

ACARDIUS ACEPHALUS MONSTER IN A GOAT

A.D. PATIL^{1*}, S.K. SAHATPURE², N. BANTE³, C. LAKDE⁴ AND B.M. GAHLOD⁵

*Department of Animal Reproduction, Gynaecology and Obstetrics
Maharashtra Animal and Fishery Sciences University, Nagpur - 440 006*

Received: 01.03.2017

Accepted: 16.03.2017

ABSTRACT

A goat with dystocia was presented and the fetus was removed after mild traction. The fetus was diagnosed as a monster namely acardius acephalus. The radiographic and postmortem examination of the monster was carried out and the findings were discussed.

Keywords: Acephalus, Acardius, Goat, Kid, Monster

INTRODUCTION

The anomalies or monsters are caused by environmental factors and agents called as teratogens which affect the genetic cellular processes responsible for normal development (Roberts, 1971). Acardius acephalus is a rare and severe congenital malformation characterized by the absence of functioning heart and the absence of head, respectively. The occurrence of this monster in a goat was discussed.

CASE REPORT AND OBSERVATIONS

A seven-year-old non-descript goat had the history of normal kidding of a female kid in morning hours followed by obstruction in the subsequent kidding process. The animal was dull, weak and exhausted with reduced body temperature. In addition, a lower frequency of abdominal straining was present along with the swollen vagina and vaginal discharge. Per-vaginal examination revealed the presence of large size fluid filled mass, however, the fetal head, neck and fore limbs were not palpable, thus, the fetal monstrosity was confirmed.

TREATMENT AND DISCUSSION

The fetal monster was removed manually following traction after correction. Subsequently, a

live male kid was also delivered. The animal was treated for next four days with analgesics, antibiotics, antihistaminics, vitamins and ecboics. In this case, the severe fetal abnormality, with accumulation of serous fluid in the abdomen, causing dystocia might be due to developmental defects.

Gross examination of fetal monster revealed the absence of forehead, neck, ear and forelimbs. Further, the subcutaneous and soft tissue edema, as well as serous fluid was present in muscles. In hindlimbs, subcutaneous fat were deposited and were abnormally developed. An empty scrotal sac was present (Figure 1).

Radiological examination revealed that the hindlimbs bones (femur, tibia, metatarsal and phalanges) were immature and were characterised by several radio-transparent lines at the proximal and distal bony region (Figure 1). An uneven soft tissue was embedding hindlimbs and pelvis. There was incomplete development of the vertebral column. In the cranio-caudal projection, the presence of two radio-opaque round-shaped areas at the level of inguinal region was confirmed as scrotum. The thoracic and superior abdominal organs were absent. The vertebral column was malformed with non-differentiable vertebral bodies of lumbar-sacral region (Figure 1).

Postmortem examination revealed the absence of heart and ribs, under developed intestines comprising

¹Assistant Professor, ³Professor and Head; ²Associate Professor, Teaching Veterinary Clinical Complex; ⁴Assistant Professor, Department of Veterinary Surgery and Radiology; *argoraja@gmail.com



Figure 1: Acardius acephalus monster in a goat (Left - Gross; Right - Radiograph)

of only ileum and an atretic, dilated and blind caecum and colon. Both the testicles were small, smooth and underdeveloped.

On the basis gross, radiological and postmortem examination, the monster was termed as acardius acephalus. Similarly others reported acardius acephalus foetus in Messinese Black goat (Macri et al., 2013).

REFERENCES

- Macri, F., Lanteri, G., Ferraro, S., Marino, G. and Mazzullo, G. (2013). Acardius acephalus in a goat kid - radiological and gross findings: a case report. *Vet. Med.*, **58**(11): 591-593.
- Roberts, S. J. (1971). *Veterinary Obstetrics and Genital Diseases (Theriogenology)*, 2nd ed., CBS Publishers and Distributors, New Delhi, pp. 284.