



**Short Communication**

**Hydroallantois in a non-descript doe - a case report**

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**Abstract**

**A rare case of hydrallantois in a goat was presented in Teaching Veterinary Clinical complex with the history of full term pregnancy. Animal was in second lactation with the history of normal parturition in previous kidding. Animal having symptoms of anorexia, respiratory distress, bilaterally distended abdomen, reluctance to stand and move was reported. Animal was showing the signs of straining for 6-7 hours. One non-viable fetus was removed by caesarean section.**

**Key words:** Doe, hydroallantois

Hydroallantois, a placental dropsical condition characterized by progressive bilateral abdominal distension, respiratory distress, depression, tendency to adopt recumbent posture, difficulty in standing and walking is caused by abnormal accumulation of large volume of allantoic fluid in the uterus of pregnant female during 5-20 days period in last trimester of pregnancy. It has been commonly reported to occur in bovine, Bubaline, equine and rarely in ovine, canine and caprines (Milton *et al.*, 1989; Jackson, 2004; Feliciano *et al.*, 2013; Kumar *et al.*, 2018). A reduction in the number of cotyledons and adventitious placentation has also been associated with hydrallantois (Peek, 1997).

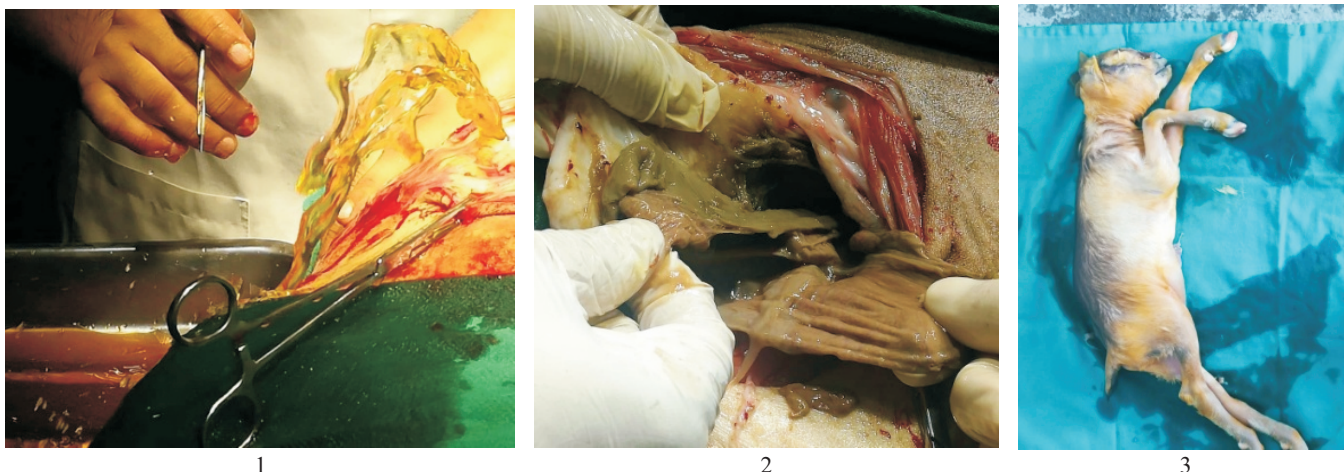
**Case history and clinical observation**

A full term pregnant goat in her second parity was presented at teaching veterinary clinical complex of the college with complaint of anorexia, respiratory distress, difficulty in walking and progressive abdominal distension. Abdomen was barrel shaped, tense and bilaterally distended. Animal was showing the signs of straining for 6-7 hours. The physiological parameters such as pulse rate, respiratory rate and

rectal temperature were within physiological limit. Based on history, symptoms and observations, this case was diagnosed as hydrallantois. On per-vaginal examination cervix was closed and was stretched outwardly due large volume of fluid in uterus.

**Treatment and Discussion**

The doe was restrained in right lateral recumbency and site of incision was prepared. Before caesarean section goat was given anti shock therapy with dexamethasone 16 mg by i.v route and 2 bottles of each normal saline and Ringer's lactate before, during and after surgery to prevent hypovolumic shock developed due to excessive loss of fluid from gravid uterus. Following the incision of skin, fascia, abdominal muscles, peritoneum was tented and then incised to expose the uterus, which was exteriorized and incised on its greater curvature and the dead fetus (Figure 3) was removed. Copious amount of fluid approximately 8-10 liters of fluid was removed (Figure1). The uterus was adhered to peritoneum and was separated and was lavaged externally with warm saline to remove blood clots and other debris before closing. The incision site was sutured as per standard



**Figures 1, 2 and 3 Hydroallantoic fluids; Adventitious Placentation along with thin walled uterus; Dead fetus**

procedures, uterus was sutured by using no. 1 catgut by Cushing followed Lambert suture pattern, muscle layer was closed with no. 1 catgut by ford interlocking suture pattern, and skin was closed by horizontal matters suture pattern by using no. 1 surgical silk. The suture line was dressed with povidone iodine and antibiotic injection Intacef® (Intas Pharmaceutical Pvt. Ltd) 500 mg i.m. bid, melonex® (Intas Pharmaceutical Pvt. Ltd) 2ml i.m. and fluid therapy with Ringer's lactate and normal saline 1 bottle each was done daily for 5 days. Skin sutures were removed after 10<sup>th</sup> day of surgery and animal had shown uneventful recovery.

Main reasons associated with hydroallantois are increased permeability as well as decreased active transport of sodium across the chorioallantoic membrane, hormonal imbalances, and fetal renal

disease (Morin *et al.*, 1994). Multiple fetuses in the uterus, fetal liver disease, uterine torsion and/or twisting of the umbilical cord, deficiency of vitamin-A causing decreased endometrial resistance to infections (compromises the number of caruncles), malnutrition and cardiac or renal diseases in animals are responsible for hydroallantois (Toniollo *et al.*, 2003). Most fetuses of animals with hydrallantois are underdeveloped with congenital defects or are apparently normal but not viable (Morin *et al.*, 1994). The uterus is usually thin walled with lost tonicity due to overstretching caused due to accumulation of large volume of allantoic fluid in the uterus (Roberts 2004) as similar condition was seen in our case where uterus has become thin walled (Figure 2).

**Conflicts of interest:** There is no conflict among the authors in this research article.

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