# Ectopic Pregnancy due to Hydroallantois in a Crossbred Cow-A Case Report

K. KRISHNAKUMAR, M. PALANISAMY, C. CHANDRAHASAN, V. PRABAHARAN AND K. RAVIKUMAR

Department of Animal Reproduction, Gynaecology and Obstetrics, Veterinary College and Research Institute, Namakkal-637 002.

## **ABSTRACT**

A case of Ectopic Pregnancy due to hydroallantois in a Crossbred Cow has been discussed.

Key words: Ectopic pregnancy, Hydroallantois, Crossbred Cow

Excessive accumulation of allantoic fluid in the allantoic sac occurs as a single pathological factor in 85 to 90 per cent of the dropsical conditions affecting fetus and its membranes in bovines (Roberts, 1986; Youngquist, 1997). But the spontaneous rupture of the bovine uterus followed by partial or total displacement of fetus in the peritoneal cavity is an uncommon complication of late pregnancy (Arthur *et al.* 1982; Haque, 1991). The present report describes a rare and unusual case of ectopic pregnancy due to hydro allantois associated with fetal anomalies in a cow.

# CASE HISTORY AND CLINICAL EXAMINATION

A nearing term, pluriparous Jersey cross bred cow was presented to the Obstetrical unit of Veterinary College and Research Institute Hospital, Namakkal with the history of depressed, reluctant to move, respiratory distress and laboured breathing with excessive bilateral ventral distension of abdomen. Vaginal examination revealed that the cervix was close and on per rectal examination, neither fetus nor polacentomes were palpable and the gravid uterus was dragged deep in the abdominal cavity with distended fluid. On the basis of history and Gynaeco-clinical examination, it was diagnosed as a case of ectopic pregnancy due to hydroallantois. Since the abdomen was distended ventrally and suspected for an ectopic pregnancy, the case was found unfit for medical termination of pregnancy. Hence it was decided to perform

caesariansection.

#### TREATMENT

Emergency laporatomy was performed on lower flank. While incising the peritoneum a bluish colored fluid filled allantoic bag was protruded through the incision site with two cotyledons. 150 litters of serous allantoic fluid were siphoned out with the help of suction pump. Then, it was observed that the anomalous fetus with the fetal membrane was fully slipped in to the peritoneal cavity through a transverse tear on the uterus. After removal of the fetus and fetal membrane, the peritoneal cavity was rinsed with 10 litres of normal saline. The tear and the laporatomy wound were repaired as per the standard technique. After caesarean section the cow recovered uneventfully. On ninth day, suture was removed and the animal was discharged.

#### DISCUSSION

Hydroallantois is successfully treated with a combination of dexamethazone and prostaglandin (Sloss and Dufty, 1980). In the present case, caesarean section was performed directly because of the delayed case may not be responded to medical termination of pregnancy.

The predisposing cause for the rupture of uterus was the excessive accumulation of fetal fluid in the allantoic sac which leads severe pressure on the uterine wall. The ruptured edges of the uterus were smooth indicating that rupture must have occurred long back. The escaped allantois in to the abdominal cavity might have

neous led to

gens.

ue to

rt

cts

E5

ystic

is of il. 4:

Press.

CBS New developed dropsical condition due to structural or functional changes in the allantoic chorion including the vessel (Roberts 1971). Usually the uterine rupture during parturition may result in considerable uterine haemorrhage and the hypovolumic shock (Arthur et al. 1982). In the present case, there was no much bleeding since the following uterine rupture might have contraction and atrophy of the uterine artery prevents the further bleeding. It was found that, the dropsy of the fetus and fetal membrane may be the one of the important cause for ectopic pregnancy in a cow.

### **ACKNOWLEDGEMENT**

The authors are thankful to the Dean, Veterinary College and Research Institute, Namakkal for the facilities provided.

#### REFERENCES

- Arthur, G. H. G., Noakes, D. E. and Pearson, H, 1982. Veterinary Reproduction and Obstetrics. Baullere Tindall, London., pp.261-275.
- Haque, M., 1991. Rupture of uterus with displacement of the foetus in to the peritoneal cavity in a cow-A case report. Indian Vet. J., 68: 271-272.
- Roberts, S. J., 1986. Veterinary obstetrics and Genital Diseases (Theriogenology), 3<sup>rd</sup> Edn. CBS Publication, New Delhi., pp.225-228.
- Sloss, V. and Dufty, J. H., 1980. Hand book of bovine obstetrics, William and Wilkins, Baltimore, London, pp.88-90 and 121.
- Younquist, R. S., 1992. Current therapy in large animal Theriogenology, Ed. W. B.Sanders Company, Philadephia. pp 400-403.

# INSTRUCTIONS FOR CHAPTER SECRETARY / TREASURER

The Chapter Secretary / Treasurer, receiving the membership fee of newly enrolled life members, may please send the name to Editor Immedialtely. The subscription fee of annual members may be remitted in full to us alongwith the names of the members, so that the journal is dispatched to them. The money may be send by draft or money transfer in favour of Editor IJAR payable at Chennai with a receipt of transfer to us

**Editor** 

Testice
by co
sperma
as a de
cells f
germin
(Robei
case (
testicu
abnorm

Veterii Ludhia the fei dog w and va reveal Furthei comme evaluar conditi Examin relative one. reveale normal

to the

Present / Gynaecc Reproduc Veterinal 141004

hypopl testicu