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## Management of dystocia due to foetal anasarca in a non-descript cow: A case report

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### Abstract

Hydro-allantois is sometimes seen in cattle and buffalo, and is usually treated with medical termination of pregnancy. A pregnant cow was brought to tvcc with sudden and extensive distension of abdomen, on clinical and physical examination it was found to be hydro-allantois. It was treated with Cloprostenol and dexamethasone for induction of parturition, 30 hours later parturition started but resulted in dystocia due to fetal disposition which was then corrected by manual manipulation, repuksion and traction. The dam was treated with antibiotic and analgesic.

**Keywords:** Hrdro-allantois, cattle, dystocia

### Introduction

A pathological disease called hydro allantois is characterized by an excessive buildup of allantoic fluid in the allantois during foetal development (*Bharai et al., 2021*)<sup>[1]</sup>. Usually, maternal factors are involved, where rapid and abnormal distension of the abdomen occurs (*Drivers Peek, 2008*)<sup>[2]</sup>. Prostaglandin F<sub>2</sub> and corticosteroids are typically used to end the pregnancy as part of the treatment for hydro allantois. (*Manokaran et al., 2011*)<sup>[6]</sup> but the abrupt removal of allantoic fluid causes hypovolemic shock and the animal may pass out) (*Peiro et al., 2007*)<sup>[8]</sup>. In dairy cattle, hydro allantois occurs more frequently in the final trimester and less frequently in buffaloes and heifers (*Srinivas and Sreenu, 2006*)<sup>[9]</sup>. As a result of decreased placental vascularization brought on by hydro allantois physiopathology, the foetal membranes and placental tissue undergo metabolic alterations building up foetal fluids (*Kapadiya et al., 2018*)<sup>[3]</sup>.

### Case history and clinical observations

An eight-years old, seven months pregnant non-descript cow, was brought to Teaching Veterinary Clinical Complex, College of Veterinary Science and A.H, DSVCKV, Anjora, Durg, with the history of excessive distension of abdomen. Owner complained about the excessive distension of abdomen over a period of 10-15 days. The cow was lethargic and appetite was reduced. When admitted to the clinic, the heart beat was 96/minute, temperature was 102°F, and estimated body weight was around 350 kg. Auscultation of abdomen revealed fluid sound on both the sides of the abdomen. Rectal examination revealed excessively distended uterus with fluid. No foetal parts were palpable on rectal examination due to extensive enlargement of uterus. On per-vaginal examination cervix was found closed. On the basis of above findings, the case was diagnosed as hydro allantois.

### Treatment and Discussion

Considering the health and closeness to parturition, it was decided to induce calving. PGF<sub>2α</sub> analogue, Cloprostenol (500mcg), together with Dexamethasone (40 mg) was given intramuscularly. She was expected to deliver within 24-48 hour of treatment. The owner was asked to wait until then. After 30 hour of treatment, parturition started with expulsion of large quantity of fluid and lodging of both the foetal forelimbs in the birth canal. The animal was unable to deliver the fetus even after 12 hour of rupture of the first water bag. The animal was seen lying on the floor in sternal recumbency with the fore-feet of the foetus visible outside the vulva. Lubricated hand was inserted per-vaginally to examine the calf and was found to have anterior presentation and dorso-sacral position. The posture was corrected by repulsion, manipulation and traction which resulted in the successful delivery of the dead foetus (fig. 1, 2). The dam was treated with antibiotic Ceftriaxone @ 10 mg/kg b.wt. i/m, and analgesic Meloxicam @ 5 mg/kg b.wt. i/m.



**Fig 1:** Over distended pear shaped abdomen



**Fig 2:** Under developed foetus

### Conclusion

In general, hydrops allantois can be managed successfully by inducing parturition with cloprostenol and dexamethasone if the animal is close to calving. Intestinal obstruction, ascites, bladder rupture, abdominal lumps like tumors, abscesses, or fat necrosis, rumen tympany, severe ventral edema, hydrometra, and numerous foetuses must all be distinguished from hydro allantois (*Morin et al.*, 1994) [7]. Dexamethasone 40 mg i/v and Cloprostenol 500 mg i/m were administered together in one dose to successfully induce parturition. Various treatment procedures have been used by veterinarians to induce parturition in cattle and buffaloes, including the use of PGF2 preparations, dexamethasone, and estrogens (*Kumar et al.*, 2012) [5]. In order to avoid hypovolemic shock brought on by the abrupt expulsion of allantoic fluid after the termination of pregnancy, supportive fluid therapy is typically advised along with slow and continuous evacuation of the excess allantoic fluid (*Kumar et al.*, 2012) [5]. In this case, the allantoic bag naturally broke after the induction of parturition, and allantoic fluid began to come out quickly. Dexamethasone injections and supportive fluid treatment were used to prevent hypovolemic shock.

### References

1. Bharai MJ, Dodiya VA. Hydroallantois in a Gir Cow: A Case Report. *Ind. J Vet Sci. and Biotech.* 2021;17(4):98-99.
2. Drivers TJ, Peek S. *Rebhun's Diseases of Dairy Cattle.* 2<sup>nd</sup> Eds., Saunders Elsevier, St. Louis, Missouri; c2008. p. 395.
3. Kapadiya PS, Parikh SS, Chauhan PM, Sutaria TV, Nakhasi HC. Management of hydroallantois in a

Jaffrabadi buffalo: A case report. *Journal of Pharmacognosy and Photochemistry.* 2018;SP1:1534-1536.

4. Kumar CR, Shaikh HA, Balate AKASH, Kakde VK, Kandarpalle AV. Hydroallantois in a buffalo-A case report. *Cheiron.* 1988;17:196
5. Kumar S, Sharma U, Pandey AK, Agrawal S, Kushwaha RB, Tripathi AK. Hydroallantois in buffalo: A case report. *Buffalo Bulletin.* 2012;31(2):67-69.
6. Manokaran S, Ravikumar K, Ezakial Napoleon R, Palanisamy M, Selvaraju M. Hydrallantois in a non-descript buffalo: A case report. *The Indian Journal of Field Veterinarians.* 2011;7:69.
7. Morin DE, Hornbuckle T, Rowan LL, Whiteley HE. Hydroallantois in a caprine doe. *Journal of the American Veterinary Medical Association.* 1994;204(1):108-111.
8. Peiro JR, Borges AS, Yanaka R, Koivisto MB, Mendes LCN, Feitosa FLF, *et al.* Hydrallantois in an ewe (Case report). *Ars. Veterinaria.* 2007;23:116-119.
9. Srinivas M, Sreenu M. Hydroallantois with foetal ascites in a buffalo. *Indian Veterinary Journal.* 2006;83(12):1342-1343.