DYSTOCIA DUE TO PARTIAL PRIMARY UTERINE INERTIA IN A SIBERIAN HUSKY AND ITS MANAGEMENT BY CAESARIAN SECTION

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ABSTRACT

Husky, a popular working dog has very low incidence of dystocia associated with uterine inertia. The present report describes dystocia due to partial primary uterine inertia in a Husky bitch and its management by Caesarian section.

Key words: caesarian section, dystocia, husky, uterine inertia

INTRODUCTION

Uterine inertia (primary or secondary) is the failure to expel fetus(es) from uterus in the absence of obstruction (Jutkowitz, 2005) and is a frequent cause of maternal dystocia in dogs (Kutzler, 2009). It is associated with large litter size, nutritional or neuroendocrine imbalances, age, nervous inhibition and systemic disease (Kumar et al., 2018). In Husky dogs, its incidence is comparatively low. Present report is a rare case of dystocia due to partial primary uterine inertia with large litter size in a Husky bitch.

CLINICAL PRESENTATION AND DIAGNOSIS

A full-term 3 years old, Siberian Husky, female (30kg) bitch was presented at the Division of Veterinary Clinical Complex, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-Kashmir. The bitch had a short duration of straining and delivered one pup 2 h earlier and the straining ceased thereafter. The visual inspection revealed that bitch was in a debilitated condition, reportedly consumed less feed and water and restless. All the vital parameters viz; rectal temperature, pulse and respiration rates were within normal range. The mammary glands of the bitch were fully engorged. Per-vaginal examination did not stimulate straining but revealed partially dry birth canal with dilated cervix. The abdominal radiography revealed the presence of multiple fetuses which were located in the uterine horns. The ultrasonography examination recorded the presence of adequate fluid and fetal movements within the uterus.

TREATMENT AND DISCUSSION

The bitch was injected 5 IU oxytocin (Pitocin, Pfizer Ltd.) mixed with 1.0ml normal saline (NaCl, 0.9%) by slow intravenous (IV) route. Injection calcium gluconate (5ml) plus calcium lactobionate (5ml) was administered subcutaneously and intravenously, but there was no progress even after 2 h. Hence, decided to perform laparohysterotomy and animal was anesthetized using

butorphanol (0.2 mg/kg) and propofol (6 mg/kg) intravenously and maintained with 3% isoflurane. Wide mid-ventral area was prepared for aseptic surgery and celiotomy incision given on linea alba. Four live and four dead fetuses were retrieved from the uterus. Subsequently, the uterus was closed with Lambert suture pattern using vicryl 3-0 and muscles were brought into apposition using vicryl 1-0 in simple interrupted pattern. The skin was closed using silk in cross mattress pattern. The Inj. ceftriaxone (10mg/kg, BID, IM) for five days and meloxicam (0.1mg/kg, SC, OD) for three days was advised and continued by the owner. The cutaneous sutures were removed after 10 days. The animal recovered uneventfully.

Partial primary uterine inertia is the premature ending of labour (after a short duration of straining) that renders pups undelivered (Bergstrom et al., 2006a). In dogs, the overstretching of the myometrium by large litter size is an important cause of uterine inertia (Arthur et al., 1989). In this case, the overcrowding / malalignment of a total of nine fetuses might have led to the overstretching of the uterine musculature of the dam. Large litter size is generally associated with uterine inertia: primary as well as secondary (Kumar et al., 2018). As per the conventional treatment protocol, such cases are treated with either oxytocin and calcium borogluconate / calcium gluconate - calcium bionate combination or subjected to caesarean section with varying results. Although the incidence of dystocia due to uterine inertia is reportedly low in Husky dogs but a large litter size may not spare them. Additionally, the mal-positioned fetuses may obstruct each other's movement and aggravate the uterine exhaustion. Timely caesarean section might save the fetuses as well as the dam.

CONCLUSION

Full-term, Husky, bitches showing dystocia presented without delay and non-responsive to the ecbolics can be saved along with their fetuses by Caesarian section.

REFERENCES

Arthur, G.H., Noakes, D.E. and Pearson, H. (1989). Dystocia and other disorders associated with parturition. In: Veterinary Reproduction and Obstetrics, Edn 6th. Bailliére Tindall, London. pp. 182-230.

Bergstrom, A., Fransson, B., Lagerstedt, A.S. and Olsson, K. (2006a). Primary uterine inertia in 27 Bitches: etiology and Treatment. *Journal of Small Animal Practice.*, **47**: 456-460

Jutkowitz, L.A. (2005). Reproductive emergencies. *Vet Clin North Am Small Anim Pract.*, **35**: 397-420.

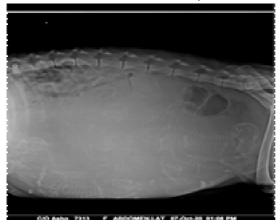


Fig. 1: Radiograph showing multiple fetal skeletons in uterus of husky

Kumar, P., Krishnaswamy, A., Honnappa, T. G., Murthy,
V. C. M., Bhat, N. and Ranganath, L. (2018).
Retrospective Studies on Primary Uterine Inertia in Female Dogs. *International Journal of Livestock Research.*, 8(2): 153-161

Kutzler, M.A. (2009). Dystocia and obstetric crises. In: (eds: Silverstein DC, Hopper K) Small Animal Critical Care Medicine. Elsevier Saunders, St. Louis, pp. 611-615.



Fig. 2: Delivery of fetus through caesarian section