HYDROALLANTOIS IN BUFFALO: A CASE REPORT

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ABSTRACT

A case of hydroallantois in buffalo and successful treatment is reported.

Keywords: hydroallantois, buffaloes, gestational disorder, pregnancy

INTRODUCTION

Hydroallantois is one of the gestational disorder in which sudden increase in allantoic fluid occurs in allantoic cavity due to foetal membrane pathology leading to bilateral enlargement of abdomen (Roberts, 1971). This is more common last phase of third trimester in dairy and beef cattle and less so in buffaloes and heifers (Srinivas and Sreenu, 2006). The present report describes a case of hydroallantois in a 10-year-old buffalo that was 7 months pregnant.

CASE HISTORY AND CLINICAL EXAMINATION

A 10-year-old buffalo that was 7 months pregnant was presented to the Veterinary Referral Hospital and Polyclinic, SKUAST-J with the history of sudden enlargement of abdomen in previous 4-5 days (Figure 1) and being unable to sit on its own. The buffalo was dull and depressed, its eyes ball were sunken, and its muzzle was dry.

The physiological parameters pulse rate, respiratory rate and rectal temperature were 105 per minute; 30 per minute and 102.3°F, respectively. Ballottement of the abdomen failed any evidence of foetus. Extensive venous collateral circulation was noticed in the ventrolateral part of the abdomen. Rectal examination revealed highly distended uterus filling most of the pelvic cavity. Vaginal examination revealed completely dilated cervix and foetal membrane with fluid coming out in vagina. Based on history, symptoms and observations, the case was diagnosed as hydroallantois.

TREATMENTS AND DISCUSSION

For removal of allantoic fluid, hand was inserted in vagina and protruded part of allantoic sac was broken out and keeping the hand in vagina, about 60 litres of allantoic fluid was slowly drained. After that separated part of placenta was removed from vagina manually (Figure 2) and again 80 litres of allantoic fluid was drained out from uterus slowly. The drained allantoic fluid was watery and amber in colour. After complete removal of allantoic fluid, foetus was palpated and delivered by rope traction tied in hind limbs (Figure 3). The remaining necrosed portion of placenta was removed manually. The animal was administered 10 litres of...
each 5% dextrose normal saline and normal saline solution intravenously. Injection of oxytetracycline 1500 mg (Terramycin, Pfizer) and injection of dexamethasone 60 mg (Dexasone, Zydus Animal Health Limited) were given intravenously whereas injection of Meloxicam 150 mg (Melonex, Intas Neovet) was administered intramuscularly. Bolus of Furazolidone and urea (Furea, Pfizer) was placed in uterus. The same treatment was continued for next 3 days except inj Dexamethasone. The animal recovered uneventfully.

In hydroallantois, accumulation of allantoic fluid is rapid due to placental abnormalities and possible interference with sodium metabolism at the cell level (Jackson, 1980). Hydroallantois is seen mostly in 8-9 months of pregnancy (Roberts, 1972); however, in the present case it was seen in 7 months of pregnancy and could be due to necrosed and oedematous placenta. Similar findings and cause also be earlier said by different researchers (Arthur, 1957, Roberts, 1972; Vandeplassche et al., 1965). Sudden increase in fluid imposed pressure over diagphragm resulting in respiratory distress. The shifting of fluid from interstitial tissue or cell to cavity might have been responsible for dehydration, sunken eye, dullness and depression (Arthur et al., 1989). Due to heavy bilateral distension of abdomen, ballotment was failed to revealed

![Figure 1. A 10-year-old buffalo with hydroallantois. Note the distension of abdomen.](image1)

![Figure 2. Heavy, necrosed and edematous foetal membrane after removal.](image2)

![Figure 3. Dead foetus after removal. Note the non-hairy skin.](image3)
presence of foetus. Drainage of allantoic fluid or cesearean is the only treatment option (Arthur et al., 1989). In present cases, foetus was removed after drainage of allantoic fluid per vaginum as the cervix was dilated at the time of examination and placenta and foetus was within the reach of hand. Inj. Dexona was administered to prevent the shock due to rapid drainage of fluid. Remaining treatment was given symptomatically. The present paper described and discussed a case of hydroallantois and its successful management in cattle.

REFERENCES

*Veterinary Reproduction and Obstetrics*, ELBS, 118-120.


