

# SURGICAL MANAGEMENT OF CONGENITAL DORSO-VENTRAL VAGINAL BAND IN A GOLDEN RETRIEVER BITCH

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A two year old nulliparous female Golden Retriever bitch was presented to University Veterinary Hospital, Kokkalai, Thrissur for prepartum checkup. The animal was bred 55 days before. On ultrasonographic examination, animal was found to be pregnant with approximately four viable fetuses. On pervaginal examination, a persistent dorso-ventral vaginal band was located at anterior vestibule, just caudal to the urethral papilla. Immediate surgical intervention under local anaesthesia (with 2% lignocaine) was performed and the band was resected to regain patency of the vaginal canal. Post-operatively, flunixin meglumine and a course of antibiotics (cefotaxime) were administered parenterally as supportive therapy. The animal recovered uneventfully without any adhesion or scar tissue formation at the surgical site. After one week the animal whelped normally without any difficulty in expulsion of fetuses.

**Keywords:** Bitch, Dorso-ventral, Vaginal band.

A variety of congenital developmental abnormalities of the vagina and vestibule have been reported in bitches (Noakes *et al*, 2009). Abnormal embryologic development is responsible for most of these conditions. Vaginal septum or band can be a thin membrane, develops when the hymen fails to completely regress or when there is failure of the complete fusion of the paramesonephric ducts during embryogenesis. Presence of vaginal septum may interfere with the act of coitus. Incidence dystocia due to vaginal band is 0.5 % in canines (Jackson, 2004). Presence of lateral vaginal band is more common but dorso-ventral band is rare in bitches. The present paper puts on record a rare case of persistent dorso-ventral vaginal band in a Golden

Retriever bitch and its surgical management.

## Case History and Observations

A two year old female Golden Retriever bitch was presented to University Veterinary Hospital, Kokkalai, Thrissur for prepartum checkup. Animal was bred 55 days before without any breeding difficulties. Pulse (80/min.), respiration (24/min.) and body temperature (102.2<sup>0</sup>F) were within normal range. On ultrasonographic examination, animal was found to be pregnant with approximately four viable fetuses. On pervaginal examination, a persistent dorso-ventral vaginal band was located at anterior vestibule, just caudal to the urethral papilla (Fig.1, A). The condition was diagnosed as persistent dorso-ventral vaginal band.

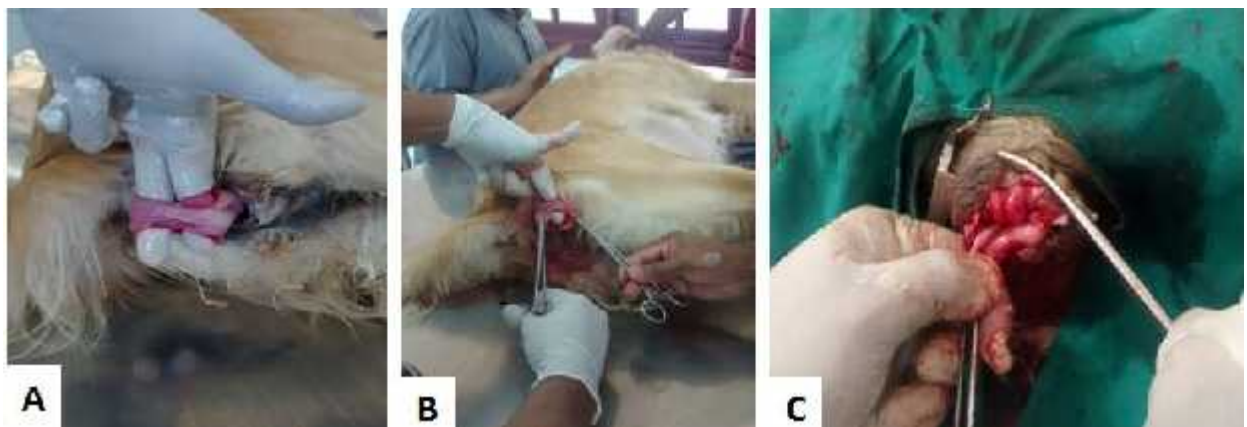


Figure-1. A, B and C

## Treatment and Discussion

As the animal was full term pregnant and considering the possibilities for future complications, surgical management was resorted to. Animal was placed on lateral recumbency and hair around the vulval region was clipped and the site was aseptically prepared. A 2% Lignocaine solution was injected into the vaginal band at the point of insertion and surrounding vestibular tissue. Two artery forceps were applied on either side of band, close to vaginal wall and ligated the band between clamp and vaginal wall (Fig.1, B). Surgical resection was carried out on both ends (Fig.1, C) and slowly removed the clamps and checked for further bleeding.

Flunixin meglumine and a course of third generation cephalosporins were administered intravenously and haemostat was applied topically. The owner was advised to apply an emollient preparation intravaginally to prevent adhesion. After one week animal had whelped normally without any difficulty in expulsion of fetuses. Wound healing was reviewed five days later and to check whether the animal had an uneventful recovery without adhesion or scar tissue formation.

Bitches with persistent vaginal band most often have breeding difficulties, whelping difficulties, chronic vaginitis or urinary incontinence unresponsive to conventional therapy because of urine pooling. In this case animal bred without any breeding difficulties. Digital palpation is the preferred method for diagnosing the condition. Depending on the nature of the stricture, they can either be either resected manually or surgically under anaesthesia.

Contrary to our study Burdick *et al* (2014) reported to conduct a study in 36 dogs and found that surgical intervention could lead to scarring which may in future result in further complications. However, our study proved that timely surgical intervention and effective post operative management can be helpful in retaining the breeding value of a female dog.

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