

FIBRO-LEIOMYOMA OF CERVIX SIMULATING CERVICO-VAGINAL PROLAPSE AND ITS MANAGEMENT IN A CROSSBRED COW - A CASE REPORT

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The incidence of pedunculated tumors in the bovine genital system is rare; while as cervical tumors are still rarer. Jubb and Kennedy (1970) and Roberts (1971) described fibromas, fibrosarcomas, leiomyomas and carcinomas affecting bovine cervix and vagina. Cervical and/or vaginal tumors simulating and/or causing cervico-vaginal prolapse have been documented as a cause of infertility in cows and buffaloes by Derashri et al. (1985), Kochhar et al. (1996) and Ryot (2000). Further, Sharma et al. (1977) and Kochhar et al. (1995) described tumors of cervix & vagina in buffaloes. Such rare pedunculated cervical tumors have also been reported in a pregnant Rathi cow (Kohli and Bishnoi, 1980), a lactating crossbred cow (Sindhaye, 1982) and an infertile cow (Ryot, 2000). The present report places on record a case of pedunculated large cervical fibro-leiomyoma and its successful treatment by surgical intervention in a crossbred cow.

CASE HISTORY AND CLINICAL OBSERVATIONS

A seven years old crossbred cow in her 2nd parity was presented for treatment of chronic cervico-vaginal prolapse at Teaching Veterinary Clinical Complex of the College, Anand. The owner reported that the cow had suffered from complete uterine prolapse at her last calving 2 years back, and that the cow was lactating and non-pregnant, but suffering from chronic recurrent cervico-vaginal prolapse since one year. The protruding mass was gradually increasing with unhealthy whitish discharge from the birth canal for the last 6-8 months. The animal was feeding and watering normally but had straining bouts during urination and defecation. The case was also treated 2-3 times by a local quack using purse-string sutures assuming that it was nothing but a case of recurrent chronic case of cervico-vaginal prolapse, unfortunately commissioning the owners history of past prolapsed without deeper exploration and confirmation of the condition as tumor.

The cow when presented to the college clinic was in good body condition with normal rectal temperature, pulse rate, respiration rate, but a fleshly irregular shaped necrosed soiled mass of about coconut size was protruding through the vulvar lips with foul smelling whitish pus flakes. There were fresh scars of mattress stitches on either sides of vulva suggesting that the attempts were made to retain the prolapse mass by some local quack. Cleaning of the soiled protruding mass with water revealed that it was a pedunculated tumorous mass originating from some deeper structure. Further, rectal examination revealed that the cow was cycling non-pregnant, but had a strong thick band or peduncle extending from enlarged cervix to the protruding mass. On vaginal exploration, it was found to be a long pedunculated (18-20 cm) cervical tumor, rather than cervico-vaginal prolapse, originating from right lateral wall of the cervix (Plate 1). The animal also had developed vagino-cervicitis with lots of whitish exudates on the floor of its lumen. It was decided to remove the tumor surgically and treat the cow.

TREATMENT AND DISCUSSION

The animal was restrained in standing position in a crate and caudal epidural anaesthesia was induced using 8 ml of 2% lignocaine hydrochloride. The perineal region of the cow including protruded mass was thoroughly cleaned along the stalk up to the cervix with plenty of diluted betadine solution. After setting of anaesthesia, the cervix was everted through vaginal passage by

applying the traction bandage on the peduncle of the tumor (Plate 2). The tumor was found to be supplied with plenty of blood vessels through stalk. The local anesthetic was also instilled at and around the incision site. The stalk was clamped with a pair of artery forceps very close to the cervix. The prominent blood vessels in the stalk of tumor were ligated at the base of stalk using chromic catgut No. 1. A bold incision was then made to excise the pedunculated tumorous mass from its base (Plate 2). The stump was sutured with chromic catgut No. 2/0 to check the bleeding and thermocautery was also used to control diffuse bleeding from the stump. The stump was dressed with Cephalaxin powder 20 g and RC Chrome 10 ml was injected i/m. Further, Strepto-penicillin 2.5 gm, Meloxicam 15 ml and Chlorpheniramine maleate 10 ml were administered i/m daily for 4 days post-operatively. The animal made an uneventful recovery. The cow exhibited pronounced estrus 15 days after surgery and was inseminated with good quality frozen semen resulting into conception. There was no any recurrence and she delivered a male calf normally again without any complication a few days before this writing.

The size of extirpated tumorous mass was like a big coconut size and it weighed 1.8 kg (Plate 3). The histopathological investigation of the tissue sections stained with H & E stain confirmed it to be a fibro-leiomyoma of cervix (Plate 4).

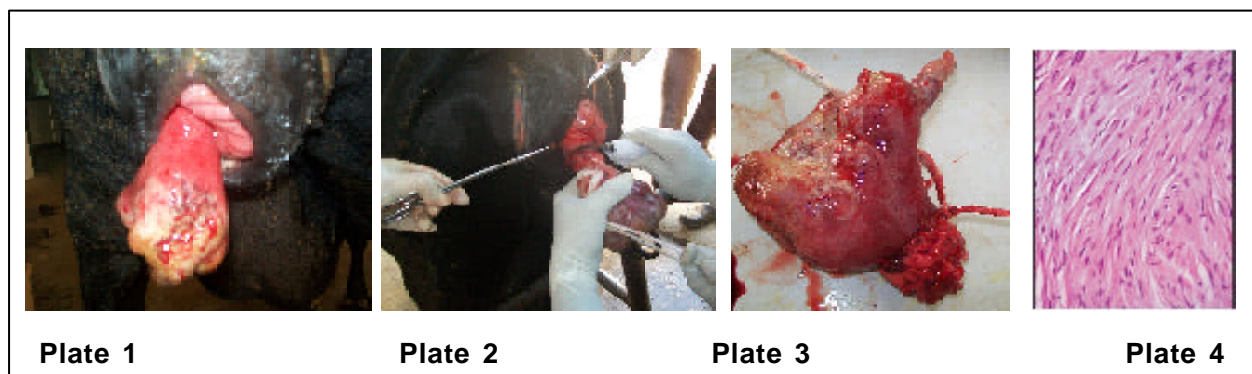


Plate 1-4: Pedunculated fibro-leiomyoma of cervix in a cow; its surgical removal and gross & microscopic appearance.

The tumors and pedunculated growths in the vagina and cervix often tend to be a potent cause of irritation and straining causing chronic cervico-vaginal prolapse (Roberts, 1971). Usually such tumors are benign in nature and yield to routine surgical interventions (Arthur et al., 1996). Like present case, pedunculated tumors of cervix or vagina causing recurrent cervico-vaginal prolapse in cows and buffaloes and their successful surgical removal have been documented earlier (Kohli and Bishnoi, 1980; Derashri et al., 1985; Kochhar et al., 1995 & 1996; Ryot, 2000). Further, Vashistha et al. (2000) reported cervical carcinomas in a cow. The present observations suggested that early correct diagnosis and timely removal of such tumors from the birth canal could be a well-come approach to prevent/correct the infertility in dairy animals. Erroneous diagnosis and faulty treatment approach, as made in the present case by a quack, makes the animal vulnerable to complications such as prolapse, suffering and loss of fertility. Moreover, carcinomas may metastasize in the other organs jeopardizing the life of the animal, if not attended in time. Although in the present case successful pregnancy and calving were achieved soon after surgical removal of the tumour and medical management of genital infection.

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