

Case Report: Thelotomy in a Dairy Buffalo after Ultrasonographic Diagnosis of Teat Stenosis

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Abstract: Teat cistern stenosis was surgically treated by thelotomy and excision of the fibrous stenosis following teat ultrasonography to determine location and extent of the lesion in a dairy water buffalo.

Keywords: Ultrasonography, teat cistern, thelotomy.

CASE STUDY

A 13-years old dairy water buffalo was admitted to the surgery clinic of the faculty of veterinary medicine, Cairo University with a history of partial teat obstruction accompanied with hard milking of the right hind teat. The owner has observed progressive decrease of milk yield from the affected quarter since 4 months concomitant with partial thickening of the upper half of the teat. The other quarters were normal and producing milk.

Physical examination indicated that the buffalo was healthy. On palpation of the affected teat demonstrated hard fibrous area at the junction of the two halves of the cistern (Figure 1). Milk production was scarce by hand milking.

The lesion was attributed to previous mastitis. Introducing of sterile teat cannula through the streak canal, showed resistance by passing through the stenotic part of the teat cistern.

Ultrasonography of the affected teat in standing animal, demonstrated the exact seat and extent of the stenosis at 10 MHz frequency, occupying a distance of 2 cm of the proximal teat cistern and occluded $\frac{3}{4}$ of its diameter (Figure 2).

Surgical Procedure

Thelotomy was decided to remove the stenotic fibrous lesion. The buffalo was fasted 24 hours before surgery and then sedated with xylazine 2% at a dose of 0.1 mg/kg. The buffalo was placed in left lateral recumbency for exploration of the right hind affected teat. The hind legs were restrained by rope. The teat

was anaesthetized by ring block by infiltrating the base of the teat with 2% lidocaine HCl. A plastic band with self lock was tightened around the base of the teat to provide hemostasis during surgery. Following surgical aseptic preparation, a sterile teat cannula was inserted through the streak canal to the stenotic lesion in the teat cistern. A 3-cm long incision using a no.11 scalpel blade over the lateral aspect of the teat, where the stenotic fibrous lesion was palpated. The fibrous scar tissue was carefully resected from the mucosal lining without injuring the teat vein (Figures 3 and 4).

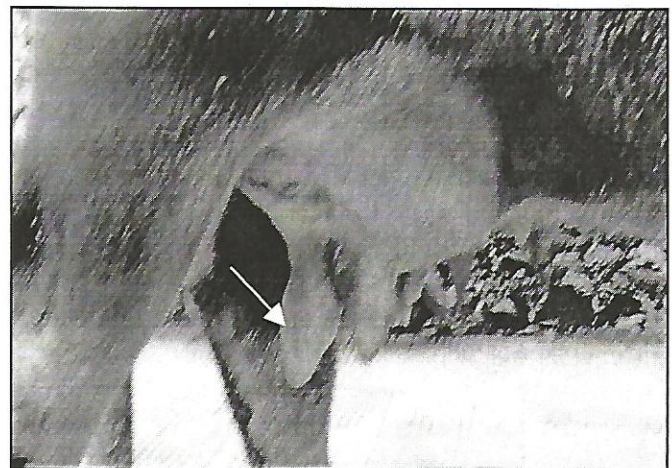


Figure 1: Udder of the presented buffalo showing the seat of stenosis at the right hind teat (arrow).

The surgical field was irrigated with sterile saline and the musculocutaneous skin incision was closed with 3/0 polygalactin 910 using vertical mattress suture pattern.

The plastic band fixed at the base of the teat was removed and followed by profuse let down of milk from the teat cannula. A dose of intramammary antibiotic was infused through the teat orifice. A teat bandage supported with adhesive tape was applied. A systemic

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