RESUMO SIMPLES - OUTRAS ÁREAS TEMÁTICAS

TUBULAR CYSTOSTOMY IN THE MANAGEMENT OF URINARY RETENTION SECONDARY TO LUMBOSACRAL TRAUMA IN A DOMESTIC CAT: CASE REPORT

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Traumas represent a significant risk for outdoor cats, especially young males. Pelvic traumas often leads to neurological damage, including bladder paralysis and urinary incontinence. Therefore, proper bladder management is essential to prevent exacerbated distension that may lead to irreversible damage. In this condition, tubular cystostomy represents an adequate intervention to reestablish urinary flow and bladder decompression. The objective of this report is to describe the case of Foley catheter insertion in a traumatized outdoor feline with

traumatic lumbosacral involvement and pelvic fractures, associated with obstruction of urinary outflow. On day 0, a 2 years old male cat was admitted to the Veterinary Hospital of the Universidade Federal Rural do Rio de Janeiro, with a history of dog attack. On physical examination, it was possible to observe paresis and loss of proprioception of the pelvic limbs, pale mucous membranes, tachypnea, a distended bladder, lumbar pain, and perforations in the lumbosacral region. Pelvic radiography made it possible to visualize multiple fractures in the pelvic region, fracture of the transverse process of the sixth lumbar vertebra (L6), and subcutaneous emphysema. On day 03, the cat returned with urinary retention. Attempts at bladder emptying were unsuccessful, as manual compression caused intense pain and the presence of multiple intravesical blood clots prevented drainage by cystocentesis. Given the prognosis, prolonged maintenance of the urethral catheter would increase the risk of urethritis until bladder recovery; therefore, tubular cystostomy became the best option, associated with therapy using prazosin, dipyrone, and methadone. On day 04, the surgical procedure was performed. First, bladder emptying was carried out by cystocentesis, followed by peritoneal lavage. Then, cystostomy was performed with insertion of a Foley catheter connected directly to a collection system to prevent bladder distension. On reevaluation on day 25, it was observed that the cat had regained mobility, although presenting signs compatible with cystitis. Thus, urine was collected directly from the catheter for urine culture, which isolated multiresistant Serratia rubidaea, based on the antimicrobial susceptibility profile, marbofloxacin was prescribed. With favorable clinical progression, an evaluation of the cat’s ability to urinate spontaneously was performed by temporarily closing the catheter to promote bladder stretching and stimulate the voiding reflex. Through this evaluation, it was determined that the cat was able to void competently. Additionally, contrast radiography using iopamidol was performed to confirm urethral integrity and rule out previous alterations before catheter removal. The contrast passed through the entire urinary tract, indicating no evidence of rupture or obstruction. On day 37, catheter removal and cystorrhaphy were performed, and on the same day, the cat exhibited competent spontaneous urination. On follow-up on day 39, the cat presented normal urination, demonstrating treatment success. In cases in which urinary continence is not recovered within 5 days after neurological injury, placement of a cystostomy tube is recommended, as it allows long-term management compared to urethral catheterization. This recommendation applies to this case, which required approximately 37 days of bladder rest for recovery of spontaneous voiding. However, one of the main challenges of using

a cystostomy tube is the risk of ascending infection, which predisposes the development of bacterial urinary tract infections, as also observed in this report. Adjuvant therapies must be instituted to aid in urinary control while the cystostomy tube is in place, such as prazosin for urethral spasms reduction and appropriate analgesic measures. This report highlights the importance of recognizing urination dysfunction in cats related to pelvic trauma with neurological or compressive injuries. The use of the Foley catheter proved to be an effective alternative for long-term management of these cases, as it is less commonly associated with urethritis compared to permanent catheterization.

Palavras-chave: foley catheter; traumatic neuropathy; neurological injury.