

SUCCESSFUL PREGNANCY OF A BULLMASTIFF BITCH WITH VAGINAL HYPERPLASIA

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ABSTRACT

A one and half year old female Bullmastiff was brought to the Teaching Veterinary Clinical Complex (TVCC), Mannuthy with a mass protruding at the level of vulva which prevents mating. Clinical examination revealed a painless, semi hard growth obstructing the lumen. Based on clinical examination, the condition was diagnosed as first degree vaginal hyperplasia. Two injections of Chorulon 250 IU IM was given at two days interval before breeding. With ample vaginal lubrication using non-spermicidal lubricant successful mating was achieved and the bitch conceived and whelped nine pups.

Keywords: Female Bullmastiff, vaginal hyperplasia

INTRODUCTION

Vaginal hyperplasia is one of the most common conditions seen in young intact female dogs of larger breeds (Kumar *et al.*, 2011). This condition is caused by excess oestrogenic stimulation of vaginal tissue during proestrus and oestrus stage of canine reproductive cycle (Soderberg, 1986). Canine vaginal hyperplasia involves only the mucosa, which is different from the condition seen in other species such as

cattle, goats and sheep. Vaginal tissue may get swollen and protrude through the vulva as a tongue shaped mass. The protruding mass may prevent bitch from mating. The present study places on record the medical management of vaginal hyperplasia in a Bullmastiff bitch.

CASE HISTORY AND OBSERVATION

A one and half year old female Bullmastiff bitch was brought to the Teaching Veterinary Clinical Complex (TVCC), Mannuthy for breeding advice. The bitch was on its second heat, and day presented was eleventh day of bleeding. Animal was crossed on last heat but successful mating could not be achieved because of a mass protruding from the vulva and associated severe bleeding. Vaginal cytology revealed stage of oestrus cycle as early oestrus. Clinical examination revealed a painless, semi hard growth at the level of vulva obstructing the lumen (Fig. 1). Based on clinical examination the condition was diagnosed as first degree vaginal hyperplasia.

TREATMENT AND DISCUSSIONS

As the animal was in early oestrus stage of the cycle, crossing was advised for two alternate days after proper lubrication with

K-Y jelly. Two injections of Chorulon 250 IU IM was given at two days interval before breeding and the size of the mass was reduced. Again the bitch was presented to the TVCC on 35th day after last crossing. Ultrasound examination revealed gestational sacs which were indicative of positive for pregnancy. Bitch successfully whelped 9 pups among them four were alive.

Vaginal hyperplasia has been observed most frequently in young bitches during the follicular stage of first to third oestrous cycles. An exaggeration of this oestrogenic response can result in excessive mucosal folding of vaginal floor just cranial to urethral papilla and redundant mucosa begins to protrude through the vulvar lips (Wykes, 1986). The protruding mass is vulnerable to trauma, ulceration, inflammation and self-mutilation and can interfere with natural mating.



Fig. 1. Mass obstructing vaginal lumen

Boxers and other brachycephalic breeds are most commonly affected with vaginal hyperplasia (Jones and Joshua, 1982). Most of the times, it may go unnoticed when the mass size is small except where it is large and visible outside. Depending upon the nature, severity of the condition and the breed, such cases have been successfully

treated with hormonal therapy or surgical excision (Burke, 1986; Antonov *et al.*, 2009; Tiwari *et al.*, 2013; Kumar *et al.*, 2014).

Type of medical treatment depends on the degree of hyperplasia, damage done to the mucosa, and whether dealing with a breeding or non-breeding animal. If the mass is small or protrudes intermittently, it will usually shrink during diestrus and no further treatment is necessary. A mass protruding from the vulva must be kept clean and protected from drying. Lubricating jelly, antibiotic ointment, ointment with antibiotic/ glucocorticoid combined, artificial tears and 50 per cent glucose have been used for this purpose.

Hormone treatments including gonadotrophin releasing hormone (GnRH) and human chorionic gonadotrophin (hCG) have been used to induce ovulation and to shorten oestrus (Rushmer, 1980). The GnRH administration will result in the release of LH and cause a subsequent rise in the serum concentration of progesterone. Since progesterone is antagonistic to the effect of oestradiol, treatment that increases serum concentrations of progesterone might be beneficial in treating vaginal hyperplasia (Wykes, 1986).

SUMMARY

Prevention of vaginal hyperplasia can be achieved by ovariectomy or more commonly, by ovario-hysterectomy. There fore in bitches with vaginal hyperplasia, appropriate management practices and mating at timed ovulation will aid in successful pregnancy.

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