

UNILATERAL CRYPTORCHIDISM IN A CAT AND ITS SURGICAL MANAGEMENT

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A five year old male persian cat was presented to the Department of Veterinary Gynaecology and Obstetrics for neutering. The cat was having the problem of frequent urination also, for past 20days. Physical examination revealed only one palpable testis in the scrotum. Trans-abdominal ultrasonography did not reveal any evidence of cryptorchid testis and hence the case was tentatively diagnosed as Monorchid condition and then castration was done. The patient was again presented after 3 months with a complaint of displaying sexual activity despite of castration. Suspecting the unilateral cryptorchid condition, exploratory laparotomy procedure was performed under general anaesthesia. Cryptorchid testis was removed by standard surgical procedure. Post operatively surgical wound got auto mutilated and treated with oral antibiotics and wound dressing. The case was recovered uneventfully after 10 days.

Keywords: Cryptorchidism, Exploratory laparotomy, Persian cat.

Cryptorchidism is a condition in which one or both the testicles fail to descend into the scrotum. These testicles may be at abnormal site in the subcutaneous tissue of inguinal region or in the abdominal cavity (Nadkarni *et al.*, 2015). Both the testis are scrotal at birth in tom cats. The testes in some individuals may slide up and down from the scrotum to the inguinal canal prior to puberty and hence is difficult to make a definitive diagnosis of cryptorchidism until 7 to 8 months of age.

Cryptorchid condition in cats is extremely rare and commonly seen in dogs. The most common breed of cat associated with this condition is Persian and incidence of cryptorchidism ranges from 0.37 - 1.7 Per cent (Richardson and Mullen, 1993). This condition in cats is more likely to be unilateral (90%) than bilateral (10%), with both the testes being affected equally frequently when unilateral. Abdominal cryptorchids are more common than inguinal (Millis *et al.*, 1992). In retained testes, there is an increased risk of neoplasms, such as Sertoli cell tumors and seminoma, which can exhibit more aggressive behavior than those in scrotal testes (Hayes *et al.*, 1985). Retained testes are more susceptible than scrotal testes to spermatic cord torsion, and the risk of this condition increases even more with progressive enlargement of the neoplastic

organ (Miyabayashi *et al.*, 1990). This paper reports a surgical management of unilateral cryptorchidism in Persian male cat.

Case History and Observation

A 5year old male Persian cat was presented to Department of Veterinary Gynaecology and Obstetrics for neutering and the cat had a problem of frequent urination also, for past 20 days. On physical examination pet was active with normal appetite, temperature, heart rate and respiration rates. On clinical examination one testis was palpable in the scrotum. The other missing testis (Fig; 1) was not found in inguinal region and cat was subjected to trans-abdominal ultrasonography. Trans-abdominal ultrasonography could not visualize the missing testis. Based on the above clinical findings the condition was tentatively diagnosed as monorchidism and the decision was taken to perform routine castration. After 3 months pet was again presented with a complaint of displaying sexual behavior despite of castration. With the consent of owner the decision was taken to perform exploratory laparotomy to check for unilateral cryptorchidism. The haematological and biochemical parameters were as follows, Hb-12.5g/dl, total count-6500/ μ l, platelet-1.52lakh/ μ l, PCV-40%,

serum SGPT-35 IU and serum creatine-1.2 mg/dl.

Treatment

After confirmation of normal blood values and clinical fitness, tom cat was fasted for 12 hours prior to surgery. Surgical site for exploratory laparotomy to remove the undescended testis and the scrotal testis was prepared aseptically. Under general anaesthesia {combination of ketamine (15mg/kg B.wt) and xylazine (1mg/kg



Fig 1: Single testis in scrotum

Results and Discussion

The cat recovered uneventfully. In the present case we opted for surgical removal of the descended and also cryptorchid testis. The surgical approach for finding and removal of the Cryptorchid testis is dependent on the location of the testis because they may be at abnormal site in the subcutaneous tissue of inguinal region or in the abdominal cavity. Similarly, Memon *et al.*,(1992) also reported a case of unilateral cryptorchidism and removal of undescended testis by exploratory laparotomy procedure. In the present case unilateral cryptorchidism condition was successfully managed by exploratory laparotomy procedure.

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B.wt}}, laparotomy incision was made on caudal midline, the retained testis was located caudally between kidney and scrotum, ductus deferens was exteriorized along with the retained testis. After ligation of testicular vessels the retained testis was removed (Fig: 2) and the laparotomy wound was closed by standard suturing technique. Post operatively surgical wound got auto-mutilated and was treated with continuous daily parenteral antibiotics (cefazolin 25mg/kg B.wt) and alternate day wound dressing.



Fig 2: Removal of abdominal testis

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