SUCCESSFUL MANAGEMENT OF PARAMPHISTOMOSIS ASSOCIATED SECONDARY BLOAT WITH UTERINE TORSION IN A PREGNANT BUFFALO

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ABSTRACT

A pluriparous full term pregnant buffalo aged three calving was brought to the hospital with the history of persistent bloat for two days, restlessness, anorexia and excessive abdominal straining with no progress in parturition for the previous 24 h. On clinical examination the animal had swollen and edematous vulval lips with a sero-sanguinous vaginal discharge along with tucked up udder, absence of rumen motility and tympanic sounds upon percussion of the left para lumbar fossa. Per vaginal examination revealed twisting of vaginal folds towards right. Through rectal and per-vaginal examination the case was diagnosed to be right sided post-cervical uterine torsion with bloat. Initially the case was treated with sus. Tolzan F (oxyclozanide) p.o 18.7 mg/kg and the same dose was repeated after two days. The detorsion was carried out by a modified Schaffer’s method with single rotation. After five days of treatment the animal recovered successfully.

Keywords: buffaloes, Bubalus bubalis, uterine torsion, bloat

INTRODUCTION

Ruminant animals produce large volumes of gas during the normal process of digestion. This gas either is belched up or passes through the gastrointestinal tract. But, there are some situations where these gases cannot escape. Consequently, the gases build up in the rumen and the rumen wall becomes distended (Cheng et al., 1998). Torsion of the uterus is seen as a cause of dystocia in all domestic animals. It is defined as the revolution or twisting of the uterus on its longitudinal axis. This condition is more commonly observed in pluriparous than in primiparous animals (Roberts, 1982) and right sided uterine torsion is more common than left sided uterine torsion in buffaloes (Srinivas et al., 2007). This present case discusses paramphistomes associated secondary bloat with uterine torsion in a buffalo and its successful treatment.

CASE HISTORY AND OBSERVATION

A pluriparous full term pregnant buffalo aged three calving was brought to the Emergency and Critical Care Unit, Resident Veterinary Services Section, Madras Veterinary College with the history of persistent bloat (Figure 1) for two days, restlessness, anorexia and excessive abdominal straining with no progress in parturition for the past 24 h. On clinical examination the animal had swollen and edematous vulval lips

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with sero-sanguinous vaginal discharge along with tucked up udder (Figure 2), and absence of rumen motility and tympanic sounds upon percussion of left para lumbar fossa were evident.

Rumen liquor showed a pH 7.2 and very few small protozoa, Hb – 9.5 g%, PCV 38%, RBC-4.4x10^6 cells/cmm, WBC 8.02x10^3 cells/cmm, TP- 7.2 g/dl, albumin 1.4 g/dl, globulin 5.8 g/dl. Blood smear did not reveal the presence of blood parasite. Dung sample showed ova of amphistomes (++). Per vaginal examination revealed twisting of vaginal folds towards right. Through rectal and per-vaginal examination the case was diagnosed to be right sided post-cervical uterine torsion.

**TREATMENT AND OBSTETRICAL MANAGEMENT**

Rumen fluid extraction pump was introduced and a little resistance to the passage of the tube at the level of cardia was felt. A large quantity of gas was released and when the tube was removed a large number of flesh coloured amphistomes of different stages (Figure 3) were found sticking on the suction strainer. Initially the case was treated with sus. Tolzan F (oxyclozanide) p.o 18.7 mg/kg and the same dose was repeated after two days. After two hours the distention of rumen was reduced.

The animal was cast on right lateral recumbency with forelimb and hind limb tied separately. The detorsion was carried out by a modified Schaffer’s method with single rotation. Following detorsion, a dead male fetus was delivered along with fetal membrane by traction. Following delivery, the animal was treated with enrofloxacin (5 mg/kg b.wt, i/m once daily for 5 days), Inj. meloxicam (15 ml, i/m), inj. pheniramine maleate 15 ml i/m, furazolidone (4 boli IU) for the next three days. Inj. DNS (1 litre IV) and Inj. Calcium borogluconate 450 ml I/V was administered to restore the normal body condition. After five days of treatment the animal recovered successfully.

**DISCUSSION**

Eructation or belching normally occurs about once in every minute and requires about 10 seconds to be completed. The volume of gas produced by rumen fermentation increases after feeding and it peaks in two to four hours. To accommodate increased rate of gas production, belching occurs more often, up to three or four times per minute. Normally, the process is efficient in expelling large volumes of gas from the rumen. Inserting a stomach tube with the aid of a speculum allows the animal to expel large quantities of gas, thus easing rumen distension. In addition, any esophageal obstruction can be detected when the stomach tube is passed into the animal. Absence of froth in rumen fluid confirmed that it was a case of free gas bloat (Cheng et al., 1998).

Immature flukes migrate proximally along the duodenum and through the abomasums to reach their predilection site in the rumen and reticulum. The period required for maturation varies from six weeks to four months. (Radostitis et al., 2000). Occlusion of amphistomes around the cardia caused bloat as reported in the present case.

Although dystocia is less common in buffalo than in cattle, the most frequent cause of maternal dystocia was uterine torsion (Srinivas et al., 2007). The predisposing factor was anatomical in origin especially the long uterine ligaments, low number of smooth muscle cells in the broad ligament and also due to the confinement of the
Figure 1. Distention of left para lumbar fossa.

Figure 2. Tucked up udder.

Figure 3. Flesh coloured amphistomes of different stages.
animal (Noakes et al., 2009). The right side post cervical uterine torsion found in the present case were in agreement with the earlier reports (Das et al., 2010; Mudasir et al., 2010; Deori et al., 2009). Detorsion of the dam through the modified Schaffer’s method has proved very useful for the replacement of uterine torsion in the buffalo (Noakes et al., 2009) and similar observation was evident in the present case. The objective of rolling is to suddenly and rapidly rotate the dam’s body in the same direction while the uterus remains stationary. Death of the fetus in the present case might be due to the delay in reporting to the clinic, resulting in lack of blood supply to the uterus due to torsion and subsequent hypoxia (Noakes et al., 2009).

REFERENCES


