

ABORTION DUE TO ADVENTITIOUS PLACENTATION IN A JERSEY CROSSBRED CATTLE

S. RAJA^{1*}, A. VIJAYARAJAN², V. PRABAHARAN¹, P. JAYAGANTHAN¹, A. SIVAKUMAR¹
AND S. SATHESH KUMAR³

*Department of Veterinary Gynaecology and Obstetrics
Veterinary College and Research Institute, Tamil Nadu Veterinary and Animal Sciences University,
Orathanadu - 614 625*

Received: 29.07.2016

Accepted: 20.08.2016

ABSTRACT

A four month pregnant pleuriparous Jersey crossbred cattle was presented with vaginal discharge and lodging of fetus in cervix. By manual traction and lubrication aborted male fetus was delivered along with placenta that was adventitious in nature.

Keywords: Abortion, Adventitious Placenta, Cattle, Jersey

INTRODUCTION

Ruminant placenta has 70-120 placentomes consisting of maternal caruncle originating from uterus and fetal cotyledon contributed by chorion. However, the number of maternal caruncles may decrease due to diseases such as severe metritis, mycotic abortion, toxoplasmosis and faulty handling of retained placenta. Consequently, the primal placental structure imitates a diffuse placenta in the area between allanto-chorion and the endometrium, which is referred as adventitious placenta (Roberts, 1971). The extensive presence of adventitious region leads to insecure pregnancy (Drost, 2007). The present case reports abortion at four month of gestation due to adventitious placentation.

CASE HISTORY AND OBSERVATIONS

A five-year old Jersey crossbred cattle had the history of vaginal discharge and continuous straining for more than two hour. The vaginal examination revealed fully dilated cervix and a small size fetal head in the external cervical os. These findings suggested that the cattle is in the process of aborting the fetus.

TREATMENT AND DISCUSSION

Under low caudal epidural anaesthesia (4 ml, 2% lignocaine hydrochloride) and subsequent to birth passage lubrication, the fetus was delivered by gentle traction along with the major portion of placenta. Subsequently, the placenta was removed en masse. The dam was treated with antibiotics, anti-inflammatory and intrauterine bolus for 4 days to prevent subsequent chances of infections. The serological tests for brucellosis were negative.

The placental examination revealed the absence of abnormal exudates, blood and was washed thoroughly with running water to remove the dirt and attached loose material. Further examination revealed the presence of a few apparently enlarged cotyledons. The major placental portion was adventitious in nature with microvilli type of projections (Figure 1).

A sufficient number of placentomes are required to maintain the normal pregnancy. In the present case, the reason behind placental detachment could be adventitious placentation because this type of placenta could result in abortion at any stage of gestation depending upon the nutrient and oxygen demand imbalance between the dam and fetus (Roberts, 1971). Adventitious placenta may cause permanent

¹Assistant Professor, ²Professor and Head, Department of Veterinary Gynaecology and Obstetrics; ³Associate Professor, Teaching Veterinary clinical Complex; *argoraja@gmail.com



Figure 1: The presence of uniform microvilli projections in the adventitious placenta

alteration of caruncular structures of the endometrium and prognosis is guarded (Drost, 2007). The factor responsible for activation of adventitious placenta is still unclear.

ACKNOWLEDGEMENTS

The authors thank Dean, VCRI, Orathanadu and Director of Clinics, TANUVAS for the facilities provided.

REFERENCES

- Drost, M. (2007). Complications during gestation in the cow. *Theriogenology* **68**: 487-491
- Roberts, S.J. (1971). *Veterinary Obstetrics and Genital Diseases*. 2nd ed., CBS Publishers and Distributors, New Delhi, India. pp. 180-183.