

Dystocia Due to Partial Primary Uterine Inertia in A Siberian Husky and Its Management by Caesarean Section

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Abstract

The present report describes dystocia due to partial primary uterine inertia in a Husky bitch and its management by Caesarean section. A Siberian husky bitch was presented with a complaint of delivery of one pup and cessation of straining efforts thereafter. Multiple fetuses in the uterus were observed in a radiograph and uterine inertia was diagnosed and a cesarean section was performed which saved the dam and the pups.

Keywords: Caesarian section, Dystocia, Husky, Uterine inertia

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Introduction

Uterine inertia (primary or secondary) is defined as the failure to expel fetus/es from the uterus when no obstruction exists (Jutkowitz 2005). It is a frequent cause of maternal dystocia in dogs (Kutzler 2009). The uterine inertia is associated with large litter size, nutritional or neuroendocrine imbalances, age, nervous inhibition, and systemic disease/s. also, in large breeds, like Siberian Husky, the incidence of uterine inertia is comparatively low (Kumar *et al* 2018). In the present report, we describe a rare case of dystocia due to partial primary uterine inertia associated with large litter size in a Husky bitch.

Clinical Presentation and Diagnosis

A three-year-old female Siberian Husky (30kg) was presented at the Division of Veterinary Clinical Complex, Faculty of Veterinary Sciences and Animal Husbandry, SKUAST-Kashmir. With a history of the short duration of straining which delivered one pup, the bitch was exhaustive 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 revealed a partially dry birth canal with the dilated cervix and primary uterine inertia. The abdominal radiography revealed the presence of multiple fetuses. The ultrasonography examination recorded the presence of adequate fluid and fetal movements within the uterus.

Treatment and Discussion

The bitch was injected 5 I.U. oxytocin (Pitocin, Pfizer Ltd.) mixed with 1.0ml normal saline (NaCl, 0.9%) by slow intravenous (IV) route. Injection of calcium gluconate (5ml) plus calcium lactobionate (5ml) was administered subcutaneously and intravenously, but, no progress even after 2.0 h following the treatment was noticed and cesarean section was reported. The anesthesia was induced using butorphanol (0.2 mg/kg) and propofol (6 mg/kg) intravenously and maintained with 3% isoflurane. After aseptic preparation, a celiotomy incision was given on linea alba. Four live and four dead fetuses were retrieved from the uterus. Subsequently, the uterus was closed with a Lambert suture pattern using vicryl 3-0, and muscles were brought into apposition using vicryl 1-0 in the simple interrupted pattern. The skin was closed using silk in a cross-mattress pattern. The Inj. ceftriaxone (10mg/kg, BID, IM) was administered for five days and meloxicam (0.1mg/kg, SC, OD) for three days was advised. The animal recovered uneventfully and the cutaneous sutures were removed after 10 days.



Fig 1: Radiograph showing multiple fetal skeletons in uterus of Huskey



Fig 2: Delivering fetus through caesarian section

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 were generally treated with either oxytocin and calcium borogluconate/ calcium gluconate -

calcium bionate combination or subjected to cesarean section with varying results. Although the incidence of dystocia due to uterine inertia is reportedly low in Husky dogs a large litter size may not spare them. Additionally, the mal-positioned fetuses may obstruct each other's movement and aggravate uterine exhaustion. A timely cesarean section might save the fetus as well as the dam.

Conclusion

The report describes successful management of dystocia due to partial primary uterine inertia in a Husky bitch, carrying multiple fetus (es), by Caesarean section.

Contribution of Authors

Authors contributed equally.

Conflict of Interests

There is no conflict of interest.

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