The Surgical Management of Cystolithiasis in a Bitch

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A Samoyed bitch, aged three years was registered in the clinic (O.P. No.827) on 13-8-1975 with a 3 month history of haematuria, frequent micturition and ischuria. Previous treatment for cystitis proved futile. The diet of the patient was mostly non-vegetarian.

Clinical Observations

The patient had normal temperature, pulse and respiration. Blood examination, negative blood parasitic infection. The urine was mixed with the blood and epithelial casts. Cystography confirmed the presence of a large cystolith and laparocystectomy was proposed.

Treatment

The operative site was prepared for aseptic surgery. Triflupromazine hydrochloride 10 mg was administered intramuscularly half an hour prior to surgery and then the patient was anaesthetised with Intraval sodium. The bitch was restrained in dorsoventral recumbency and a laparotomy incision about 8 cm. long was made at the pre-pubic mid-line region. A thick-walled congested bladder was exteriorised. A cystolith with sabulous deposit was recovered through the incised cystic wound in the fundic region. The stone was rounded in and about 4 cm. in diameter with a rough surface. The cystic wound was sutured by double row of Cushing sutures employing cotton thread. Terramycin 100 mg was instilled into the abdominal cavity. The laparotomy wound was conventionally repaired, employing cotton thread.

Post-Operative Treatment

Tincture of iodine was applied over the suture line and Terramycin injectible 100 mg administered intramuscularly which was continued for four days. A bandage protected the operative site. Novalgin 1 tab. and triflupromazine hydrochloride 10 mg tablet twice daily were orally administered for three days. From the fifth post-operative day, Nefrotec (Cystone) powder 0.5 g (The Himalaya Drug Company) was administered orally twice a day for a month. Cutaneous sutures were removed on the eighth post-operative day and the patient recovered uneventfully. The owner was advised to change the diet and to feed milk with chapati also.

Results & Discussion

The symptoms haematuria, frequent micturition, ischuria and the haemorrhagic thickened urinary bladder wall, were all due to the large size of the cystolith weighing 16.100 g. It contained mostly calcium oxalate. Since the diet of the patient was non-vegetarian, the same was speculated as an aetiological factor for the genesis of the cystolith and hence a change in the diet was suggested.

Jayadevappa and Reddy (1976) also treated a case of cystolith in a bitch and repaired the bladder with 2/0 chromic catgut and an omentum was tagged over the cystomy sutured wound. The abdominal wound was closed with No.1 chromic catgut. A rubber catheter was in-dwelt in the urethra which was removed on the fifth post-operative day.

In the present case, cotton thread was employed throughout for suturing and catherisation was avoided to prevent the risk of ascending infection as reported by Kass and Schneiderman (1957). There was an uneventful recovery.

Nefrotec powder 0.5 g twice daily was fed with an aim to dissolve and flush out any smaller calculi which were reasonably doubted to be present in the urinary system. Radiography after one month of Nefrotec treatment failed to reveal the presence of uroliths in urinary system and to date the patient has had no recurrence of the malady.

Summary

The surgical management of cystolithiasis in a bitch and its post-surgical treatment with Nefrotec powder is documented and discussed.

Acknowledgement

The authors are grateful to the Principal of the institution for the facilities provided and to The Himalaya Drug Company for providing the drug, Nefrotec for trial.
References
