ABSTRACT

A buffalo was presented for the treatment of repeat breeding, however, gynaecological examination revealed the protrusion of an ovary through a dorso-lateral tear on the left vaginal wall. Suspected etiology is occurrence of post-partum cervico-uterine prolapse during last parturition followed by the improper replacement of prolapsed uterus.

Keywords: buffalo, ovary, post-partum, uterine prolapse, vaginal tear

INTRODUCTION

Prolapse of uterus is one of the important maternal abnormalities during post-partum period in buffaloes (Sah and Nakao, 2003). Accurate repair and replacement of completely prolapsed uterus through various techniques and their potential complications are well known to bovine practitioners (Miesner and Anderson, 2008). However, sometimes uterine prolapse is not properly repaired and can lead to an unfavorable outcome (Andres, 1971). The present report puts on record an unusual case of protrusion of an ovary through a vaginal tear in a buffalo which had the history of fourth degree cervico-uterine prolapse during post-partum period.

CASE HISTORY AND DIAGNOSIS

A four-year-old Murrah buffalo was presented at the veterinary university hospital with history of being a repeat breeder and had been exhibiting vaginal discharge for the previous 2 days. Physical examination of the buffalo revealed good body condition. Examination of the external genitalia revealed swelling of the vulva and thus the effacement of horizontal wrinkles usually present on the external surface of vulva, and reddening of the vestibular mucosa. On per-rectal palpation, the cervix (external os) was not clearly palpable, uterus (body and horns) was completely adhered with the right ovary and the left ovary was not palpable. Nevertheless, copious, clear and stringy cervico-vaginal mucous appeared during the course of rectal palpation. For detailed examination of the cervix, a speculum was inserted into the vagina using aseptic procedures. No abnormality was detected with the external os which was open. However, to the surprise of the gynecologist, the left ovary along with ovarian bursa was clearly protruding out of the left dorso-lateral wall of the vagina about two inches away.
from cervix (Figures 1A, B). Moreover, this ovary appeared to be exhibiting a mature follicle (Figure 1B). For confirmation of rectal observations, transrectal ultrasonographic scanning was carried out. Ultrasonography suggested a kink in the cervix, confirmed the adhesions of the uterus and further revealed that the right ovary was without any mature (dominant) follicle, whereas the left ovary had a dominant follicle.

When these findings were reported to the owner of the buffalo, he further revealed that buffalo had aborted about six months back at about eight months of gestation. Immediately after abortion, the buffalo had complete cervico-uterine prolapse that was replaced by a quack. Following replacement of prolapsed uterus, buffalo had exhibited vigorous straining and intermittent vaginal bleeding for about a week.

**DISCUSSION**

From the examination of the genital tract and history, it was concluded that the protrusion of left ovary into the vagina, through a tear, could have been the outcome of inappropriate replacement of cervico-uterine prolapse. The vaginal tear might have occurred either while replacing the uterus or following severe straining exhibited by buffalo. The rupture of vaginal wall in association with uterine prolapse has been reported in bovines (Andres, 1971). In the present case, blood supply to the protruded left ovary may not have been hampered as the ovary was functioning normally as suggested by the presence of dominant follicle. This condition remained undetected during the previous estruses due to use of breeding bulls, and thus, the buffalo was presented for treatment of

![Figure 1](image_url)  
(A) A speculum inserted into the vagina revealing the protrusion of ovary into the vagina, (B) Enlarged portion showing ovarian bursa as well as ovary with a mature follicle.
repeat breeding.

Although, uterine prolapse and its complications have been well discussed in scientific veterinary literature and textbooks, no reference of the type of complication observed in the present buffalo is available (Sloss and Dufty, 1980; Miesner and Anderson, 2008). The losses subsequent to post-partum uterine prolapse can be minimized to a great extent through appropriate interventions (Roberts, 1986). Thus, it is recommended that prompt and accurate treatment subsequent to the occurrence of post-partum uterine prolapse is imperative for a favorable prognosis with regard to the fertility of buffaloes.

REFERENCES


