

TUBECTOMY TO PREVENT SUBSEQUENT CONCEPTION AND DYSTOCIA IN COWS AFFECTED WITH NARROW PELVIS

T.SATHIAMOORTHY, T.G.DEVANATHAN¹, K.KULASEKAR², S.A. ASOKAN,
S.BALASUBRAMANIAN³ S.RANGASAMY⁴ AND S.RAJA⁵

Department of Clinics,
Madras Veterinary College,
Tamil Nadu Veterinary and Animal Sciences University
Chennai - 600 007

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ABSTRACT

Tubectomy performed in two narrow pelvis affected cows to prevent subsequent conception and dystocia is presented.

Key words: Tubectomy, Narrow pelvis, Heifers

Congenital and acquired deformities of the pelvis, cervix, vagina or vulva lead to dystocia by altering the shape and volume of the birth canal (Sloss and Dufty, 1980). Narrowing of the pelvic inlet may be due to extensive callous formation in healed fractures, thus leading to dystocia during subsequent parturitions. Cattle affected with narrow pelvis may be exposed to unintentional breeding by natural service and become pregnant. Some of the cattle owners unwilling to cull these animals and prefer to maintain until natural death for sentimental reasons. In human, tubectomy is one of the methods adopted to prevent conception. Hence, in the present study tubectomy was successfully performed in two cows with narrow pelvis on owner's request while performing caesarean section to prevent subsequent conception and dystocia.

One primiparous crossbred heifer and one non-descript heifer both aged about 2½ years on their first calving were brought to the large animal obstetrics unit of the Madras Veterinary College Teaching Hospital with the history of frequent straining and difficulty in parturition. The past history revealed that both the heifers had met with accident during calf hood stage. The water bag had ruptured 12 hours before. On clinical examination both the heifers were dull, exhausted and straining frequently. The temperature was within the normal range in both the heifers. Vulva appeared oedematous. Vaginal examination revealed the reduced diameter of the pelvic passage in crossbred heifer and

the presence of callous formation in non-descript heifer. In both the heifers, the fetal parts were palpable anterior to the pelvis and cervix was relaxed completely. Since both the animals had narrow pelvic inlet, vaginal delivery was ruled out and caesarean section was advised.

Under local and epidural anaesthesia, caesarean section was performed on the left ventrodorsal site adopting the standard operating procedure as outlined by Noakes *et al.*, (2009). In both cases, dead female calf was delivered. In order to maintain normal cyclicity and hormonal milieu and to prevent subsequent conception and dystocia, it was decided to adopt tubectomy in both the heifers. After the uterine incision was closed the oviduct on both sides were located below the respective ovary and tubectomy was performed as per the technique described by Pomeroy (1996). Briefly, the fallopian tube was lifted near the mid portion to form a loop, choosing the most avascular area in the mesosalpinx, the base of the loop was ligated with chromic catgut, No.1 size and the top of the loop was severed. Within a few days, the peritoneum grows over and covers the cut ends of the tubal segments. The cut ends of the fallopian tube separate as the ligature dissolves. The peritoneal covering and separation of the remaining tubal segments prevent them from re-attaching to each other. Subsequently, the abdominal muscles and skin were sutured. The animals were administered with Inj. Ceftriaxone 3 g, Inj. meloxicam 15 ml, Inj. chlorpheniramine maleate 10 ml, intravenous fluids and supportive therapy for 7 days. The suture site was cleaned with povidone iodine and dressed with povidone iodine and metronidazole spray. Both the cows

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recovered uneventfully and were discharged. Histopathological examination of the severed part was confirmed as ampullary portion of oviduct. In bovines, pelvic fractures due to automobile accidents usually results in dystocia and caesarean section is generally preferred. In rural areas, since the animals are allowed for grazing, there is a likelihood of unnoticed natural service which results in pregnancy and thus warranting another major surgery that may endanger the life of the dam. To avoid the undesirable pregnancy, it is better to prevent subsequent conception. In conclusion, tubectomy would be an easy simple and apt method to be performed in cows with narrow pelvis to prevent subsequent conception and dystocia and salvage them safely.

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