

Case Report

SURGICAL REMOVAL OF TEAT SIPHON FROM COW'S UDDER

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1. CASE HISTORY

A five-year-old Jersey cross breed cow at the second stage of lactation was suffering from a chronic suppurative mastitis at Damchena village under Shari subdistrict, Paro. The owner had treated the case by applying hot fomentation and other local methods but failed to cure the case. The case was then reported to the subdistrict livestock extension office for treatment on 23 November 2017. The livestock staff had examined the case and found thick purulent discharges oozing out from the teat canal while squeezing the teat and udder. Since the case was away from the subdistrict livestock extension centre, the extension staff had instructed the owner to drain out pus from the udder with the help of a teat siphon. Mammary infusions were provided. The owner had inserted the teat siphon into the teat canal on 25 November 2017, to drain out pus, as per the instruction but unfortunately the teat siphon had slipped into the mammary gland when cow moved during operation. The owner reported about the incident to the subdistrict extension staff on 27 November 2017. The case was then referred to the District Veterinary Hospital (DVH), Paro on 28 November 2017 when both the owner and the sub district livestock staff failed to remove the teat siphon manually. The Veterinary Officer from DVH, Paro visited the case and tried to remove the teat siphon manually but was in vain. We decided to remove teat siphon by performing surgery. The owner was informed about the decision of surgical intervention on the next day. The owner consented to the decision.

2. ASCERTAINING POSITION OF THE TEAT SIPHON

We requested Miss Jamie Vaughan, Maya Foundation, Paro to lend her digital X-ray machine (Ultralight 9020HF, Collimeter, EcoRay Co., LTD. Seoul, Korea 153-786MarkIIG® sound company) to ascertain the position of the teat siphon inside the udder. She kindly lent her machine and also supported us in performing the X-ray. We built temporary crush with wooden poles and planks to restrain the animal during X-ray and surgery. We took X-ray laterally as well as postero-anteriorly and the X-ray picture showed a very clear position of teat siphon inside the udder (Figure 1). Our

attempt to remove the teat siphon manually after X-ray examination was unsuccessful.

SURGICAL INTERVENTIONS

The animal was restrained in standing position within the crush. The surgical site was prepared by shaving the hairs around the teat with blade and then cleaned the site with 5% chlorhexidine, followed by povidone iodine and rectified spirit. The incision site was desensitized by ring nerve block using 20 ml of 2% lignocaine at the base of teat.

About 2 cm longitudinal incision was made on the teat at the site where teat siphon was located

(based on X-ray examination). When incision reached the teat canal, a thick purulent discharge gushed out and the remaining pus were removed by squeezing the mammary gland. A teat siphon was located and was removed using 14 inches curved artery forceps. The quarter was flushed with povidone iodine, followed by metronidazole solution. The inner and external muscular layer were sutured with absorbable polyglacton (vicryl 1 2-0) and vicryl 1, respectively. The wound was dressed with gamma benzene hexachloride ointment. As part of post-operative treatment, the animal was provided with injection 10ml meloxicam i/v, injection ampicillin cloxacillin 2g i/v and injection 20ml oxytetracycline (LA) i/m. The animal was followed up after the operation and the surgical wound had healed. The animal also recovered from mammary infection.

3. CONCLUSION AND RECOMMENDATIONS

This incident demonstrates that teat siphon should be used only by trained livestock personnel and should not be given to the farmer for intervention without technical guidance.

The portable digital X-ray machine had helped to locate the teat siphon inside the mammary gland in a cow and can also be useful to diagnose certain conditions like fracture and foreign objects in animals. Therefore, X-ray machine is a critical equipment for the district veterinary hospitals.

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