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Clinical Article

RARE CASE OF UNILATERAL UTERINE HYPOPLASIA IN A SHE DOG

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SUMMARY

Uterine hypoplasia is underdeveloped uterine horn which possesses fairly normal tissue layers and a uterine lumen. A rare incidence of uterine hypoplasia in a mongrel she dog and its resection is reported in the present study.

Keywords: Ovariohysterectomy, She dog, Uterine hypoplasia

Hypoplastic uterine horn is an under developed horn which possesses fairly normal tissue layers with a lumen connecting to the uterine body (McIntyre *et al*., 2010). Mullerian duct abnormalities may lead to set of structural malformations that include diverse situations of agenesis or aplasia or hypoplasia (Colaco *et al.*, 2012). The incidence of uterine hypoplasia and congenital uterine abnormalities recorded were 0.003 and 0.05 per cent, respectively (McIntyre *et al*., 2010). However, agenesis is the failure in development of a structure or organ system because of the nonappearance of its primordium during embryonic development (Vince *et al.*, 2011). In dogs, the uterine and vaginal segments can show developmental abnormalities ranging in severity from hypoplasia to complete agenesis (Romagnoli and Schlafer, 2006).

A 2-year-old mongrel she dog with the history of whelping 3 months before was presented to Small Animal Gynaecology Unit for ovariohysterectomy. On clinical examination, all vital parameters and haematological parameters were within physiological limit. Hence, animal was subjected to ovariohysterectomy with owner's consent.

Animal was premedicated with Inj. Atropine sulphate (0.04 mg/Kg body weight S/C), and sedated with Inj. Xylazine (1 mg/Kg body weight I/M). Anaesthesia was induced and maintained with Inj.Ketamine + Inj. Diazepam in the ratio of 4:1 at the dose rate of 5 mg/Kg body weight I/V. Ovariohysterectomy carried out through abdominal mid-ventral incision through linea alba and examination revealed fully developed right uterine horn with hypoplasia of the left uterine horn (Fig. 1) with well developed ipsilateral ovary. Both the ovarian ends were ligated and resected followed by the cervical end. Muscles followed by subcutaneous and skin were closed by standard suture patterns and treated with Ringer's lactate solution at the rate of 10 ml per kg, antibiotic Inj. Ceftriaxone (20 mg/Kg b. Wt.) and anti-inflammatory Inj. Meloxicam (0.2 mg/Kg body weight) for seven days.

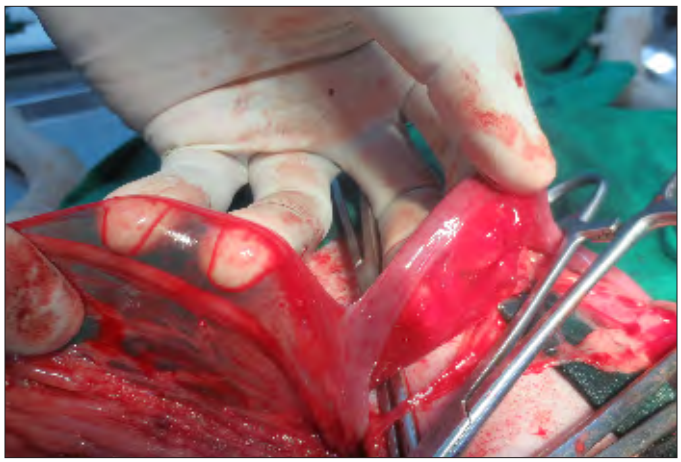

Fig. 1. Hypoplasia of left uterine horn

Although uterine horn agenesis can result in infertility (Jones *et al.*, 1996), in the present case it reveled animal had whelped in spite of unilateral uterine hypoplasia. Singh *et al.* (2018) reported the case of unicornuate uterus with singleton pregnancy and its successful management by caesarean section. This proved that there was a real possibility for normal conception, development and delivery of the fetuses in a case of unilateral uterine horn agenesis and uterine hypoplasia which was in accordance with Seyrek *et al.* (2004) who showed that surgical removal of one uterine horn in she dogs, did not have any influence on subsequent fertility.

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