ABSTRACTS

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URETHRAL SPHINCTER MECHANISM INCOMPETENCE IN NEUTERED MALE DOGS: A RETROSPECTIVE STUDY IN 32 DOGS

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Objective of the work. Castration may be responsible for urinary incontinence in males, a phenomenon commonly known as “post-castration incontinence” or more accurately as “post-castration urethral sphincter mechanism incompetence” (USMI). This affection is less frequent in males than in females, but the symptoms are often different and the therapeutic successes are clearly weaker. So far, only two retrospective studies have been published concerning males (1, 2). The purposes of our study were to define the characteristics of the neutered male dog incontinence together with a better understanding of the mechanisms of this incontinence.

Materials and methods. We performed a retrospective study in 32 castrated dogs seen in consultation between 2001 and 2007. All the dogs presented incontinence due to a default of urinary storage which appeared after surgical castration.

Results. Indications of surgical castration were: comfort of owner (12/32), perineal hernia (4/32), prostatic syndrome (5/32), testicular pathology (7/32), or unknown reasons (4/32). The main symptoms reported were continuous dripping of urine in 23 dogs. The breeds were: Boxer (5/32), Poodle (5/32), Mongrel (4/32), Breton Spaniel (3/32), Yorkshire Terrier (3/32), Griffon (2/32), Cairn Terrier (2/32), Pyreneese shepherd dog (2/32), Westie (2/32), Doberman Pinscher (1/32), Fox Terrier (1/32), Labrador retriever (1/32), and Chow Chow (1/32). The average body weight was 13.5 kg [5-46]. The mean age was 9.4 yo [2-14]. The mean delay between castration and the first signs of incontinence was 22 weeks [1-144 weeks]. 19 dogs were presented for USMI in the first month following castration. The symptoms were worsened by sleeping position in 12 dogs and stress in 9 dogs. A urine loss only during sleeping was reported in 9 males. An ultrasound examination and/or a retrograde uretrography were performed in 26 dogs: an enlargement of the prostatic urethra was reported on 5 dogs, two of them showing intra-prostatic urethral dilatation. A urodynamic pressure profile was performed in 10 dogs: all of them showed a low urethral pressure profile and 6 of them showed a default of bladder compliance for which the origin remained undetermined (an inflammation generated by an infection, a neoplasia or a lithiasis was excluded by complementary examinations). A polyuria-polydypsia syndrome was reported in 7 dogs related to a: Cushing syndrome (1/32), corticotherapy (4/32), chronic renal failure (1/32), nephrogenic insipidus diabetes (1/32). 21 dogs were treated with α-agonists, 7 dogs were healed, an improvement was noted for 9 dogs and no improvement was noted for 7 dogs (evaluation of one month). Among these 9 dogs, 7 dogs received further hormonotherapy (testosterone propionate): 5 dogs were healed and no improvement was noted for the 2 other dogs. The seven dogs with an enlargement of the prostatic urethra and the urethra prostatic diverticle didn’t respond to any medical treatment.

Discussion and Conclusion. This study allows underlining the characteristics of the male post-castration incontinence in comparison to what is known in females. The incontinence appears quickly after castration. A loss of urine in continuous dropping, worsened by the sleeping position, is the most frequent clinical sign. The urodynamic data underline the role of urethral tone decrease in the pathogenesis of this affection but the defect of bladder compliance further remains to be explored. The default of bladder compliance may explain...
the lower efficacy of $\alpha$-agonists (compared to females) and underlines the interest of an association with parasympatholytic drugs.

References