplantation; thus, double-system ureteral ectopia should be considered as a possible differential diagnosis for urinary incontinence.

Publication Type
Journal article.

<61>

Accession Number
20143331938

Author

Grant, D. C.; Troy, G. C.

Title

Recurrent urethral fibroepithelial polyps in a golden retriever.

Source

Journal of the American Animal Hospital Association; 2014. 50(5):361-365.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

A 2 yr old castrated male golden retriever was referred multiple times over a period of 7.5 yr for stranguria, pollakiuria, urinary incontinence and urinary outflow obstructions due to urethral polyps. Diagnostic imaging modalities used to identify polyps included abdominal ultrasound, excretory urography, double-contrast retrograde urethrocytograms, and urethrocytostomy, which revealed multiple filling defects within the proximal and prostatic urethra. Multiple cystotomies and endourologic procedures were performed to remove the multiple fibroepithelial polyps within the proximal and prostatic urethra. Urinary incontinence resulted from treatments, but did respond to phenylpropanolamine. Medical treatment consisted of a nonsteroidal anti-inflammatory drug, which appeared to decrease the recurrence of the polyps over time. Urethral polyps are an uncommon cause of urinary outflow obstruction and do not usually recur after removal. This case illustrates an uncommon clinical presentation and the difficulties encountered in treatment over an expanded time frame.

Publication Type

Journal article.

<62>

Accession Number
20143354873

Author

Hill, T. L.; Berent, A. C.; Weisse, C. W.

Title

Evaluation of urethral stent placement for benign urethral obstructions in dogs.

Source

Journal of Veterinary Internal Medicine; 2014. 28(5):1384-1390. 13 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background: Benign urethral obstructions (BUO) in dogs result in substantial morbidity because of challenges with conventional therapies. Treatment of malignant urethral obstructions with intraluminal urethral stents is reported to successfully relieve obstructions. Hypothesis/Objectives: To evaluate the efficacy and outcome of urethral stent placement for treatment of BUO in dogs. Animals: Eleven client-owned animals with urethral stents placed for treatment of BUO. Methods: Retrospective study in which medical records were reviewed in dogs diagnosed with BUO and treated with a metallic urethral stent. Data collected included signalment, cause of benign obstruction, procedure time, size and type of stent, complications, and short- and long-term outcome. Results: Eleven dogs with 15 urethral stents were included. Intraluminal urethral stent(s) relieved the obstructions in all dogs. Four dogs had 2 stents placed in separate procedures because of incomplete patency after treatment (n=1), inadvertent compression of the stent (n=1), or tissue ingrowth through the stent (n=2). The median continence score after stent placement was 10 of 10 (range 3-10) with 6 dogs being continent, 3 mildly incontinent, and 1 each moderately and severely incontinent. All owners considered their dog to have an excellent long-term clinical outcome with long-term urethral patency. The median follow-up time was 24 months (range 4-48). Conclusions and Clinical Importance: Urethral stents appear to be an effective treatment for benign urinary obstructions. Moderate to severe incontinence developed in a minority (12.5%) of dogs. Stents relieved obstructions in all dogs with an excellent long-term outcome.

Publication Type

Journal article.

<63>

Accession Number

20143365874

Author

Sousa, V. R. de; Silva, L. M. C.; Azevedo, G. M.; Silva, F. L.; Bezerra, F. B.; Sousa, J. M. de

Title

Ureteronefrectomy for treatment of unilateral hydronephrosis secondary to ascending urolith in dog - case report. [Portuguese]

Source

Acta Veterinaria Brasilica; 2013. 7(Suppl. 1):130-132. 8 ref.

Publisher

Universidade Federal Rural do Semi-Arido (UFERSA)

Location of Publisher

Mossoro

Country of Publication

Brazil

Abstract

- A mixed breed dog with urinary incontinence and recurrent cystitis since puppy was treated at the Veterinary Hospital of UFPI. After clinical evaluation and laboratory tests, and ultrasonography was performed radiography, where she was diagnosed unilateral hydronephrosis, uroliths in the bladder and urethra and prostate gland enlargement. In hematology, the azotemia was found. After stabilization, he was referred for surgery, which was performed orchiectomy and ureteronefrectomia. The animal had a good recovery after surgery, with clinical improvement and good adaptation to special diet.

Publication Type

Journal article

Conference paper.

<64>

Accession Number

20143364233

Author

Kim JiHyun; Lee JunAm; Kim IllHwa; Jang DongWoo; Kang HyunGu

Title

Prognosis and surgical treatment of the urethra embedding leiomyosarcoma in a dog.

Source

Journal of Veterinary Clinics; 2014. 31(4):307-312. 25 ref.

Publisher

Korean Society of Veterinary Clinics

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

A 16-year-old female Shih-Tzu, weighing 5 kg, presented with clinical symptoms of abdominal distension and urinary and fecal incontinence. Abdominal palpation detected a large mass. According to the radiographic findings, the bladder had been moved to the umbilicus by the mass and a large abdominal mass was confirmed in the lower abdominal area. Ultrasonography indentified a large heterogeneous mass with heterogeneous parenchyma and a focal anechoic area in the lower abdominal area. The complete blood count abnormalities suggested thrombocytosis and mild neutrophilia, and the serum chemistry indicated an elevated alkaline phosphatase value. During laparotomy, a firm mass that measured 10.5x9.6 cm was found between the uterine cervix and urinary bladder. The urethra was embedded in the mass. A diagnosis of leiomyosarcoma was established based on histopathology and histochemistry. One week after surgery, urinary retention symptoms that did not appear to be related to mechanical obstruction presented suddenly, but they did not respond to several drug treatments, thus long-term conservative therapy was adopted. The urinary symptoms disappeared on day 27 and the patient started to void large quantities of urine in a smooth and frequent manner. This case report describes the serial changes in the patient's status and the response after surgical remove of the urethra embedding leiomyosarcoma.

Publication Type

Journal article.

<65>

Accession Number

20143361833

Author

Hnizdo, J.; Bicanova, L.; Cap, M.

Title

Diagnostic and management of ectopic ureter in a male Portuguese water dog. [Czech]

Source

Veterinarstvi; 2014. 64(9):659-665. 35 ref.

Publisher

Profi Press, s.r.o.

Location of Publisher

Praha 2

Country of Publication

Czech Republic

Abstract

The article describes diagnostic and therapeutic approach in a male Portuguese Water Dog affected by ectopic ureter. The main clinical problem was an urine incontinence. Diagnosis was based on the contrast CT study, ultrasonography and flexible endoscopy of the urinary tract. The surgical management was the therapy of choice in this case. The ureteral neostoma in the trigonum vesicae was performed Patient is recently few months after the surgical treatment and without any clinical problem Ectopic ureters are uncommonly reported in male dogs and may remain undetected if urinary incontinence is not present due to specific anatomy of a male urethra. Ureteral ectopia is a result of faulty embryonic development and is commonly associated with some other anomalies like hydroureter or hydronephrosis.

Publication Type

Journal article.

<66>

Accession Number

20133017538

Author

Grauer, G. F.

Title

Canine urinary tract infections.

Source

NAVC Clinician's Brief; 2012. (December):19-21.

Publisher

Educational Concepts LLC

Location of Publisher

Tulsa

Country of Publication

USA

Abstract

A case of urinary tract infection (UTI) caused or complicated by probable urethral sphincter mechanism incompetence (USMI), abnormal vulvar anatomy and subsequent perivulvar inflammation in an 8-year-old, spayed, black, Labrador Retriever was described [USA, date not given]. The dog presented with urinary incontinence of several months' duration. Physical examination, including rectal examination and palpation of the urinary bladder, was unremarkable. Complete blood count and biochemistry profile were within normal limits. Urinalysis obtained by cystocentesis revealed a cloudy appearance with pH of 7.5, urine specific gravity of 1.037, 2+ proteinuria, 25 to 30 RBCs/hpf, 10 to 15 WBCs/hpf, 25 struvite crystals/hpf and Gram negative rods. Urine culture yielded *Escherichia coli* (>1000 cfu/ml) sensitive to amoxicillin-clavulanic acid. Abnormal vulvar anatomy and USMI resulted in a moist perivulvar dermatitis and increased the number of pathogenic bacteria at the vulvar opening. Excessive perivulvar skinfolds likely occurred secondary to weight gain. The dog was treated with amoxicillin-clavulanic acid at 13.75 mg/kg PO q12h for 4 weeks, indefinite administration of phenylpropanolamine at 1.5 mg/kg PO q12h for sphincter incompetence, local treatment (astringents, hot-packing, topical antibiotics) and an Elizabethan collar to prevent licking of the perivulvar dermatitis. Improvement was observed after treatment, however reinfection occurred 2 months later. Urine culture again yielded *E. coli* but with a different sensitivity profile (sensitive to fluoroquinolones). Phenylpropanolamine and local treatment of the perivulvar dermatitis helped improve the host defence mechanisms. Once the recurrent UTI had been effectively treated (follow-up urine cultures had no growth), long-term cranberry extract (CE) treatment was initiated to help support the compromised host defence mechanisms. Recheck urinalyses were performed quarterly.

Publication Type

Journal article.

<67>

Accession Number

20133037464

Author

Reeves, L.; Adin, C.; McLoughlin, M.; Ham, K.; Chew, D.

Title

Outcome after placement of an artificial urethral sphincter in 27 dogs.

Source

Veterinary Surgery; 2013. 42(1):12-18. 36 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To evaluate the safety and efficacy of an adjustable artificial urethral sphincter (AUS) in a population of dogs with acquired or congenital urinary incontinence. Study Design: Case series. Animals: Dogs (n=27) with naturally occurring urinary incontinence. Methods: Medical records (January 2009-July 2011) of dogs that had AUS implantation for treatment of urinary incontinence were reviewed and owners were interviewed by telephone to assess outcome. Continence was scored using a previously established analogue scale, with 1 representing constant leakage and 10 representing complete continence. Results: Twenty-four female and 3 male dogs had AUS implantation. Causes of incontinence included urethral sphincter mechanism incompetence (n=18), continued incontinence after ectopic ureter repair (6), and pelvic bladder (3). Medical therapy was unsuccessful in 25 dogs before AUS implantation. Surgery was performed without major complications in 25 dogs; 2 developed partial urethral obstruction after 5 and 9 months. Median (interquartile range) follow-up for the other 25 dogs was 12.5 (6-19) months. Continence scores were significantly improved ($P<.0001$) between the preoperative period (2) and last follow-up (9). Overall, 22 owners described themselves as very satisfied, 2 as satisfied, and 3 as unsatisfied. Conclusions: AUS implantation was successful in restoring continence in male and female dogs with both congenital and acquired urinary incontinence. Dogs that develop partial urethral obstruction may require AUS removal.

Publication Type

Journal article.

<68>

Accession Number

20133044272

Author

Blackburn, A. L.; Berent, A. C.; Weisse, C. W.; Brown, D. C.

Title

Evaluation of outcome following urethral stent placement for the treatment of obstructive carcinoma of the urethra in dogs: 42 cases (2004-2008).

Source

Journal of the American Veterinary Medical Association; 2013. 242(1):59-68. 20 ref.

Publisher

American Veterinary Medical Association

Location of Publisher

Schaumburg

Country of Publication

USA

Abstract

Objective: To evaluate the outcome following urethral stent placement for the palliative treatment of obstructive carcinoma of the urethra in dogs. **Design:** Retrospective case series. **Animals:** 42 dogs with obstructive carcinoma of the urethra. **Procedures:** Medical records for dogs in which a self-expanding metallic stent (SEMS) was used for the treatment of obstructive carcinoma of the urethra were reviewed. Signalment, diagnostic findings, clinical signs before and after SEMS placement, and patient outcome were analyzed. Fluoroscopic images were evaluated to determine the effects of stent size, obstruction length, tumor length, and urethral length and width on the incidence of incontinence or stranguria. **Results:** Resolution of urinary tract obstruction was achieved in 41 of 42 (97.6%) dogs. After SEMS placement, 6 of 23 male and 5 of 19 female dogs developed severe incontinence, and 1 of 23 male and 1 of 17 female dogs developed stranguria. Stent length, diameter, and location were not associated with incidence of incontinence or stranguria. Median survival time after SEMS placement was 78 days (range, 7 to 536 days). Treatment with NSAIDs before and chemotherapeutics after SEMS placement increased median survival time to 251 days (range, 8 to 536 days). **Conclusions and Clinical Relevance:** Urethral SEMS placement was an effective palliative treatment for dogs with obstructive carcinoma of the urethra; however, severe incontinence subsequently developed in 11 of 42 (26%) treated dogs. Adjunctive treatment of affected dogs with NSAIDs and chemotherapeutics significantly increased the median survival time.

Publication Type

Journal article.

<69>

Accession Number

20133075290

Author

Yoon HunYoung; Roh MiYoung; Jeong SoonWuk

Title

Surgical correction of a vesicourachal diverticulum in a cat.

Source

Journal of Veterinary Clinics; 2012. 29(6):509-512. 10 ref.

Publisher

Korean Society of Veterinary Clinics

Location of Publisher

Seoul

Country of Publication

Korea Republic

Abstract

A 4-year-old female Korean short hair cat weighing 6.5 kg presented for evaluation of urinary incontinence and stranguria. On physical examination, stranguria was observed concurrently with urinary bladder distention. Abdominal radiographs revealed two small uroliths in the urinary bladder. Urinary bladder sludge was detected on abdominal ultrasound. Urine analysis indicated hematuria and bacteriuria. The cat was treated with a 4-week course of a combination of antibiotics and urinary bladder irrigation using normal saline; however, response to treatment was minimal. Excretory urography was performed to identify a congenital disorder. A small diverticulum, located to the urinary bladder apex, was identified. A tentative diagnosis of a vesicourachal diverticulum was made. Surgical exploration of the abdomen was performed and a triangular-shaped diverticulum was apparent at the urinary bladder apex. Cystotomy was performed to remove two small uroliths. Partial cystectomy was then performed for diverticulectomy. Approximately 2 cm diameter of a part of the apex was removed. Normal urination was regained 5 days postoperatively. The follow-up was completed by physical examination 2 years after surgery. There was no evidence of stranguria and urinary incontinence.

Publication Type

Journal article.

<70>

Accession Number

20133147861

Author

Raillard, M.; Manassero, M.; Gomes, E.; Combrisson, H.; Maurey, C.

Title

Ectopic ureter in an adult male Labrador. [French]

Source

Point Veterinaire; 2013. 44(334 Part 2):66-71. 17 ref.

Publisher

Editions du Point Veterinaire

Location of Publisher

Maisons-Alfort

Country of Publication

France

Abstract

A 5-year old male Labrador was presented for urinary incontinence with continuous drop loss for 2 years, without voiding difficulties. Incontinence due to defective storage was explored. Suspected conditions included sphincter incompetence, a lack of compliance or bladder capacity, or ectopic ureter. Ultrasonography of the urinary tract revealed bilateral ectopic ureters, the uro-dynamic profile being sphincter incompetence. Surgical treatment was undertaken and continence was restored in the dog. Ectopic ureter is rarely described in male dogs. Other conditions are often associated, such as sphincter incompetence, which can affect surgical success.

Publication Type

Journal article.

<71>

Accession Number

20133185124

Author

Forsee, K. M.; Davis, G. J.; Mouat, E. E.; Salmeri, K. R.; Bastian, R. P.

Title

Evaluation of the prevalence of urinary incontinence in spayed female dogs: 566 cases (2003-2008).

Source

Journal of the American Veterinary Medical Association; 2013. 242(7):959-962. 19 ref.

Publisher

American Veterinary Medical Association

Location of Publisher

Schaumburg

Country of Publication

USA

Abstract

Objective: To determine the prevalence of urinary incontinence in spayed female dogs and categorize affected dogs by age at time of ovariohysterectomy, number of litters prior to ovariohysterectomy, body weight, treatment of affected dogs, and severity of incontinence and to determine associations among these variables. Design: Retrospective case series. Animals: 566 ovariohysterectomized dogs. Procedures: An attempt was made to contact owners of 912 dogs ovariohysterectomized between January 2003 and January 2008 to discuss presence or absence of urinary incontinence. The actual number of responders was

566. Those owners with incontinent pets received a questionnaire further assessing degree of incontinence, diagnostic testing, treatment, and history. Results: The prevalence of acquired urinary incontinence was determined to be 5.12% (29/566 dogs) on the basis of results of phone surveys and questionnaires. There was no significant difference in the age at time of ovariohysterectomy between incontinent and continent groups. A significant association was found between body weight and incontinence, with incontinence rates higher among larger (≥ 15 kg [33.1 lb]) dogs. Larger dogs were approximately 7 times as likely (OR, 7.2 [95% confidence interval, 2.5 to 21.1]) to develop acquired urinary incontinence, compared with small dogs (< 15 kg). Conclusions and Clinical Relevance: Although acquired urinary incontinence in female dogs is known to be associated with ovariohysterectomy, the prevalence in this study was low.

Publication Type

Journal article.

<72>

Accession Number

20133193715

Author

Asai, Y.; Nishizima, N.; Matsuda, N.; Katayama, M.; Okamura, Y.; Uzuka, Y.

Title

Hormone-responsive urinary incontinence in a female dog treated effectively with oral oestradiol preparation. [Japanese]

Source

Journal of the Japan Veterinary Medical Association; 2013. 66(5):325-329. 13 ref.

Publisher

Japan Veterinary Medical Association

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

An 18-month-old, neutered female West Highland White Terrier was presented for urinary incontinence during sleep. Urinary incontinence was observed 8 months after neutering. There were no significant findings on clinical examinations. Because hormone-responsive urinary incontinence was diagnosed presumptively based on the information provided by the owner, oral oestradiol therapy was started. As a result of the measurement of serum oestradiol concentration at the initial presentation, the level of serum oestradiol was lower than found in healthy dogs. After oestradiol was orally administered a total of three times, the dog has been asymptomatic for more than two years. Mild dermatitis appeared temporarily as a side effect. At 753 days after the initial presentation, the dog was generally in good condition without any sign of recurrence. The result of this case suggested that oral oestradiol therapy for hormone-responsive urinary incontinence could replace conventional medical therapy in terms of treatment effect, reduction of frequency of administration and side effects.

Publication Type

Journal article.

<73>

Accession Number

20133193092

Author

Currao, R. L.; Berent, A. C.

Title

Use of a percutaneously controlled urethral hydraulic occluder for treatment of refractory urinary incontinence in 18 female dogs.

Source

Veterinary Surgery; 2013. 42(4):440-447. 19 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To evaluate the efficacy and safety of a percutaneously controlled urethral hydraulic occluder (HO) device for the treatment of refractory urinary incontinence (RUI) in female dogs with various urogenital anomalies. Study Design: Case series. Animals: Female dogs with RUI (n=18). Methods: Retrospective evaluation of dogs after a silicone ring (HO) was surgically placed around the proximal urethra. The ring was connected to a subcutaneous injection port with actuating tubing. Residual incontinence was treated with percutaneous infusion of sterile saline into the device to provide extraluminal urethral compression. Dogs were assessed for continence (owner-assessed 10-point continence scale) and complications at standard time points. Results: All 18 dogs had significantly improved continence scores ($P < .001$) after HO placement (median and mean score pre-HO=2.8 and 3.3; post-HO=10 and 8.9, respectively) with a median follow-up time of 32 months. "Functional" continence (score ≥ 9) was achieved in 67% of dogs after HO placement, though only 13/18 clients were compliant with inflations. Of dogs belonging to compliant owners, 12 (92%) had a functional continence score. Six dogs (33%) did not require inflation to achieve continence. Urethral obstruction occurred as a complication in 3 dogs. Conclusions: Use of an HO device was an effective long-term treatment for RUI when traditional options failed. The technique was associated with some complications, and these risks should be considered before use.

Publication Type

Journal article.

<74>

Accession Number

20133225405

Author

Chew, D. J.; McLoughlin, M. A.

Title

Fixing urinary incontinence in dogs - what are your options?

Source

Small Animal and Exotics Proceedings. North American Veterinary Conference, Orlando, Florida, USA, 19-23 January 2013.; 2013. :unpaginated. 39 ref.

Publisher

North American Veterinary Conference

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<75>

Accession Number

20133217013

Author

Trebackz, P.; Jurka, P.

Title

Short-term outcome following concurrent surgical treatment of ureteral ectopia and intrapelvic urinary bladder in nine neutered bitches.

Source

Veterinary Record; 2013. 172(25):663.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Abstract

This article discusses the successful surgical treatment of ureteral ectopia with concurrent intrapelvic urinary bladder in nine neutered bitches. The urinary incontinence associated with the congenital defect completely resolved after the surgical operation.

Publication Type

Journal article.

<76>

Accession Number

20133283841

Author

Mayhew, P. D.; Berent, A.

Title

Treatment strategies for urinary sphincter mechanism incompetence.

Source

Small animal soft tissue surgery; 2013. :552-561. 43 ref.

Publisher

John Wiley & Sons

Location of Publisher

Chichester

Country of Publication

UK

Publication Type

Book chapter.

<77>

Accession Number

20133318590

Author

Briand, L.

Title

Benefits and risks of estriol in a sterilized bitch with urinary incontinence. [French]

Source

Point Veterinaire; 2013. 44(338 Part 1):13.

Publisher

Editions du Point Veterinaire

Location of Publisher

Maisons-Alfort

Country of Publication

France

Abstract

The clinical signs, diagnosis and the advantages and disadvantages of treatment with estriol (Incurin) vs. phenylpropanolamine (Propalin) in a dog in France [date not given] with urinary incontinence are described.

Publication Type

Journal article.

<78>

Accession Number

20133335136

Author

Hnizdo, J.; Bicanova, L.; Valasek, P.; Gargel, J.; Plachy, J.

Title

Diagnostics and surgical solution of bilateral ectopic ureter in a five-year-old bitch. [Czech]

Source

Veterinarstvi; 2013. 63(2):90-97. 36 ref.

Publisher

Profi Press, s.r.o.

Location of Publisher

Praha 2

Country of Publication

Czech Republic

Abstract

The paper describes an unusual case of a five-year-old female Chinese crested dog, in which a bilateral ectopic ureter was diagnosed with the use of ultrasound, radiography and endoscopy. Also a bilateral chronic pyelonephritis with unilateral hydrourether was found in this patient. Scintigraphy showed mild reduction in GFR in the right kidney and a marked dysfunction of the left kidney. An intravesicular resection of the right intramural urether was performed with a novel technique using diode laser. A neostoma was created in the trigonum following that procedure. The left urether was transposed end-to-site to the cranio-lateral bladder wall. Shortly after surgical treatment the urinary incontinence disappeared. There was a marked reduction in size of the left hydrourether, also a reduction of pyelectasia in both kidneys, especially in the right kidney. A follow-up sonographic exam, excretion urography and second look cystoscopy proved bilaterally functional urethers. The authors discuss the prevalence, ethiology and treatment options in patients with ectopic urethers in general in dogs and cats.

Publication Type

Journal article.

<79>

Accession Number

20133407786

Author

Bae JaeHyun; Kwon YongHwan; Jung YeChan; Jung JiMo; Lee HaeBeom; Lee KiChang; Kim NamSoo; Kim MinSu

Title

Use of an aortic stent graft extension for the treatment of urethral stricture in a dog.

Source

Journal of Veterinary Medical Science; 2013. 75(10):1363-1365. 8 ref.

Publisher

Japanese Society of Veterinary Science

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

A 2-year-old male mixed dog was referred to us for further evaluation and treatment of a 4-week-history of oliguria and abdominal distension after a surgical repair of urethral injury. To relieve the urethral stricture, we placed a self-expanding aortic stent graft extension with a partial coverage with an expanded polytetrafluoroethylene (ePTFE). After the placement of the stent, the dog presented with a normal urinary voiding, despite the presence of urinary incontinence. The current case indicates that the ePTFE-covered, self-expanding ASGE is an effective intervention for the treatment of severe urethral stricture in the dog.

Publication Type

Journal article.

<80>

Accession Number

20123186684

Author

Reichler, I. M.; Specker, C. E.; Hubler, M.; Boos, A.; Haessig, M.; Arnold, S.

Title

Ectopic ureters in dogs: clinical features, surgical techniques and outcome.

Source

Veterinary Surgery; 2012. 41(4):515-522. 48 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Objective: To compare clinical features of ectopic ureter (EU) in male and female dogs and outcome after neoureterostomy with resection restricted to the intravesical part of the ureter for intramural ectopic ureter (iEU) or of ureteroneocystostomy for extramural ectopic ureter (eEU). Study design: Retrospective case series. Animals: Female dogs (n=26) with 32 iEU and 8 eEU; male dogs (n=24) with 25 iEU and 18 eEU. Methods: Data were collected from medical records (1992-2008). Long-term follow-up information after surgical correction by modified neoureterostomy or ureteroneocystostomy was gathered by owner questionnaire. Results: Median age at first occurrence of UI was significantly lower in females (<2 months) than in males with EU (8 months; P=0.0015). Bilateral occurrence and an extramural course of the ureter were more common in males (n=19 and n=20, respectively) compared with females (14 and 12, respectively), but the outcome of surgical treatment was comparable in both genders. Conclusions: The prognosis after surgery is fair with a success rate of 72% and a complication rate of 26%. Resection of only the intravesicular ectopic ureter resulted in resolution of incontinence in a high percentage of dogs and thus is an acceptable alternative to removal of the entire ureteral remnant.

Publication Type
Journal article.

<81>

Accession Number
20123169219

Author
Holt, P.

Title
Understanding canine urinary incontinence.

Source
Understanding canine urinary incontinence; 2011. :48 pp.

Publisher
Vet Professionals
Location of Publisher
Roslin

Country of Publication
UK

Abstract

This book provides a comprehensive review of the common and not so common causes of urinary incontinence in both male and female dogs. Particular emphasis is placed on the common causes of urinary incontinence in puppies and adult animals and on the investigations and treatments that are available and what the response to therapy might be. It should prove invaluable to any pet owner with dogs of this condition, struggling to understand this complex range of conditions. It will help the client prepare what questions to ask and the needed information on the treatments given. The text will also prove useful to veterinary nurses and general practitioners who wish to review this topic. The author's vast experience of investigating and managing incontinent dogs shines through and the text provides a balanced commentary on the subject.

Publication Type
Book.

<82>

Accession Number
20123241687

Author
Kanca, H.; Karakas, K.; Yagc, I. P.; Basaran, T.

Title
Evaluation of once daily dose of phenylpropanolamine in the treatment of urethral sphincter mechanism incompetence in spayed bitches.

Source
Ankara Universitesi Veteriner Fakultesi Dergisi; 2012. 59(3):203-210. 23 ref.

Publisher
Ankara Universitesi, Veteriner Fakultesi Dekanlg

Location of Publisher
Ankara

Country of Publication
Turkey

Abstract

The aim of this study was to evaluate the efficacy and long term safety of once daily administration of phenylpropanolamine (PPA) in the treatment of urethral sphincter mechanism incompetence (USMI) in spayed bitches in comparison to three times daily administrations. For this purpose, 22 spayed bitches suffering from USMI received either PPA at the dose rate of 1.5 mg/kg, body weight (BW) once daily (group I, n=11) or 1.5 mg/kg three times daily (group II, n=11) by oral administration. Clinical efficacy was determined by using a scoring system based on analysing the frequency and the amount of unconscious urination on d 7, 14 and 28. There was no significant difference ($p>0.05$) between the clinical response observed on d 7, 14 and 28 of treatment in group I and II. Eight dogs (72.7%) in each group were continent on d 28. The side effects observed were mild and transient. Phenylpropanolamine therapy was continued in 13 dogs that became continent after 28 d and the dogs were followed up for 12 months. None of the dogs showed symptoms of urinary incontinence except for 2 bitches that became refractory to PPA treatment in group II. Phenylpropanolamine was combined with estriol for 14 d (1 mg/dog PO) in dogs in which PPA therapy was inefficient or unsatisfactory on d 28 and in dogs that became refractory to PPA treatment. A total of 8 dogs were treated with estriol PPA combination. Five (62.5%) bitches were continent on 14th d of estriol PPA combination treatment. In one bitch (12.5%) urinary incontinence improved. In conclusion, once daily administration of PPA at a dose of 1.5 mg/kg, BW is effective in treatment of USMI in spayed bitches and it offers a cheap and convenient treatment option. In addition, recurrence of incontinence can be observed during long term administration of PPA and combination of PPA with estriol is effective in dogs in which PPA therapy alone is unsatisfactory and in dogs that become refractory to PPA treatment.

Publication Type

Journal article.

<83>

Accession Number

20123241377

Author

Byron, J. K.

Title

Drippy dogs: causes and treatment of urinary incontinence.

Source

Small Animal and Exotics Proceedings. Book One: Alternative medicine - Ophthalmology. North American Veterinary Conference, Orlando, Florida, USA, 14-18 January 2012. Volume 26; 2012. :unpaginated.

Publisher

The North American Veterinary Conference

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<84>

Accession Number

20123241223

Author

Pressler, B. M.

Title

Management of incontinence: beyond PPA.

Source

Small Animal and Exotics Proceedings. Book One: Alternative medicine - Ophthalmology. North American Veterinary Conference, Orlando, Florida, USA, 14-18 January 2012. Volume 26; 2012. :unpaginated.

Publisher

The North American Veterinary Conference

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<85>

Accession Number

20123335379

Author

Martinez-Ruzafa, I.; Kruger, J. M.; Miller, R.; Swenson, C. L.; Bolin, C. A.; Kaneene, J. B.

Title

Clinical features and risk factors for development of urinary tract infections in cats.

Source

Journal of Feline Medicine and Surgery; 2012. 14(10):729-740. 37 ref.

Publisher

Sage Publications

Location of Publisher

Thousand Oaks

Country of Publication

USA

Abstract

The clinical and diagnostic features of 155 cats with urinary tract infection (UTI) and 186 controls with negative urine culture/s were characterized retrospectively (signalment, clinical signs, urinalysis, urine culture, concurrent diseases, lower urinary tract diagnostic/therapeutic procedures). Multivariable logistic regression was used to identify risk factors associated with UTI. Cats of all ages were affected by UTI with no sex/breed predisposition. Lower urinary tract signs were absent in 35.5% of cats with UTI. Pyuria and bacteriuria had sensitivities of 52.9% and 72.9%, and specificities of 85.5% and 67.7% for detection of UTI, respectively. Risk factors significantly associated with increased odds of UTI were urinary incontinence [odds ratio (OR)=10.78, P=0.0331], transurethral procedures (OR=8.37, P<0.0001), urogenital surgery (OR=6.03, P=0.0385), gastrointestinal disease (OR=2.62, P=0.0331), decreased body weight (OR=0.81, P=0.0259) and decreased urine specific gravity (OR=0.78, P=0.0055). Whilst not independently significant, renal disease and lower urinary tract anatomic abnormalities improved statistical model performance and contributed to UTI.

Publication Type

Journal article.

<86>

Accession Number

20123387367

Author

Ponglowhapan, S.; Khalid, M.; Church, D.

Title

Canine urinary incontinence post-neutering: a review of associated factors, pathophysiology and treatment options.

Source

Thai Journal of Veterinary Medicine; 2012. 42(3):259-265.

Publisher

Faculty of Veterinary Science, Chulalongkorn University

Location of Publisher

Bangkok

Country of Publication

Thailand

Abstract

Canine urinary incontinence is commonly encountered in small animal veterinary practice with high prevalence in spayed female dogs. The diagnosis of neutering-induced urinary incontinence is usually based on clinical signs, history and elimination of other possible diagnoses. The proposed predispositions to incontinence that follows neutering including gender, breed, body weight, obesity, tail docking, spaying technique (ovariectomy and ovariectomy) and morphology of the LUT, e.g. the position of neck of the bladder and urethral length, have all been investigated. At present, the exact underlying mechanisms are not fully understood. However, it is widely agreed that the condition is multi-factorial and hormone-associated. The role of gonadotrophin LH and FSH in the physiology and/or pathology of the canine lower urinary tract function and its relationship to the development of urinary incontinence post-spay has recently been suggested and remains an interesting subject for further research. Medical approach is the mainstay of treatment for affected animals with surgical correction being considered when medical treatment fails to restore continence or patient is unsuitable for long-term medication. Medical and surgical options in the treatment of post-neutering urinary incontinence are reviewed.

Publication Type

Journal article.

<87>

Accession Number

20113014150

Author

Claeys, S.; Leval, J. de; Hamaide, A.

Title

Transobturator vaginal tape inside out for treatment of urethral sphincter mechanism incompetence: preliminary results in 7 female dogs.

Source

Veterinary Surgery; 2010. 39(8):969-979. 64 ref.

Publisher

Blackwell Publishing

Location of Publisher

Boston

Country of Publication

USA

Abstract

Objectives: To evaluate the clinical efficacy of the transobturator vaginal tape inside-out (TVT-O) in incontinent female dogs affected with urethral sphincter mechanism incompetence (USMI) and to determine its urodynamic and morphologic effects. Study Design: Case series. Animals: Incontinent spayed female dogs (n=7). Methods: TVT-O tape was inserted in 7 incontinent female dogs diagnosed with USMI. Urethral pressure profilometry (UPP) and vaginourethrograms were performed preoperatively, and 1 and 3 months postoperatively. Clinical efficacy of the technique was evaluated and complications reported. Follow-up information was evaluated by a telephone questionnaire. Results: All dogs were continent immediately after

the procedure. Incontinence recurred 2 months after surgery in 1 dog and was treated by phenylpropanolamine administration. At mean follow-up time of 11.3 months, 6 of 7 dogs were continent. An iatrogenic urethral tear occurred intraoperatively in 1 dog. No postoperative complications were encountered. The postoperative UPPs showed significantly increased maximal urethral closure pressure and integrated pressure. Postoperative vaginourethrograms were unremarkable. The surgical procedure did not modify the location of the urinary bladder neck in dogs with a "pelvic urinary bladder" preoperatively. Conclusions: TVT-O was efficient in maintaining short term continence in 6 of 7 dogs affected with USMI.

Publication Type
Journal article.

<88>

Accession Number
20113016827

Author
Reina, F.

Title
A general approach to canine urinary tract disorders: origin to treatment.

Source
VN Times; 2011. 11(1):14-16. 10 ref.

Publisher
Veterinary Business Development Ltd

Location of Publisher
Peterborough

Country of Publication
UK

Abstract
This article looks at the clinical signs and pathology of various canine urinary tract problems.

Publication Type
Journal article.

<89>

Accession Number
20113068243

Author
Bleser, B. de; Brodbelt, D. C.; Gregory, N. G.; Martinez, T. A.

Title
The association between acquired urinary sphincter mechanism incompetence in bitches and early spaying: a case-control study.

Source
Veterinary Journal; 2011. 187(1):42-47.

Publisher
Elsevier Ltd

Location of Publisher
Oxford

Country of Publication
UK

Abstract

A case-control study was conducted between December 2005 and August 2006 in London (1) to estimate the strength of association between early ovariohysterectomy (spaying) and urinary incontinence (sphincter mechanism incompetence), (2) to identify other risk factors for incontinence, and (3) to assess any implications of incontinence on the owner-pet relationship. Cases were defined as bitches that developed incontinence after spaying and were treated, and the controls comprised continent spayed bitches. Questionnaires from 202 cases were compared to 168 controls, and analysed using multivariable logistic regression. No significant association between early spaying and incontinence was detected although there was a tendency that early spayed bitches were less likely to be incontinent. Docked bitches were 3.8 times more likely to be incontinent than undocked bitches; bitches weighing over 10 kg were 3.7 times more likely to be incontinent than smaller dogs; and older bitches were more likely to be incontinent (OR=3.1-23.8) than younger animals. Some owners were found to have a negative attitude towards incontinence.

Publication Type

Journal article.

<90>

Accession Number

20113059380

Author

Iris, R.; Madeleine, H.; Susi, A.

Title

Urinary incontinence in the dog.

Source

Veterinaria (Cremona); 2010. 24(6):9...34. 67 ref.

Publisher

Edizioni SCIVAC

Location of Publisher

Cremona

Country of Publication

Italy

Abstract

The article reports a review of the literature on canine urinary incontinence. The anatomical and physiological aspects involved in the mechanism of micturition are described. Epidemiological data, diagnostic approach, clinical examination and medical and/or surgical treatment are widely illustrated.

Publication Type

Journal article.

<91>

Accession Number

20113136213

Author

Adams, L. G.

Title

Diagnosis and treatment of refractory urinary incontinence.

Source

BSAVA Congress 2011, The ICC/NIA, Birmingham, UK, 31 March - 3 April. Scientific Proceedings Veterinary Programme; 2011. :153-155. 5 ref.

Publisher

British Small Animal Veterinary Association

Location of Publisher
Quedgeley
Country of Publication
UK
Publication Type
Book chapter
Conference paper.

<92>

Accession Number
20113170121

Author
Ho, L. K.; Troy, G. C.; Waldron, D. R.

Title
Clinical outcomes of surgically managed ectopic ureters in 33 dogs.

Source
Journal of the American Animal Hospital Association; 2011. 47(3):196-202.

Publisher
American Animal Hospital Association

Location of Publisher
Denver

Country of Publication
USA

Abstract

Factors that predict postoperative continence and incontinence were evaluated in 33 female dogs with surgically corrected ectopic ureters. The current study found that intramural or extramural, left- or right-sided, and unilateral or bilateral ectopic ureters were not significant factors influencing postoperative incontinence in affected dogs. The presence of either hydroureter or urinary tract infection was also not significantly associated with postoperative incontinence. Dogs with ectopic ureters that were incontinent postsurgically tended to remain unresolved.

Publication Type
Journal article.

<93>

Accession Number
20113161747

Author
Grauer, G. F.

Title
A simple approach to urine leakage and urine retention.

Source
Small animal and exotics. Proceedings of the North American Veterinary Conference, Orlando, Florida, USA, 15-19 January 2011; 2011. :838-841.

Publisher
The North American Veterinary Conference

Location of Publisher
Gainesville

Country of Publication

USA
Publication Type
Conference paper.

<94>

Accession Number
20113203431

Author
Kang MinHee; Kim JuWon; Park HeeMyung

Title
Spay-related urethral sphincter mechanism incompetence concurrent with pituitary-dependent hyperadrenocorticism in a bitch.

Source
Journal of Veterinary Clinics; 2011. 28(2):258-261. 9 ref.

Publisher
Korean Society of Veterinary Clinics

Location of Publisher
Seoul

Country of Publication
Korea Republic

Abstract

An 8-year-old spayed female, Yorkshire terrier dog was presented with a urinary incontinence. Unaware urine dribbling during sleeping was observed eight months after spaying. Polyuria and polydipsia were also reported. Physical examination revealed obesity and hypertension. Characteristic laboratory findings in this dog were polycythemia, hyperlipidemia and elevated hepatic enzyme. Other causes of the urinary incontinence were ruled out through further diagnostic tests and spay-related urethral sphincter mechanism incompetence (USMI) was made as a presumptive diagnosis. In addition, the dog was also diagnosed with pituitary-dependent hyperadrenocorticism. Both conditions can cause urinary incontinence in dogs; therefore, definite diagnosis was made through a therapeutic approach. The synthetic estrogen, diethylstilbesterol, was initially administered and successfully managed the urinary incontinence in this dog. To the best of the author's knowledge, this is the first case report describing the clinical and laboratory features of spay-related USMI concurrent with hyperadrenocorticism and treatment outcomes in our country.

Publication Type
Journal article.

<95>

Accession Number
20113286290

Author
Hadar, E. N.; Morgan, M. J.; Morgan, O. D. E.

Title
Use of a self-expanding metallic stent for the treatment of a urethral stricture in a young cat.

Source
Journal of Feline Medicine and Surgery; 2011. 13(8):597-601. 24 ref.

Publisher
Elsevier Ltd

Location of Publisher
Oxford

Country of Publication

UK

Abstract

A 4-month-old intact male domestic shorthair cat was evaluated for urinary outflow obstruction after several weeks of medical management for traumatic urethral rupture. Positive-contrast retrograde urethrography and anterograde cystoscopy performed 4 weeks after the initial urethral injury confirmed a stricture approximately 1 cm distal to the bladder trigone at the site of the initial urethral tear. A self-expanding metallic urethral stent (SEMS) was placed under fluoroscopic guidance to relieve the urethral stricture and re-establish luminal patency. After stent placement, the cat was able to void urine normally with minimal urinary incontinence noted. This resolved several months post-stent placement. No known clinical complications persisted other than mild intermittent hematuria.

Publication Type

Journal article.

<96>

Accession Number

20113275487

Author

Cesare, T. S.; Ferrari, S.

Title

Urinary incontinence in dogs: a revision. [Portuguese]

Source

A Hora Veterinaria; 2011. 31(182):56-59, 7. 24 ref.

Publisher

A Hora Veterinaria

Location of Publisher

Porto Alegre

Country of Publication

Brazil

Abstract

The urinary incontinence (UI) is a disease resultant of a congenital or acquired problem. Amongst the acquired problems, it is distinguished the UI consequent to the castration of dogs, when it has reduction of steroid hormones and increase of the Gonadotropins, beyond the functional alteration of the urethral sphincter. In 75% of the castrated dogs, the first signals appears in the first 3 years after the surgery and the treatment is carried traditionally through the use of Sympathomimetic drugs and/or estrogens. Currently the use of GnRH analogous as subcutaneous implant has been studied in the treatment of the disease.

Publication Type

Journal article.

<97>

Accession Number

20113331831

Author

Byron, J. K.; Chew, D. J.; McLoughlin, M. L.

Title

Retrospective evaluation of urethral bovine cross-linked collagen implantation for treatment of urinary incontinence in female dogs.

Source

Journal of Veterinary Internal Medicine; 2011. 25(5):980-984. 29 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Boston

Country of Publication

USA

Abstract

Background: Transurethral collagen injections are an alternative treatment for canine urinary incontinence. There is controversy regarding the long-term effectiveness of collagen and the impact urethral coaptation and injection site have on outcome. Hypothesis/Objectives: To evaluate outcome and client satisfaction after urethral collagen injections, and correlation between degree of urethral coaptation and collagen placement with outcome. Animals: Thirty-six procedures on 31 dogs, 10 with ureteral ectopia. Methods: Retrospective review of records and video evaluation of injection procedures. Follow-up communication with owners was performed between 1 and 56 months after bovine cross-linked collagen implantation to evaluate duration of continence, need for additional medical therapy, and owner satisfaction. Continence score was evaluated before and after the procedure, and after additional medical therapy, if needed. Injection location and degree of urethral coaptation was assessed with respect to duration of continence. Results: Dogs had a significant increase in continence score after the procedure. Mean (SD) duration of continence in dogs without addition of medication was 16.4 (15.2) months, and 5.2 (4.3) months in dogs needing additional medical therapy. No significant difference was found with respect to degree of coaptation. Median client satisfaction with the procedure was 100%. Conclusions and Clinical Importance: Transurethral collagen implantation may be a viable option for treatment of female dogs with urethral sphincter mechanism incompetence, particularly after medical failure. Duration and degree of improvement are variable. Client satisfaction was excellent despite lack of complete continence in some dogs, and highlights the importance of discussing outcome expectations with owners.

Publication Type

Journal article.

<98>

Accession Number

20113354539

Author

Kieves, N. R.; Novo, R. E.; Martin, R. B.

Title

Vaginal resection and anastomosis for treatment of vestibulovaginal stenosis in 4 dogs with recurrent urinary tract infections.

Source

Journal of the American Veterinary Medical Association; 2011. 239(7):972-980. 15 ref.

Publisher

American Veterinary Medical Association

Location of Publisher

Schaumburg

Country of Publication

USA

Abstract

Case Description - 4 dogs were evaluated because of recurrent urinary tract infections. Clinical Findings - All dogs had recurrent urinary tract infections and similar clinical signs; 3 dogs had urinary incontinence. Digital vaginal examination revealed vestibulovaginal stenosis in all dogs, which was confirmed by results of contrast vaginourethrography. From image measurements, the vestibulovaginal ratio (ratio of the height of the vestibulovaginal junction to the maximum height of the vagina on a lateral vaginourethrogram) was calculated for each dog. Three dogs had severe stenosis (vestibulovaginal ratio, <0.20; severe stenosis is

defined as a vestibulovaginal ratio <0.20), whereas the fourth dog had moderate stenosis (vestibulovaginal ratio, 0.24; ratio range for moderate stenosis is 0.20 to 0.25). Treatment and Outcome - All dogs were anesthetized for surgical correction of the vestibulovaginal stenosis. Vaginal resection and anastomosis of the stenosis was performed in all 4 dogs, with 1 dog also undergoing episiotomy. Complete resolution of clinical signs was apparent in 3 dogs; 1 dog had postoperative complications including pollakiuria and stranguria, which resulted in rectal and vaginal prolapse. This dog underwent ovariohysterectomy, after which clinical signs resolved. All dogs had resolution of urinary tract infections at the time of follow-up (6 to 8 months after surgery). Clinical Relevance - Resection and anastomosis may resolve recurrent urinary tract infections in dogs with severe or moderate vestibulovaginal stenosis. Episiotomy was not necessary for success of surgical treatment, and overall, that procedure increased morbidity, the severity of intraoperative hemorrhage, and duration of surgery.

Publication Type
Journal article.

<99>

Accession Number

20113380059

Author

Gogny, A.

Title

Persistence of the hymen and urinary incontinence.

Source

Summa, Animali da Compagnia; 2011. 28(7):38.

Publisher

Point Veterinaire Italie s.r.l.

Location of Publisher

Milano

Country of Publication

Italy

Abstract

Persistence of the hymen and urinary incontinence were reported in an 8-year-old American Bulldog [France, date not given]. The dog had been sterilized by oophorectomy at 6 months of age. After 6 years, the animal began to leak urine intermittently especially at night, which was complicated by episodes of cystitis for 8 months that relapsed every 2-3 months. The dog also showed marked obesity. Genital atrophy was observed in the vulva, which appeared to be capped. Moreover, lesions and perivulvar dermatitis were observed. A slight vulvar discharge was observed, and vulvar seropurulent manipulation of the genital area evoked pain. Vaginoscopy revealed persistence of the hymen, a congenital abnormality. Cytoscopy showed urinary incontinence, which could be linked to the early sterilization of the animal. Vulvoplasty was suggested, but the anaesthetic risk was great due to obesity. Thus, the owners opted to postpone the surgery, and the dog was orally given phenylpropanolamine (one mg/kg/day). Intermittent passing of urine ceased 3 weeks after the treatment was started, and weight loss was comparatively slow.

Publication Type

Journal article.

<100>

Accession Number

20103045845

Author

Jurka, P.; Trebacz, P.

Title

Alternative method of surgical treatment of urinary incontinence in the spayed bitch.

Source

Bulletin of the Veterinary Institute in Pulawy; 2009. 53(4):807-811. 12 ref.

Publisher

National Veterinary Research Institute

Location of Publisher

Pulawy

Country of Publication

Poland

Abstract

The aim of this paper was the assessment of the useful alternative method of surgical treatment of urinary incontinence in the spayed bitch. The operation was performed on a bitch, which before had been inefficiently treated by available drugs. During a contrast X-ray examination (ascendent urethrography), executed before the operation, intrapelvic position of urinary bladder neck, as well as slight spondylosis L 1, 2, and 6 and spondylarthrosis of the section L 1-4 was found. During an ultrasound examination of the abdominal cavity, perceptible changes of bladder's wall structure were not found. The vagina remained not adhered to the base of the bladder and it did not contain fluid content. The structure of either kidney did not differ from normal; inflammatory changes were not found. Before the operation, basic biochemical and morphological examination of peripheral blood, as well as general urine examinations, had been performed. The obtained results did not differ from the reference values. In the hormonal profile of peripheral blood, low concentration of oestradiol 19 pg/mL in comparison to the reference values for a bitch (≤ 20 pg/mL in anoestrus), as well as of progesterone 0.2 ng/mL (≤ 1 ng/mL in anoestrus), was found. The operation performed consisted of modification and simultaneous combination of three different techniques (colposuspension, bladder neck reconstruction, and bladder suspension) of surgical incontinence treatment. During the follow-up examination after surgery, an intra-abdominal position of the entire bladder was found, and during the period of 16 months after the operation, incidence of urine uncontrolled discharge/leakage were not observed.

Publication Type

Journal article.

<101>

Accession Number

20103029126

Author

Lew, S.; Kwiatkowska, M.; Procajlo, A.

Title

Micturition disorders in dogs and cats: diagnosis and treatment. [Polish]

Source

Weterynaria w Praktyce; 2008. 5(6):32...41. 15 ref.

Publisher

Elamed Wydawnictwo

Location of Publisher

Katowice

Country of Publication

Poland

Abstract

The main function of lower urinary tract is the cyclic accumulation of urine and its excretion. The disturbance of any single stage of this complicated process may result in micturition disorders such as urinary incontinence or dysuria. These disturbances in the functioning of the lower urinary tract very often

pose a serious diagnostic problem, due to the complexity of the nervous system and the multiplicity of the connections between its nervous tracts.

Publication Type
Journal article.

<102>

Accession Number
20103029039

Author

Bostedt, H.; Boryczko, Z.; Stratmann, N.

Title

Incontinence. After gonadectomy in bitches. [Polish]

Source

Weterynaria w Praktyce; 2008. 5(2):54-58. 26 ref.

Publisher

Elamed Wydawnictwo

Location of Publisher

Katowice

Country of Publication

Poland

Abstract

Incontinentia vesicae appearing as a result of gonadectomy is observed in bitches in different frequency. The main reason for urinary incontinence is destruction of the urethral closing mechanism what is associated with reduction of estrogen level in blood after sterilization. Clinically absolute and relative urinary incontinence are described. In therapy estradiol, ephedrine, phenylpropanolamine and equivalents of GnRH of prolonged activity are used.

Publication Type

Journal article.

<103>

Accession Number
20103121473

Author

Voorwald, F. A.; Tiosso, C. de F.; Toniollo, G. H.

Title

Urinary incontinence after gonadectomy in female dogs. [Portuguese]

Source

Ciencia Rural; 2010. 40(3):718-726. 37 ref.

Publisher

Centro de Ciencias Rurais, Universidade Federal de Santa Maria

Location of Publisher

Santa Maria

Country of Publication

Brazil

Abstract

Acquired urinary incontinence is a debilitating, incurable condition, prevalent in spayed bitches and rarely seen in entire bitches or males. In bitches, acquired urinary incontinence can occur anytime from one week after neutering and is associated with severe management problems. Incontinence in neutered bitches can

be associated with a decrease in maximal urethral closure pressure, hormonal changes and increase in the percentage of collagen in the bladder wall. It is also associated to reduced contractility of the detrusor muscle, decrease in the magnitude of response of the bladder wall to both carbachol and electrical field stimulation, and there are risk factors involved. The diagnosis is established based on historical findings, physical examination, laboratorial exams, urethral pressure profilometry, ultrasonography and abdominal radiography. The medical management involves the application of adrenergic agonists, oestrogens, GnRH analogues and antidepressants. Surgical recommendation management corresponds to urethropexy, cistourethropexy, endoscopic periurethral injection and colpo-suspension. A better understanding of the aetiology, physiopathology, diagnostic methods and treatment can provide significant benefits, considering the lack of knowledge and diagnosis of this clinical condition in Brazil.

Publication Type

Journal article.

<104>

Accession Number

20103127594

Author

Thomas, P. C.; Yool, D. A.

Title

Delayed-onset urinary incontinence in five female dogs with ectopic ureters.

Source

Journal of Small Animal Practice; 2010. 51(4):224-226. 13 ref.

Publisher

Blackwell Publishing Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

This case series describes five female dogs with congenital ectopic ureter presenting with delayed-onset urinary incontinence out of 22 female dogs diagnosed with ectopic ureter over a 102-month period at a veterinary teaching hospital. All five dogs improved following surgical treatment of ectopic ureter, but only three remained continent long-term without further intervention. Delayed-onset urinary incontinence in female dogs with ectopic ureters may be more common than the current literature suggests. Congenital ectopic ureter should be considered and investigated as a possible contributing factor in female dogs presenting with delayed-onset urinary incontinence.

Publication Type

Journal article.

<105>

Accession Number

20103168306

Author

Yoon HunYoung; Mann, F. A.; Punke, J. P.; Jeong SoonWuk

Title

Bilateral ureteral ectopia with renal dysplasia and urolithiasis in a dog.

Source

Journal of the American Animal Hospital Association; 2010. 46(3):209-214.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

A 7-month-old, 4.3-kg, spayed female bichon frise was referred for evaluation of chronic urinary incontinence. Abdominal radiographs revealed calculi within the right kidney and ureter. An ultrasound revealed a small right kidney. An abdominal computed tomography scan with contrast revealed that the left ureter was extramurally ectopic, inserting into the proximal urethra. A right intramural ectopic ureter was identified during cystotomy. Ureteronephrectomy was performed on the right, and ureteroneocystostomy was performed on the left. A telephone conversation with the owner 4 months after surgery revealed that the dog exhibited no evidence of urine dribbling, and urinary continence was maintained well on phenylpropranolamine (1.75 mg/kg orally q 12 hours). This is the first report of successful surgical management of bilateral ureteral ectopia with concurrent, unilateral, renal dysplasia and urolithiasis.

Publication Type

Journal article.

<106>

Accession Number

20103177996

Author

Lew, S.; Majewski, M.; Radziszewski, P.; Kuleta, Z.

Title

Therapeutic efficacy of botulinum toxin in the treatment of urinary incontinence in female dogs.

Source

Acta Veterinaria Hungarica; 2010. 58(2):157-165. 23 ref.

Publisher

Akademiai Kiado

Location of Publisher

Budapest

Country of Publication

Hungary

Abstract

Urinary incontinence in animals poses a growing therapeutic problem. Satisfactory results in the treatment of incontinence are not reported despite the wide availability of pharmaceuticals addressing the problem. The growing number of side effects and the need for sustained pharmacotherapy have prompted a search for new treatment methods. The experiment described in this study was performed on 11 bitches with clinical symptoms of urinary incontinence. The dogs underwent cystoscopy during which botulinum toxin solution was injected into the wall of the urinary bladder (50-100 botulinum toxin units were given per animal in 10 injections), causing changes in its innervation. Positive therapeutic effects lasting for 5 months in average were noted in 70% of the treated animals.

Publication Type

Journal article.

<107>

Accession Number

20103159778

Author

Bartges, J. W.

Title

Urolithiasis: rocks are rollin'.

Source

AAHA Long Beach 2010 Proceedings, 18-21 March, 2010. Scientific, management and technician programs; 2010. :409-413.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

Dogs and cats are often examined because of signs of lower urinary tract disease including hematuria, dysuria, pollakiuria, incontinence, and inappropriate urination. A review of data obtained from the Veterinary Medical Data Base between 1980 and 1995 revealed a prevalence of lower urinary tract disease in dogs of 3.0 percent (16,702 cases/561,028 individuals examined); between 1980 and 1990, the prevalence of lower urinary tract disease in cats was 7.3 percent (13,511 cases/184,983 individuals examined). Lower urinary tract disease is more prevalent in dogs older than four years of age, and in cats between one and ten years of age. Urolith formation is not a specific disease, but the sequelae to a group of underlying disorders. The urinary system is designed to dispose of wastes in liquid form. However, during urolith formation, sustained alterations in urine composition promote supersaturation of one or more substances eliminated in urine, and result in their precipitation and subsequent growth. The fact that urolith formation is erratic and unpredictable emphasizes that several interrelated physiologic and pathologic factors are often involved. Therefore, detection of urolithiasis is only the beginning of the diagnostic process. Essential to urolith eradication and prevention is identification of the diseases and risk factors underlying crystal formation, retention, and growth. Regardless of the process in urolith formation, they all have the potential to disrupt normal urinary tract function. The mere presence of uroliths does not always necessitate their removal; however, those resulting in clinical signs (dysuria, hematuria, UTI, incontinence, obstruction, or azotemia) should be appropriately managed.

Publication Type

Book chapter

Conference paper.

<108>

Accession Number

20103204975

Author

Reichler, I. M.

Title

Urinary incontinence and puppy coat due to spaying in the bitch. An overview of pathophysiology, diagnosis and therapy. [German]

Source

Tierärztliche Praxis. Ausgabe K, Kleintiere/Heimtiere; 2010. 38(3):157-162. 42 ref.

Publisher

Schattauer GmbH

Location of Publisher

Stuttgart

Country of Publication

Germany

Abstract

Urinary incontinence as a consequence of an insufficient urethral closure mechanism (urethral sphincter mechanism incompetence, USMI) or an impaired storing capacity of the urinary bladder is a considerable side effect of castration in the female dog. Different factors such as breed, body weight and time of spaying have an impact on the risk of urinary incontinence. Loss of urine while the patient is recumbent is the most typical symptom which is first observed at a mean time of 2.8 years after castration. Diagnosis is obtained by excluding other causes, whereas a precise patient history is particularly helpful. Therapy is aimed at increasing the closing pressure of the urethra and/or the compliance of the urinary bladder. Usually success can be achieved by medical therapy, thus surgical intervention is normally not required. In addition to urinary incontinence, coat changes can be observed as an undesirable effect of castration in certain dog breeds. To date, the pathophysiology of decreased urethral closing pressure, altered storing function of the urinary bladder and coat changes induced by castration are still not fully understood. Apart from the well-known hypothesis of estrogen deficiency, altered secretion of the hypothalamic and pituitary hormones GnRH, FSH and LH due to castration may have an influence. In addition to alpha -adrenergic medication, Flavoxate and Estriol, depot formulations of GnRH analogues have been successfully used to treat urinary incontinence. These depot formulations have also been described for the treatment of coat changes due to spaying.

Publication Type

Journal article.

<109>

Accession Number

20103181444

Author

Adams, L. G.

Title

Treatment of refractory urinary incontinence.

Source

Small animal and exotics. Proceedings of the North American Veterinary Conference, Orlando, Florida, USA, 16-20 January 2010; 2010. :812-814. 18 ref.

Publisher

The North American Veterinary Conference

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.

<110>

Accession Number

20103181403

Author

Westropp, J. L.

Title

Diagnostic and management strategies for canine urinary incontinence.

Source

Small animal and exotics. Proceedings of the North American Veterinary Conference, Orlando, Florida, USA, 16-20 January 2010; 2010. :848-850. 13 ref.



Publisher
The North American Veterinary Conference
Location of Publisher
Gainesville
Country of Publication
USA
Publication Type
Conference paper.

<111>

Accession Number
20103263623

Author
Smith, A. L.; Radlinsky, M. G.; Rawlings, C. A.

Title
Cystoscopic diagnosis and treatment of ectopic ureters in female dogs: 16 cases (2005-2008).

Source
Journal of the American Veterinary Medical Association; 2010. 237(2):191-195. 17 ref.

Publisher
American Veterinary Medical Association

Location of Publisher
Schaumburg

Country of Publication
USA

Abstract

Objective - To determine outcome of cystoscopic-guided transection for treatment of ectopic ureters in dogs. Design - Retrospective case series. Animals - 16 female dogs. Procedures - Medical records of dogs that underwent cystoscopic-guided transection of the membrane separating unilateral or bilateral ectopic ureters from the urethra and bladder between May 2005 and May 2008 were reviewed. Postoperative outcome was determined by use of telephone interviews conducted 1 to 36 months after the procedure. Results - 4 dogs had complete resolution of urinary incontinence with cystoscopic-guided transection alone, an additional 5 dogs had complete resolution with a combination of cystoscopic-guided transection and phenylpropanolamine administration, and an additional 4 dogs had an improvement in urinary control, although urinary incontinence persisted. Outcome could not be assessed in the remaining 3 dogs because of collagen injections in the urethra at the time of ureteral transection (n=2) or nephrectomy secondary to unilateral hydronephrosis (1). Conclusions and Clinical Relevance - Results suggested that cystoscopic-guided transection may be an acceptable alternative to traditional surgical correction of ectopic ureter in dogs. Most complications associated with the cystoscopic procedure were minor and easily managed.

Publication Type
Journal article.

<112>

Accession Number
20103374157

Author
Claeys, S.; Noel, S.; Hamaide, A.

Title

Acquired urinary incontinence in the bitch: update and perspectives from human medicine. Part 3: The urethral component and surgical treatment.

Source

Veterinary Journal; 2010. 186(1):25-31. 46 ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Urethral sphincter mechanism incompetence (USMI) is the most common cause of urinary incontinence in dogs. Surgery may be recommended if the animal does not respond to medical treatment or becomes refractory. In this third part of a three-part review, surgical options for the treatment of USMI are described. Colposuspension is the most frequently described procedure and offers a fair prognosis, with about 50% of the dogs being continent after surgery and most of the remainder being improved or more responsive to medical treatment. Urethropexy offers a similar success rate, but with a higher rate of complications. Endoscopic injection of collagen is an attractive technique due to its minimally invasive nature and low risk of adverse effects. Initial results may however deteriorate with time. Other procedures have been reported, but involve a low number of cases and have resulted in variable success rates. In women, stress urinary incontinence is mainly treated by minimally invasive procedures involving vaginal placement of sub-urethral slings.

Publication Type

Journal article.

<113>

Accession Number

20103374155

Author

Noel, S.; Claeys, S.; Hamaide, A.

Title

Acquired urinary incontinence in the bitch: update and perspectives from human medicine. Part 2: The urethral component, pathophysiology and medical treatment.

Source

Veterinary Journal; 2010. 186(1):18-24. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Various pathologies can affect the bladder and/or urethral contractility causing signs of urinary incontinence. In this second part of a three-part review, the pathophysiology of impaired urethral contractility (including urethral hyper- and hypotonicity) in the bitch and in women is discussed. Urethral sphincter mechanism incompetence (USMI) is the most common form of acquired urinary incontinence in bitches and is characterized by a decreased urethral tone. The pathophysiology and current recommended medical treatment options for USMI and cases of modified urethral tonicity due to a neurological disorder or functional outlet obstruction are discussed. Treatment options in human medicine in cases of impaired urethral contractility are described.

Publication Type

Journal article.

<114>

Accession Number

20103374052

Author

Noel, S.; Claeys, S.; Hamaide, A.

Title

Acquired urinary incontinence in the bitch: update and perspectives from human medicine. Part 1: The bladder component, pathophysiology and medical treatment.

Source

Veterinary Journal; 2010. 186(1):10-17. many ref.

Publisher

Elsevier Ltd

Location of Publisher

Oxford

Country of Publication

UK

Abstract

Micturition disorders are commonly encountered in veterinary medicine and can be divided into two main categories, namely, urinary incontinence and urinary retention. Various pathologies can affect the bladder and/or urethral contractility causing symptoms of urinary incontinence. In this first part of a three-part review, the different causes of urinary incontinence, the physiology of the lower urinary tract and impaired bladder contractility are reviewed. Since urinary incontinence due to overactive bladder syndrome or detrusor atony is described in both dogs and humans, the different therapeutic targets in the treatment of impaired bladder contractility in human and veterinary medicine are discussed.

Publication Type

Journal article.

<115>

Accession Number

20093018877

Author

Brockman, D. J.

Title

How I treat ectopic ureters.

Source

Small animal and exotics. Proceedings of the North American Veterinary Conference, Volume 22, Orlando, Florida, USA, 2008; 2008. :1517-1518.

Publisher

The North American Veterinary Conference

Location of Publisher

Gainesville

Country of Publication

USA

Publication Type

Conference paper.



<116>

Accession Number
20093018876

Author
Brockman, D. J.

Title
How I treat urethral sphincter mechanism incompetence.

Source
Small animal and exotics. Proceedings of the North American Veterinary Conference, Volume 22, Orlando, Florida, USA, 2008; 2008. :1515-1516.

Publisher
The North American Veterinary Conference

Location of Publisher
Gainesville

Country of Publication
USA

Publication Type
Conference paper.

<117>

Accession Number
20093017976

Author
Westropp, J. L.

Title
Urinary incontinence in dogs: diagnostics and management strategies.

Source
33rd World Small Animal Veterinary Association Congress, Dublin, Ireland, 20-24 August 2008; 2008. :409-411. 13 ref.

Publisher
Australian Small Animal Veterinary Association

Location of Publisher
Bondi

Country of Publication
Australia

Publication Type
Book chapter
Conference paper.

<118>

Accession Number
20093073552

Author
Coit, V. A.; Dowell, F. J.; Evans, N. P.

Title

Neutering affects mRNA expression levels for the LH- and GnRH-receptors in the canine urinary bladder.

Source

Theriogenology; 2009. 71(2):239-247. 40 ref.

Publisher

Elsevier

Location of Publisher

New York

Country of Publication

USA

Abstract

Neutering a bitch increases the incidence of acquired urinary incontinence (AUI) 20-fold. Mechanistically this effect is thought to be related to altered steroid/reproductive hormone concentrations and a recent study showed that gonadotrophin releasing hormone (GnRH) analogue treatment improved continence in bitches with AUI. The aim of this study was to examine mRNA expression levels for luteinizing hormone (LH)- and GnRH-receptors in the canine bladder and the correlation between these and in vitro contractility of the bladder using age matched entire and neutered, male and female canines and canines with AUI. Biopsies from the dome of the bladder were dissected post mortem with informed owner consent. mRNA expression for LH- and GnRH-receptor was quantified by rtPCR (relative to beta -actin). Contractility was assessed (cumulative concentration response curve for carbachol) in strips of bladder muscle using standard protocols. Analysis of variance (Tukey post-test) demonstrated that neutering was associated with significantly increased levels of expression of LH- and GnRH-receptor mRNA in both sexes ($P < 0.01$). mRNA expression for both receptors was significantly higher in female versus male canines. Neither effect was affected by animals' age and/or weight. A significant inverse correlation (Spearman's test) was found between bladder contractility and mRNA expression for both receptors. This effect was most pronounced in canines with AUI which demonstrated the highest mRNA expression levels yet had the lowest contractility of all animals studied. This suggests that increased LH- and GnRH-receptor mRNA expression is associated with changes in bladder function that increase an animal's predisposition to develop AUI.

Publication Type

Journal article.

<119>

Accession Number

20093087075

Author

Veronesi, M. C.; Rota, A.; Battocchio, M.; Faustini, M.; Mollo, A.

Title

Spaying-related urinary incontinence and oestrogen therapy in the bitch.

Source

Acta Veterinaria Hungarica; 2009. 57(1):171-182. 29 ref.

Publisher

Akademiai Kiado

Location of Publisher

Budapest

Country of Publication

Hungary

Abstract

Some aspects of spaying-related urinary incontinence in the bitch still remain incompletely clarified. Therefore, the aims of the present study were to evaluate the prevalence of the disease among spayed dogs, to detect differences in risk related to the type of surgery, to describe the characteristics of incontinent bitches, to assess the influence of age at surgery on the onset of incontinence occurrence, and to assess the effectiveness and long-term side effects of oestrogen therapy in affected bitches. Among 750 bitches submitted to ovariectomy or ovari hysterectomy, those showing spaying-related urinary incontinence were

evaluated. Oestrogen replacement therapy consisted of administering an effective dose followed by an individual maintenance dose. The results showed that the disease occurred in 5% of neutered bitches, the type of surgery did not affect the disease occurrence, affected bitches frequently represented large or giant breeds or large-size mongrels, the body weight of the affected bitches at surgery was often ≥ 20 kg, the disease seems to be associated with tail docking, the age at surgery influences the onset of incontinence, with earlier occurrence in older bitches, and that a strong co-operation between owners and veterinarians is necessary to achieve successful response to oestrogen replacement therapy. Long-term administration seems to be unrelated to oestrogenic side effects.

Publication Type
Journal article.

<120>

Accession Number
20093125930

Author
Neath, P.

Title
Logical and stepwise approaches to urological disease in small animals.

Source
Veterinary Times; 2009. 39(18):14...17.

Publisher
Veterinary Business Development Ltd

Location of Publisher
Peterborough

Country of Publication
UK

Abstract

This article discusses the similarities and differences between the aetiology, investigation and management of the two broad categories of lower urinary tract disease particularly the incontinence and abnormal urination in dogs and cats. The clinical aspects, aetiology, diagnosis and treatment of incontinence and abnormal urination in dogs and cats are also presented.

Publication Type
Journal article.

<121>

Accession Number
20093162958

Author
Savicky, R. S.; Jackson, A. H.

Title
Use of a rectus abdominis muscle flap to repair urinary bladder and urethral defects in a dog.

Source
Journal of the American Veterinary Medical Association; 2009. 234(8):1038-1040. 6 ref.

Publisher
American Veterinary Medical Association

Location of Publisher
Schaumburg

Country of Publication

USA

Abstract

Case Description - An 11-month-old female dog was evaluated because of a 3- to 4-day history of stranguria and hematuria. **Clinical Findings** - Rectal and vaginal examination and abdominal radiography revealed a large (4x2 cm), firm, ovoid object in the area of the pelvic inlet, between the vagina and colon. **Treatment and Outcome** - Surgical exploration revealed an abscess and moderate amount of seropurulent fluid in the left caudal abdominal quadrant. A large urethrolith (3.7x2.0x1.5 cm) was evident in the proximal portion of the urethra. The urethrolith was associated with a 3x1-cm area of necrosis in the ventral aspect of the proximal portion of the urethra and a 3x3-cm area of necrosis in the area of the bladder trigone. The necrotic areas were debrided, and the defect was repaired with an axial pattern flap constructed from the rectus abdominis muscle. During a follow-up examination 2.5 years after surgery, the dog was clinically normal with no history of urinary incontinence. During rigid cystoscopy, the ure-thral mucosa appeared grossly normal, and there was no evidence of stricture. **Clinical Relevance** - Findings suggested that axial pattern flaps constructed from the rectus abdominis muscle flap may be useful in reconstructing large urinary bladder and urethral defects.

Publication Type

Journal article.

<122>

Accession Number

20093221412

Author

Arnold, S.; Hubler, M.; Reichler, I.

Title

Urinary incontinence in spayed bitches: new insights into the pathophysiology and options for medical treatment.

Source

Reproduction in Domestic Animals; 2009. 44(s2):190-192. 33 ref.

Publisher

Blackwell Publishing

Location of Publisher

Berlin

Country of Publication

Germany

Publication Type

Journal article

Conference paper.

<123>

Accession Number

20093235841

Author

Rose, S. A.; Adin, C. A.; Ellison, G. W.; Sereda, C. W.; Archer, L. L.

Title

Long-term efficacy of a percutaneously adjustable hydraulic urethral sphincter for treatment of urinary incontinence in four dogs.

Source

Veterinary Surgery; 2009. 38(6):747-753. 28 ref.

Publisher

Blackwell Publishing
Location of Publisher
Boston
Country of Publication
USA

Abstract

Objective - To evaluate the efficacy of a surgically placed, static hydraulic urethral sphincter (SHUS) for treatment of urethral sphincter mechanism incompetency (USMI). Study Design - Prospective study. Animals - Spayed female dogs (n=4) with acquired USMI. Methods - Urinary incontinence was assessed using a subjective continence score before and after implantation of an SHUS on the proximal urethra via ventral median celiotomy. Dogs were assessed for urinary continence, urinary tract infections, and implant-associated complications for 30 months. Residual incontinence was treated with percutaneous inflation of the SHUS with sterile saline solution through a biocompatible subcutaneous administration port. Results - At last follow-up (26-30 months after surgery), continence scores improved from a median preoperative score of 3/10 to a median postoperative score of 10. One dog developed wound drainage over the subcutaneously placed administration port but remained continent after port removal. Three occluders were percutaneously filled with additional saline (median, 0.18 mL; mean, 0.16 mL) to improve continence after surgery.

Conclusions - Application and adjustment of an SHUS provided sustained improvements in continence score in all dogs. Clinical Relevance - In this pilot study, 3 of 4 dogs with hydraulic urethral sphincter implantation had successful percutaneous adjustment and maintained improved continence scores for 2 years after surgery. Continence was maintained in the 4th dog even after administration port removal. Based on this pilot study, the SHUS warrants further clinical evaluation for treatment of dogs with USMI unresponsive to medical management.

Publication Type
Journal article.

<124>

Accession Number
20093244983

Author

Dresslerova, A.; Beranek, J.; Hanzlicek, D.

Title

Urinary incontinence in dogs, a description of two cases. [Czech]

Source

Veterinarstvi; 2009. 59(1):3-6. 7 ref.

Publisher

Profi Press, s.r.o.
Location of Publisher
Praha

Country of Publication

Czech Republic

Abstract

In this article, syndrome of urinary incontinence in dogs is described, especially possible diagnostic methods aimed at contrast rentgenology imaging of urine apparatus and differential diagnostics. This issue is presented on two cases with suspicion on ectopic ureter as a cause of incontinence. In the first case was a probable reason for the incontinence SMI (incompetence of urinary sphincter). In the second case was diagnosed ectopic ureter proved by retrograd vaginourethrography, which was successfully surgically treated.

Publication Type
Journal article.

<125>

Accession Number

20093283390

Author

McLoughlin, M. A.; Chew, D. J.

Title

Surgical treatment of urethral sphincter mechanism incompetence in female dogs.

Source

Compendium Continuing Education for Veterinarians; 2009. 31(8):360-363...373. 23 ref.

Publisher

Veterinary Learning Systems

Location of Publisher

Yardley

Country of Publication

USA

Abstract

Urinary incontinence - loss of voluntary control over the retention and expulsion of urine - is a common medical problem in small animal patients. Incontinence occurs when pressure within the bladder exceeds urethral pressure. Incontinence may result from a variety of etiologies, including congenital anatomic abnormalities of the lower urinary and reproductive systems (ureter, bladder, bladder neck, urethra, vagina, vestibule) as well as neurologic, neoplastic, infectious, and inflammatory diseases.

Publication Type

Journal article.

<126>

Accession Number

20093282584

Author

Reichler, I.; Hubler, M.; Arnold, S.

Title

Urethral sphincter mechanism incompetence in spayed bitches: new insights into the pathophysiology and options for treatment.

Source

European Journal of Companion Animal Practice; 2008. 18(2):187-191. 41 ref.

Publisher

Federation of European Companion Animal Veterinary Associations (FECAVA)

Location of Publisher

Paris

Country of Publication

France

Abstract

Urinary incontinence is the involuntary loss of urine. In intact bitches urinary incontinence is rare (0-1%), whereas in spayed bitches the incidence is up to 20%. The underlying pathophysiological mechanism is mainly an acquired insufficient closure of the urethra after spaying. Therefore urinary incontinence after spaying is called urethral sphincter mechanism incompetence (USMI). Within one year after spaying the urethral closure pressure is significantly reduced. Because many bitches may only become incontinent years after surgery it took a long time until the causal relationship between ovariectomy and the occurrence of incontinence was proven. In one study, 83 of 412 (20%) bitches became incontinent 3 to 10 years after

surgery. As long as 40 years ago urinary incontinence was described as a rare side effect of spaying. However, it took 20 years to verify the causal relationship between the removal of the ovaries and urinary incontinence. The triggering mechanism is still unclear. Neuronal damage can most likely be disregarded, as the risk of urinary incontinence is the same in ovariectomised and ovariohysterectomised bitches.

Publication Type
Journal article.

<127>

Accession Number
20093301476

Author
Hotston-Moore, A.

Title
Incontinence in adult bitches.

Source
Veterinary Times; 2009. 39(43):6. 1 ref.

Publisher
Veterinary Business Development Ltd

Location of Publisher
Peterborough

Country of Publication
UK

Abstract

This article describes the aetiology and the surgical and endoscopic treatment of urinary incontinence in bitches in the UK.

Publication Type
Journal article.

<128>

Accession Number
20093317072

Author
Lorinson, K.; Lorinson, D.; Serwa, D.; Bonecka, J.

Title
Ureteral ectopia congenita in young dogs. [Polish]

Source
Medycyna Weterynaryjna; 2009. 65(11):781-784. 15 ref.

Publisher
Polskiego Towarzystwa Nauk Weterynaryjnych

Location of Publisher
Lublin

Country of Publication
Poland

Abstract

Ureteral ectopia congenita (UEC) is one of the most common reasons of urinary incontinence in young dogs. Surgery is the definitive treatment for the correction of this congenital abnormality. In the years 2006-2008, the authors found 8 patients with incontinence history. After diagnostic imaging and the confirmation of the authors' suspicion of ectopic ureter, the owners decided to treat their pets by the surgical procedure. Two

of the patients had an intermittent urine-losing failure, in the rest the urine loss was permanent. The authors found the condition significantly more common in beaches than males. The intravenous excretory urography was the primary method of diagnosing ureteral ectopia in the patients. The operation technique applied depended on the location of the distal part of the ureter and on the anatomical variations of the orifices, if found during the medial laparotomy. In all patients neoureterostomy was performed. Visibly dilated ureters and a distinctly different size of the kidneys were the most common additional anomalies of the urinary system, found in 5 patients. Altogether, eight patients were treated by surgery, in interviews conducted 6 to 31 months after the procedure, the owners of 6 dogs were satisfied with its results. The other two dogs were found greatly improved but with persistent incontinence incidents associated with relaxation or recumbency, particularly at night.

Publication Type
Journal article.

<129>

Accession Number
20093336513

Author
Battersby, I.

Title
Urinary tract nervous system disorders: drug therapy review.

Source
Veterinary Times; 2009. 39(30):16, 18.

Publisher
Veterinary Business Development Ltd

Location of Publisher
Peterborough

Country of Publication
UK

Abstract

This article discusses urine storage and voiding as well as drug therapies that can be utilized in the event of nervous system problems. Focus is given on the neuroanatomical components and processes involved in the storage and voiding of urine.

Publication Type
Journal article.

<130>

Accession Number
20083123205

Author
Berent, A. C.; Mayhew, P. D.; Porat-Mosenco, Y.

Title
Use of cystoscopic-guided laser ablation for treatment of intramural ureteral ectopia in male dogs: four cases (2006-2007).

Source
Journal of the American Veterinary Medical Association; 2008. 232(7):1026-1034. 23 ref.

Publisher
American Veterinary Medical Association

Location of Publisher

Schaumburg
Country of Publication
USA

Abstract

Objective - To describe and evaluate the outcome of cystoscopic-guided laser ablation of intramural ureteral ectopia in male dogs. Design - Retrospective case series. Animals - 4 incontinent male dogs with intramural ureteral ectopia. Procedures - Intramural ectopic ureters were diagnosed via preoperative computed tomography-IV urography and subsequent cystoscopy. Transurethral cystoscopic-guided laser ablation (diode laser [n=3 dogs] and holmium:yttrium aluminum garnet laser [1]) was performed to proximally relocate the ectopic ureteral orifice to the urinary bladder. Fluoroscopy was used during the procedures to confirm that the ureteral tract was intramural and the ureteral orifice was intravesicular after the procedure. In 1 dog with bilateral ureteral ectopia, staged laser ablation was performed at 6-week intervals because of difficulty viewing the second ureter on the first attempt. All ureteral orifices were initially located in the middle to proximal portion of the prostatic portion of the urethra. Six weeks after surgery, imaging was repeated in 3 of 4 dogs. Results - Postoperative dysuria or hematuria did not develop. All dogs were immediately continent after laser treatment and remained so at a median follow-up period of 18 months (range, 15 to 20 months) without medical management. Conclusions and Clinical Relevance - Ureteral ectopia can cause urinary incontinence in male dogs and is usually associated with other urinary tract abnormalities. Cystoscopic-guided laser ablation provided an effective and minimally invasive alternative to surgical management of intramural ureteral ectopia.

Publication Type
Journal article.

<131>

Accession Number
20083185904

Author
Coit, V. A.; Gibson, I. F.; Evans, N. P.; Dowell, F. J.

Title
Neutering affects urinary bladder function by different mechanisms in male and female dogs.

Source
European Journal of Pharmacology; 2008. 584(1):153-158. 26 ref.

Publisher
Elsevier Science Publishers B.V, Biomedical Division

Location of Publisher
Amsterdam

Country of Publication
Netherlands

Abstract

Acquired urinary incontinence is a significant, incurable problem, prevalent in neutered bitches but rarely seen in entire bitches or males. Decreased urethral closure pressure has been proposed as a causative factor for altered detrusor contractility in the neutered bitch. In post menopausal women, acquired urinary incontinence is associated with acquired urinary incontinence and changes in collagen deposition within the bladder wall. The aim of this study was to determine effects of neutering on smooth muscle in the canine urinary bladder. Tissue bath studies were used to assess contractile function and morphometric analysis to determine percentage of collagen in the bladder wall from male and female, neutered and entire canines. Maximal response to both carbachol and neurogenic stimulation was significantly lower in bladder strips from neutered animals of both sexes. Sensitivity to carbachol was also significantly reduced by neutering in both sexes. The percentage of collagen was significantly higher in the bladder wall from neutered vs. entire females, which were similar to that of both neutered and entire males. Neutering a canine decreases urinary bladder responsiveness to muscarinic stimulation in vitro, in both sexes, but only increases the percentage of collagen in the bladder wall in females. While increased percentage collagen may predispose bitches to

acquired urinary incontinence, the sex difference in this parameter indicates that more than one mechanism underlies the changes in bladder responsiveness seen following neutering. This alternative effect of neutering may be in the muscarinic receptor effector pathway and act as a therapeutic target for acquired urinary incontinence treatment.

Publication Type
Journal article.

<132>

Accession Number
20083310557

Author
Shiel, R. E.; Puggioni, A.; Keeley, B. J.

Title
Canine urinary incontinence. Part 2: Treatment.

Source
Irish Veterinary Journal; 2008. 61(12):835-840. 28 ref.

Publisher
Irish Veterinary Association

Location of Publisher
Dublin

Country of Publication
Irish Republic

Abstract

This article describes the pharmacological and surgical treatment of urinary incontinence secondary to acquired urethral sphincter mechanism incompetence (USMI) in dogs.

Publication Type
Journal article.

<133>

Accession Number
20183011514

Author
Decker, S. de; Watts, V.; Neilson, D. M.

Title
Dynamic lumbosacral magnetic resonance imaging in a dog with tethered cord syndrome with a tight filum terminale.

Source
Frontiers in Veterinary Science; 2017. 4(August):134. 19 ref.

Publisher
Frontiers Media S.A.

Location of Publisher
Lausanne

Country of Publication
Switzerland

Abstract

A 1-year and 11-month-old English Cocker Spaniel was evaluated for clinical signs of progressive right pelvic limb lameness and urinary incontinence. Neurological examination was suggestive of a lesion localized to the L4-S3 spinal cord segments. No abnormalities were seen on magnetic resonance imaging

(MRI) performed in the dog in dorsal recumbency and the hips in a neutral position and the conus medullaris ended halfway the vertebral body of L7. An MRI of the hips in extended and flexed positions demonstrated minimal displacement of the conus medullaris in the cranial and caudal directions, respectively. Similar to the images in neutral position, the conus medullaris ended halfway the vertebral body of L7 in both the extended and flexed positions. In comparison, an MRI of the hips in neutral, extended, and flexed positions performed in another English Cocker Spaniel revealed obvious cranial displacement of the conus medullaris with the hips in extension and caudal displacement with hips in flexion. A standard dorsal lumbosacral laminectomy was performed. Visual inspection of the vertebral canal revealed excessive caudal traction on the conus medullaris. After sectioning the distal aspect of the filum terminale, the conus medullaris regained a more cranial position. A neurological examination 4 weeks after surgery revealed clinical improvement. Neurological examinations at 2, 4, 7, and 12 months after surgery did not reveal any abnormalities, and the dog was considered to be clinically normal. Tethered cord syndrome with a tight filum terminale is a very rare congenital anomaly and is characterized by an abnormally short and inelastic filum terminale. Therefore, this disorder is associated with abnormal caudal traction on the spinal cord and decreased physiological craniocaudal movements of the neural structures within the vertebral canal. Although further studies are necessary to evaluate and quantify physiological craniocaudal movement of the spinal cord and conus medullaris in neurologically normal dogs, the results of this report suggest further exploration of dynamic MRI to demonstrate decreased craniocaudal displacement of the conus medullaris in dogs with tethered cord syndrome with a tight filum terminale.

Publication Type

Journal article.

<134>

Accession Number

20173226925

Author

Yoon HaKyoung; Kim HanJin; Jung Uook; Eom KiDong

Title

A luminal laminated debris ball in the urinary bladder of a dog.

Source

Veterinary Radiology & Ultrasound; 2017. 58(3):E22-E25.

Publisher

Wiley

Location of Publisher

Boston

Country of Publication

USA

Abstract

A 5-year-old dog presented with pollakiuria and urinary incontinence. Abdominal radiographs revealed an oval, multilayered structure with soft tissue opacity and gas lucency in the urinary bladder. Ultrasonography showed an oval luminal structure with hyper- and hypoechoic layers and internal reverberation artifacts. Following cystotomy, the hemisected plane showed a layered, pale whitish matrix with a gas layer around the core. Histopathological examination showed no evidence of cells, bacteria, or fungi. The core and laminae comprised fibrinous and mineral debris. A final diagnosis of a freely floating, gas-filled laminated debris ball was made.

Publication Type

Journal article.

<135>

Accession Number

20173011712

Author

Maurey-Guenec, C.; Manassero, M.

Title

Urinary incontinence: diagnostic approach. (Urologie et nephrologie en pratique chez le chien et le chat)

[French]

Source

Point Veterinaire; 2016. 47(Numero Special):104-108. 11 ref.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

Urinary incontinence can be acquired or congenital and have various origins. However, the initial diagnostic process must make a distinction between a storage default incontinence and bladder voiding default, rather than by causative origin. Epidemiology, description of urination and incontinence are important elements of the diagnostic process. Laboratory tests and medical imaging examinations then complete the process.

Publication Type

Journal article.

<136>

Accession Number

20173038152

Author

Knutsen, A. M.

Title

Transurethral cystoscopy (TUC) in the diagnosis of lower urinary tract disorders in female dogs and cats.

[Norwegian]

Source

Norsk Veterinaertidsskrift; 2016. 128(7):458-464. 14 ref.

Publisher

Den Norske Veterinaerforening

Location of Publisher

Oslo

Country of Publication

Norway

Abstract

Transurethral cystoscopy (TUC) is the only diagnostic tool that enables direct visualization of the urethra and bladder. The procedure is minimally invasive, and the risk of complications is small. Moreover, TUC offers the opportunity to collect mucosal biopsies for culture and histopathology. Indications for cystoscopy include chronic urinary tract infections, haematuria, urinary incontinence and dysuria. TUC can be used to detect anatomical anomalies, tumours, uroliths and obstructions. Signs of urethritis and cystitis such as increased vascularisation and petechial haemorrhage may be visualized, and the source of haematuria can be identified. TUC can also assist removal of uroliths.

Publication Type

Journal article.

<137>

Accession Number
20163053507

Author

Cruz, T. P. P. S. da; Jarrah, S. A.; Silva, E. P. da; Gomes, L. G.; Travagin, D. R. P.; Lima, S. R.; Ribeiro, A. P.

Title

Clinical, surgical, histological and urinary aspects in six dogs with total penectomy. [Portuguese]

Source

Acta Scientiae Veterinariae; 2015. 43(Supplement):96. 24 ref.

Publisher

Universidade Federal do Rio Grande do Sul, Faculdade de Veterinaria

Location of Publisher

Porto Alegre

Country of Publication

Brazil

Abstract

The aim was report the evolution of dogs operated by this technique, theirs complications and the histological results, urinalysis and uroculture in patients with 60 days post-operative surgery. From a period of 17 months (March 2013 to July 2014), nine dogs showed various neoplastic diseases involving the penis, prepuce, scrotum and testicles were evaluated. From the nine selected dogs, only six were considered due to patient death before the minimum period used for postoperative evaluation. After surgery, the genital tract along the resected neof ormation were conditioned to 10% formalin and sent to the Veterinary Pathology Laboratory for tissue analysis in light microscopy. All patients remained in hospital in the postoperative period about a week, receiving medications intravenously, execution of dressing every 12 h and evaluation of possible postoperative complications such as dehiscence suture and post-micturition urethral bleeding. The dehiscence occurred only in the skin adjacent the region, keeping the firm urethrocutaneous junction points. Patients were discharged only after the complete absence of bleeding which took four to seven days. The use of the Elizabethan collar was recommended until the removal of skin and urethral points, held approximately 15 days after surgery. The patients' owners who had more than 60 days after surgery, were contacted by telephone and asked for a return to postoperative assessment and collection of blood and urine, in order to investigate the occurrence of possible physiological changes caused by the surgical procedure of penectomy associated with scrotal urethrostomy. All owners reported a slight change in the appearance of urine, lack of difficulty/ urinary incontinence and degree of dermatitis near urethroscopy ranging from absent to mild. Few changes related to the urinary tract were observed in the urinalysis and urinary infection rate was low. However, two of the six dogs were euthanized, due to the aggressive development of visceral metastases, which occurred within two to five months in these cases. All patients had complete healing in the urethroscopia region without the occurrence of obstruction or stenosis. The owners reported satisfactory adaptation of the patients the procedure and absence of local complications to the endpoint.

Publication Type

Journal article.

<138>

Accession Number
20163156022

Author

Agut, A.; Carrillo, J. D.; Anson, A.; Belda, E.; Soler, M.

Title

Imaging diagnosi-urethrovaginal fistula caused by a migrating grass awn in the vagina.

Source

Veterinary Radiology & Ultrasound; 2016. 57(3):E30-E33. 19 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A young intact female dog was presented with urinary incontinence. Abdominal ultrasound revealed the presence of hyperechoic linear structures within the cranial vagina suggestive of foreign material. A computed tomography (CT) retrograde vaginourethrogram demonstrated the presence of a fistulous tract between the urethra and vagina. A presumptive diagnosis of urethrovaginal fistula due to migration of foreign material was made. The grass awn was removed with vaginoscopic-guided retrieval. Fourteen days later, surgical repair of the fistula and an ovariohysterectomy were done. This case report emphasizes the usefulness of CT for diagnosis and precise anatomical localization of genitourinary tract fistulas.

Publication Type

Journal article.

<139>

Accession Number

20163204212

Author

Maurey-Guenec, C.

Title

Procedures in diagnosing a case of urinary incontinence in an elderly animal. [Italian]

Source

Summa, Animali da Compagnia; 2016. 33(4):47-51.

Publisher

Point Veterinaire Italie s.r.l.

Location of Publisher

Milano

Country of Publication

Italy

Abstract

This article discusses the three diagnostic steps in senior dogs and cats affected with urinary incontinence. Step 1 details the normal functioning of bladder and sphincter and causes of urinary incontinence; while step 2 establishes differential diagnosis; and step 3 indicates complementary diagnostic examinations.

Publication Type

Journal article.

<140>

Accession Number

20163301580

Author

Hart, B. L.; Hart, L. A.; Thigpen, A. P.; Willits, N. H.

Title

Neutering of German Shepherd Dogs: associated joint disorders, cancers and urinary incontinence.

Source

Veterinary Medicine and Science; 2016. 2(3):191-199. 25 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

German Shepherd Dogs are important in police and military work, and are a popular family pet. The debilitating joint disorders of hip dysplasia, cranial cruciate ligament tear (CCL) and elbow dysplasia can shorten a dog's useful working life and impact its role as a family member. For this study, veterinary hospital records were examined over a 14.5-year period on 1170 intact and neutered (including spaying) German Shepherd Dogs for joint disorders and cancers previously associated with neutering. The diseases were followed through 8 years of age, with the exception of mammary cancer (MC) in females that was followed through 11 years. The cancers followed, apart from mammary, were osteosarcoma, lymphoma, hemangiosarcoma and mast cell tumour. In intact males, 7% were diagnosed with one or more joint disorders, while in males neutered prior to a year of age, a significantly higher 21% were diagnosed with one or more joint disorders. In intact females, 5% were diagnosed with one or more joint disorders, while in females neutered prior to a year of age, this measure was significantly increased to 16%. The increased joint disorder incidence mostly associated with early neutering was CCL. MC was diagnosed in 4% of intact females compared with less than 1% in females neutered before 1 year. The occurrence of the other cancers followed through 8 years of age was not higher in the neutered than in the intact dogs. Urinary incontinence, not diagnosed in intact females, was diagnosed in 7% of females neutered before 1 year, a significant difference. These findings, profiling the increase in joint disorders associated with early neutering, should help guide the timing of neutering for this breed.

Publication Type

Journal article.

<141>

Accession Number

20163321684

Author

Owen, L.

Title

Urinary incontinence in dogs.

Source

Veterinary Record; 2016. 179(10):260. 4 ref.

Publisher

BMJ Publishing Group

Location of Publisher

London

Country of Publication

UK

Publication Type

Correspondence.

<142>

Accession Number

20163368637

Title

Joint disorders, cancer and urinary incontinence in early neutered German shepherd dogs.

Source

Advances in Small Animal Medicine and Surgery; 2016. 29(10):7-8. 1 ref.

Publisher

Elsevier Inc.

Location of Publisher

Philadelphia

Country of Publication

USA

Publication Type

Journal article.

<143>

Accession Number

20153006474

Author

Bowl, K.

Title

Urinary tract surgery - incontinence: what's new.

Source

Veterinary Times; 2015. 45(1):8, 10. 22 ref.

Publisher

Veterinary Business Development Ltd

Location of Publisher

Peterborough

Country of Publication

UK

Publication Type

Journal article.

<144>

Accession Number

20153256342

Author

Cook, A. B.; Langston, C. E.; Fischetti, A. J.; Donovan, T. A.

Title

Imaging diagnosis - urinary bladder duplication in a cat.

Source

Veterinary Radiology & Ultrasound; 2015. 56(4):E48-E53. 32 ref.

Publisher

Wiley-Blackwell

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A female kitten presented for chronic, intermittent, antibiotic-responsive urinary incontinence and chronic kidney disease. Abdominal ultrasound identified bilateral pelvic/ureteral dilation and three closely apposed thin-walled fluid-filled structures in the caudal abdomen, extending toward the pelvic inlet. Excretory urography and negative contrast cystography identified contrast medium accumulation from the dilated ureters into two tubular soft tissue masses of the caudal abdomen, with subsequent gradual filling of a more cranially located urinary bladder. A retrograde vaginocystourethrogram identified a normal uterus, normal vagina, and a single urethra continuous with the cranially located urinary bladder. Antemortem diagnosis was suspicious for bilateral ectopic ureteroceles. Postmortem diagnosis, 35 months following initial presentation, determined the fluid-filled masses to have abundant smooth muscle in the wall, including a muscularis mucosa connected by a common ostium, consistent with urinary bladder duplication. Urinary bladder duplication should be included as a differential diagnosis in cats with these clinical and imaging characteristics. In this case, differentiation of ectopic ureterocele from urinary bladder duplication required histological confirmation.

Publication Type

Journal article.

<145>

Accession Number

20143091477

Author

Cesare, T. de; Ferrari, S.; Romagnoli, S.

Title

Occurrence of urinary incontinence in spayed bitches at the Veterinary Hospital of the Anhembi-Morumbi University, Sao Paulo, Brazil. [Portuguese]

Source

Brazilian Journal of Veterinary Research and Animal Science; 2013. 50(3):184-187. 16 ref.

Publisher

Faculdade de Medicina Veterinaria e Zootecnia, Universidade de Sao Paulo

Location of Publisher

Sao Paulo

Country of Publication

Brazil

Abstract

Urinary incontinence (UI) can occur in bitches after spaying due to a functional alteration in the urethral sphincter, which may be caused by a number of different causes among which a decrease in the blood levels of steroidal hormones or an increase in gonadotropin. In order to determine the occurrence of UI in spayed bitches at the Veterinary Hospital, University Anhembi-Morumbi, the medical records of spayed bitches in the period 2002-2009 were examined from August 2010 to March 2011. The owners of 227 bitches were contacted by telephone to search for development of UI after spaying. Of these, 73 (32.2%) died with no symptom of UI, 146 (64.3%) did not develop UI, and eight (3.5%) developed UI in the period of 3.8±or-1.6 years after castration.

Publication Type

Journal article.

<146>

Accession Number

20143225158

Author

Choi SungJin; Lee GiJa; Kang EunHee; Jang SeUng; Hwang EuiHee; Jeong InSeong; Kim NamSoo

Title

Surgical correction of ectopic ureter in dogs.

Source

Journal of Veterinary Clinics; 2014. 31(2):137-140. 17 ref.

Publisher

Korean Society of Veterinary Clinics

Location of Publisher

Daejeon

Country of Publication

Korea Republic

Abstract

A Maltese (case 1) and a Labrador Retriever (case 2) presented with urinary incontinence. General conditions were good and screening tests, including a complete blood count, serum chemistry and radiography, were performed. Excretory urography was conducted, and fluoroscopy was performed for case 1 and computed tomography was performed for case 2. The dogs were diagnosed as right extramural ectopic ureter in case 1 and bilateral intramural ectopic ureter in case 2. We performed surgical corrections, including a neoureterocystostomy for extramural ectopic ureter and neoureterostomy for intramural ectopic ureter. After surgery, the dogs were catheterized with an indwelling catheter for 3 days. Urinary incontinence improved completely and the clinical outcomes were good. The choice of adequate surgical procedure is important for correcting ectopic ureters in canines.

Publication Type

Journal article.

<147>

Accession Number

20143391155

Author

Maurey-Guenec, C.

Title

Diagnostic approach to urinary incontinence in older animals. [French]

Source

Point Veterinaire; 2014. 45(Special):72-76. 10 ref.

Publisher

Newsmed

Location of Publisher

Paris

Country of Publication

France

Abstract

STEP 1: Understand the functioning of the vesicosphincter apparatus. * Anatomy * Causes of incontinence in older animals - Storage-defect incontinence - Drainage-defect incontinence. STEP 2: Diagnostic Approach. * Confirm the incontinence * Epidemiological elements and medical history * Clinical examination * Description of incontinence and urination - Storage-defect incontinence - Drainage-defect incontinence. STEP 3: Ancillary tests.

Publication Type

Journal article.

<148>

Accession Number

20133139299

Author

Berger, A.; Prasse, S.; Eckrich-Specker, C.; Gerber, B.; Reichler, I. M.

Title

Urinary incontinence in the male dog. [German]

Source

Praktische Tierarzt; 2013. 94(4):288...296. 36 ref.

Publisher

Schlutersche Verlagsgesellschaft GmbH & Co. KG

Location of Publisher

Hannover

Country of Publication

Germany

Abstract

Male dogs are less commonly presented due to urinary incontinence than females, which is also reflected by the small amount of available literature on urinary incontinence in the male dog. This review should serve as a work-up guideline for the most common causes of urinary incontinence in the male dog. A presumptive diagnosis can often be made on the basis of history, signalement and a thorough clinical examination. In most cases specific investigations such as contrast radiography, ultrasonography and computer tomography are indicated for a definitive diagnosis. In puppies congenital abnormalities of the urogenital tract like ectopic ureters, congenital sphincter mechanism incompetence, bladder hypoplasia, persistent urachus and neurological disorders are the main causes of urinary incontinence. The most common causes in the adult dog are acquired disorders such as prostatic diseases, urethral sphincter mechanism incompetence, neurological disorders, detrusor instability, bladder neoplasia and ureteral ectopia.

Publication Type

Journal article.

<149>

Accession Number

20133184370

Author

Romagnoli, S.

Title

Urinary incontinence in neutered bitches: Part One - How it develops.

Source

Veterinary Times; 2013. 43(21):16-20. 28 ref.

Publisher

Veterinary Business Development Ltd

Location of Publisher

Peterborough

Country of Publication

UK

Publication Type

Journal article.

<150>

Accession Number

20123389434

Author

Anders, K. J.; McLoughlin, M. A.; Samii, V. F.; Chew, D. J.; Cannizzo, K. L.; Wood, I. C.; Weisman, D. L.

Title

Ectopic ureters in male dogs: review of 16 clinical cases (1999-2007).

Source

Journal of the American Animal Hospital Association; 2012. 48(6):390-398.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

Ureteral ectopia is a well-described cause of urinary incontinence in female dogs, but this condition has not been completely characterized in male dogs. Sixteen male dogs with ectopic ureters were evaluated between Jan 1999 and Mar 2007. Male dogs were similar to female dogs with ectopic ureters in terms of breed, presenting complaint, age of onset, and bilateral nature of the ectopia. Diagnosis was made by expert interpretation of imaging techniques such as excretory urography and contrast-enhanced computed tomography (CT). Overall, 11 of 13 dogs that had surgical correction of ectopic ureters were incontinent preoperatively. Urinary continence was restored in 82% of those dogs.

Publication Type

Journal article.

<151>

Accession Number

20113245171

Author

Pointer, E.; Murray, L.

Title

Chronic prostatitis, cystitis, pyelonephritis, and balanoposthitis in a cat.

Source

Journal of the American Animal Hospital Association; 2011. 47(4):258-261.

Publisher

American Animal Hospital Association

Location of Publisher

Denver

Country of Publication

USA

Abstract

An adult, intact male domestic shorthair presented for preputial swelling and urinary incontinence. A caudal abdominal mass was palpated. A transabdominal ultrasound examination showed severe prostatomegaly with abnormal tissue extending along the urethra. The cat was euthanized due to the owner's financial constraints and the veterinarians' suspicion of a poor long-term prognosis. Biopsies showed chronic active inflammation of the prostate, bladder, kidneys, ureters, penis, and prepuce most consistent with a chronic infectious process. Reports of feline prostatic disease of any kind are rare. Chronic prostatitis may have a more favorable prognosis than feline prostatic adenocarcinoma, currently the most commonly reported disease of the feline prostate.

Publication Type

Journal article.

<152>

Accession Number

20113259507

Author

Reina, F.

Title

Approaches to canine urinary tract disorders - Part Two.

Source

VN Times; 2011. 11(8):15, 18. 11 ref.

Publisher

Veterinary Business Development Ltd

Location of Publisher

Peterborough

Country of Publication

UK

Abstract

Canine urinary tract problems may be readily identified by owners, with symptoms including pollakiuria, possibly accompanied by polydipsia, dysuria/stranguria, haematuria or urinary incontinence. Many conditions may be identified on physical examination and with minimum data, although others, such as proteinuria or azotaemia, require laboratory analysis/diagnostic imaging tests. The identification of clinical signs was described in a part one (VN Times 11.01); this article provides a general approach to the most common disorders that affect the lower urinary tract in dogs.

Publication Type

Journal article.

<153>

Accession Number

20103169417

Author

Fujita, H.; Takahashi, T.; Shibata, M.; Aikawa, T.

Title

Intrapelvic urethral rupture and urethral stricture accompanied by pelvic fracture in two dogs.

Source

Japanese Journal of Veterinary Anesthesia & Surgery; 2009. 40(3):41-44.

Publisher

Japanese Society of Veterinary Anesthesia & Surgery

Location of Publisher

Tokyo

Country of Publication

Japan

Abstract

We reported two cases of dysuria caused by intrapelvic urethral trauma secondary to pelvic fracture. Case 1 (A 1-year-old male crossbreed dog, 3.1 kg) presented with pelvic fracture and dysuria. The urethral rupture was diagnosed by retrograde urography and the urethral anastomosis was performed. The dog has been urinating voluntarily but still has urinary incontinence at 16 months after the surgery. Case 2 (1-year-old male Miniature Dachshund, 3.7 kg) started to have dysuria at 7 days after the pelvic fracture repair. The urethral

stricture was diagnosed by retrograde urography. The first resection of urethral constriction and end to end anastomosis resulted recurrent urethral stricture. Therefore, the urinary diversion via preputial urethrostomy was performed. The dog has been urinating voluntarily at 10 months after the surgery.

Publication Type

Journal article.

<154>

Accession Number

20093321316

Author

Dreher, U. M.; Glabasnia, T.; Linger, M.; Schwedes, C.

Title

Urinary incontinence in a kitten as a result of a complex abnormality of the urogenital tract. [German]

Source

Tierärztliche Praxis. Ausgabe K, Kleintiere/Heimtiere; 2009. 37(5):342-346. 34 ref.

Publisher

Schattauer GmbH

Location of Publisher

Stuttgart

Country of Publication

Germany

Abstract

This case report involves a 3-month-old female kitten, which had shown a constant dribble of urine through a small vulva aperture since birth. Ultrasound examination and laparotomy revealed a complex abnormality of the urogenital tract, with urethral hypoplasia, absence of vagina and duplicated uterus. In view of the poor prognosis, involving the high risk of infection, and hygiene problems for the owner, the kitten was killed and examined post mortem. The diagnosis was confirmed by the PM examination.

Publication Type

Journal article.

<155>

Accession Number

20093282575

Author

Mantis, P.; Brockman, D.; Whatmough, C.; Gregory, S. P.; Lamb, C. R.; Mahoney, P.; Jakovljevic, S.

Title

Sensitivity, specificity, accuracy of diagnostic imaging for diagnosis of ectopic ureters in the dog.

Source

European Journal of Companion Animal Practice; 2008. 18(1):21-27. 17 ref.

Publisher

Federation of European Companion Animal Veterinary Associations (FECAVA)

Location of Publisher

Paris

Country of Publication

France

Abstract

The clinical records of dogs with urinary incontinence, examined at the Queen Mother Hospital for animals between November 1995 and January 2006, were reviewed. Only dogs that had at least one contrast

radiographic study, ultrasonographic examination of the ureters and surgical diagnosis were included. All the cases were examined on an individual ureter basis and on a case basis. The sensitivity, specificity and accuracy were calculated for intravenous urography, retrograde urethrography or retrograde vaginourethrography and ultrasonographic examination of the ureterovesicular junctions. Ultrasonographic examination of the ureterovesicular junctions had the higher sensitivity, specificity and accuracy from the imaging methods with only intravenous urography having mildly higher sensitivity when examined on a ureter base. The main failure of ultrasonographic examination of the ureterovesicular junctions was the identification of the correct side of ectopia. When evaluated on a case basis ultrasonographic examination of the ureterovesicular junctions had perfect sensitivity, specificity and accuracy. The lower mainly specificity and accuracy of intravenous urography and retrograde urethrography or retrograde vaginourethrography were probably related to the difficulty in identifying the location of the ureterovesicular junction.

Publication Type

Journal article.

<156>

Accession Number

20093278459

Author

D'Anelli, A.

Title

Leiomioma as cause of urinary incontinence and inability on the coupling in the bitch. [Italian]

Source

Praxis Veterinaria (Milano); 2009. 30(3):20-21.

Publisher

Bayer Italia S.p.A - Veterinaria

Location of Publisher

Milano

Country of Publication

Italy

Abstract

In the course of clinical work, may be required veterinary advice for a urinary incontinence and/or inability on the coupling of female; these symptoms should be assessed with great attention in virtue of the various causes that they can determine and, therefore, a depth differential diagnosis will allow to solve with great professionalism pathology, improving the quality of life of the animal. The presence of tumours of the female chromosome is rare and the symptoms often occur when the cancer has achieved great dimensions. But, surgical excision doesn't solve definitely the pathology; in fact, relapses, though rare, are possible.

Publication Type

Journal article.

<157>

Accession Number

20083254319

Author

Romagnoli, S.; Mascarello, F.; Guidi, G.; Bernardini, M.

Title

Urinary incontinence: a parallelism between dogs and humans. Epidemiology, causes and clinical signs.

[Italian]

Source

Praxis Veterinaria (Milano); 2008. 29(3):2-8. 23 ref.

Publisher

Bayer Italia S.p.A - Veterinaria

Location of Publisher

Milano

Country of Publication

Italy

Abstract

Urinary incontinence (UI) occurs in male and female dogs and cats, but more common in dogs as 75% of cases were observed in spayed adult bitches. Female dogs and women share a few clinical aspects when it comes to UI, such as lack of oestrogen in women during menopause as in castrated bitches and the weakness (or incompetence) of the urethral sphincter (urethral sphincter incompetence mechanism=USMI) as key pathogenic mechanism. In spayed bitches, UI occurs among large dogs in which surgical removal of the tail is a common practice. Unlike women, the finding of the bladder neck into the pelvic cavity is not considered as risk factors in dogs. The incidence of (a) ectopic ureters (45% in young dogs) or (b) urogenital disease as cause of UI is quite low in adult dogs (5% and 20% respectively). Diseases which may occur complicating the diagnostic procedures include: neurologic conditions, generalized weakness, increase bladder tone, urinary tract infection, neoplasia, obstruction and use of drugs (diuretics, tranquilizer, corticosteroids, alpha and beta adrenergics). The classical sign however of USMI is the loss of urine during sleep or recumbency.

Publication Type

Journal article.

<158>

Accession Number

20083319882

Author

Sontas, B. H.; Apaydn, S. O.; Toydemr, T. S. F.; Kaskc, G.; Ekc, H.

Title

Perineal hernia because of retroflexion of the urinary bladder in a rottweiler bitch during pregnancy.

Source

Journal of Small Animal Practice; 2008. 49(8):421-425. 23 ref.

Publisher

Blackwell Publishing

Location of Publisher

Oxford

Country of Publication

UK

Abstract

A young pregnant rottweiler bitch was presented with a large mass of tissue protruding through the vulvar lips. fetal death was diagnosed on ultrasonography, and ovariohysterectomy was performed, at which time the bladder was observed to be dislocated caudally into the pelvic cavity under the vagina. The bladder was manually repositioned during surgery. One week later, the bitch was healthy with no evidence of dysuria, stranguria or urinary incontinence. Two months later, the owner reported that the bitch was clinically normal with no recurrence of the retroflexion. To the authors' knowledge, this is the first reported case of retroflexion of the urinary bladder during pregnancy.

Publication Type

Journal article.



<159>

Accession Number

20083278940

Author

Shiel, R. E.; Puggioni, A.; Keeley, B. J.

Title

Canine urinary incontinence. Part 1: Aetiology and diagnosis.

Source

Irish Veterinary Journal; 2008. 61(11):765-770.

Publisher

Irish Veterinary Association

Location of Publisher

Dublin

Country of Publication

Irish Republic

Abstract

The physiopathology of urinary incontinence is reviewed. Moreover, the diagnostic approach in such cases is outlined. Focus is given on the aetiology and diagnosis of canine urinary incontinence.

Publication Type

Journal article.