# CLITORECTOMY FOR THE MANAGEMENT OF OS CLITORIS IN A DOG

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## Introduction

**D**isorders of genital development occur in all species of mammals (Cribiu and Chaffaux, 1990; Passello-Legrand and Mowat, 2004; Weng et al., 2005). In female dogs, the clitoris develops from the genital tubercle, as the penis in the male. The enlargement or ossification of clitoris may be caused by an abnormality of chromosome differentiation, by exposure to androgens or progestins during gestation, or by exogenous androgens administration (Johnson, 2003). Dogs with disorders of sexual development are usually infertile. Several conditions in which the abnormality is noticed such as a clitoral enlargement resembling a penis with a bone, an abnormally shaped vulva, a caudally displaced prepuce, a penis with hypospadias, or bilaterally cryptorchid have been recorded during physical examination of the affected dogs (Meyers-Wallen, 1986; Meyers-Wallen, 2001). The present communication deals with the successful surgical management of os clitoris in a female Labrador dog.

## Case history and observations

A one year old female Labrador dog was presented with the complaint of enlarged clitoris, frequent licking of the vulvar region by the animal and reluctance to sit for 3 months. Physical examination of the external genitalia revealed protrusion of the enlarged clitoris out from vulvar cleft and resembled a small penis (Fig. 1). It had hard consistency with the feeling of bone inside the flesh. Physiological parameters were within the normal physiological limits. Radiographic examination confirmed presence of bony tissue in the clitoris. On the basis of clinical signs and radiological evidence a diagnosis of os clitoris was made. It was decided to perform clitorectomy for excision of the os clitoris.

**Fig. 1: Protrusion of enlarged clitoris resembling os penis out from vulvar cleft**

## Treatment

The animal was premedicated with atropine sulphate 0.04 mg/kg body weight subcutaeneously followed, 10 minutes later, by Pentazocine hydrochloride @ 1mg/kg and Diazepam 0.5mg/kg both given intravenously. General anesthesia was induced with 5% Thiopentone sodium @ 10 mg/kg body weight and maintained to effect. The animal was positioned in ventral recumbency and the perineal area was prepared for aseptic surgery. Urethra was catheterized to locate the urethral orifice. The os clitoris was lifted off the vestibular floor and an elliptical incision was given to undermine the tissues around the base of the os clitoris. By simple dissection os clitoris was excised. The haemorrhage was controlled by ligating the tissue around the

**Fig. 2: Closure of skin after completion of clitorectomy**

**Fig. 3: Surgically excised os clitoris (left) and radiography revealed presence of bony tissue (right)**

bleeding site. The soft tissue surrounding the area was closed with simple continuous suture pattern using 2-0 Vicryl (polyglactin 910) and skin was closed in a simple interrupted manner using 2-0 nylon (Fig. 2). Postoperatively, ceftriaxone 20mg/kg IM for 5 days and meloxicam 0.5mg/kg IM were administered for 3 days. Daily dressing of the wound with povidone iodine solution and application of fly repellant spray was carried out for 10 days.

**Results and Discussion**

The length of the os clitoris, surgically removed, was about 6 centimetres (Fig. 3), which was resembling to os penis. The skin sutures were removed on 10$^{th}$ postoperative day and the animal made an uneventful recovery. In general, the removal of os clitoris is not difficult because the urethra is distinct from this defect. Surgical removal of the bone quickly will help to eliminate the clinical signs. Excessive licking of the area surrounding vulva seen in the present case could be due to drying of the mucosa, and clitoral enlargement protruding from the vulvar cleft (Feldman and Nelson, 1996). To conclude, surgical removal of clitoris tissue (clitorectomy) was the curative treatment of choice in dog with an enlarged bony clitoris.

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