



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.03

TPI 2019; 8(6): 04-05

© 2019 TPI

www.thepharmajournal.com

Received: 04-04-2019

Accepted: 06-05-2019

**Dr. M Thirunavukkarasu**

Assistant Professor,  
Department of Veterinary and  
Animal Sciences, TNAU,  
Coimbatore, Tamil Nadu, India

**Dr. S Pavithra**

Ph.D. Scholar, Department of  
Veterinary Pharmacology and  
Toxicology, IVRI, Bareilly,  
Uttar Pradesh, India

**Dr. S Vigneshwaran**

Ph.D. Scholar, Department of  
Veterinary Surgery, VC&RI,  
Namakkal, Tamil Nadu, India

**Dr. S Shanmuganathan**

Ph.D. Scholar, Department of  
Veterinary Virology, IVRI,  
Bangalore, Karnataka, India

## An acephalus monster in a kid: A case report

**Dr. M Thirunavukkarasu, Dr. S Pavithra and Dr. S Vigneshwaran and  
Dr. S Shanmuganathan**

### Abstract

A Female Tellicherry goat intensively reared and kidded two live kids along with one dead kid which was found to be without head. On the basis of gross and post-mortem findings the malformation was identified as acephalus and the findings are discussed.

**Keywords:** Acephalus, goat, monster, kid

### Introduction

Anomalies or monsters are caused by environmental factors and other agents called as teratogens which affect the genetic cellular processes responsible for normal development (Roberts, 1971)<sup>[6]</sup>. Foetal monsters are developed due to teratogenic factors occurs at the early stage of foetal development which are changes in genetic, physical, chemical, viral (Jackson, 2004 and Chandrasekaran *et al.*, 2015)<sup>[3, 2]</sup> and environmental factors (Roberts, 1971)<sup>[6]</sup>. Monstrosity leads to economic loss because of poor viability in postnatal period. Acephalus is a rare and severe congenital malformation characterized by the absence of functioning head and absence of ears respectively. Hence, the present paper describes an acephalic monster kid in a Tellicherry goat under farm condition.

### Case history and observations:-

A Four years old full term Tellicherry doe was presented with the history of kidding of 3 kids. First 2 female kids were delivered normally in the morning hours followed by delay in the subsequent kidding process. The animal was exhausted and finally delivered a kid without head. Out of 3 kids, 1 kid was found as monster.

### Gross examination:

Gross examination of foetal monster revealed that it was male kid without head, ears alone were found in the anterior part of the neck and other external body parts were normal which was similar to the findings of Jena *et al.*, (2016)<sup>[9]</sup>. Monster kid was weighed around 800 gram.

### Post-Mortem examination:

Post-mortem examination revealed no abnormalities in viscera organs like heart, kidney, liver and Lung etc. Since earlier reports mentioned that acephalus condition occurred along with acardius in which absence of heart noticed. The present case confirmed as an acephalus monster not an acardius acephalus monster based on the examination.

### Discussion:-

Gross and post mortem examination was revealed that the dead foetus was acephalus. Acephalus monster was one of the most severe and rarest congenital anomaly. Monster kid incidence occurs due to defects in the early embryonic stages.

Acephalic disorder mostly occur due to the defect in the rostral (head) end of the neural tube which fails to close usually between the 23<sup>rd</sup> and 26<sup>th</sup> day of conception reported in human beings (Rahilly and Muller, 1992)<sup>[5]</sup>.

Teratogen is a causative factor for the monster development. Teratogens are genetic, non-genetic and environmental origin. According to Arthur *et al.*, (2001)<sup>[1]</sup> monstrosities mostly occurred by means of genetically, chemically, gamma radiation, trace elements, variation of temperature, infectious agent like virus leads to development of foetal abnormalities and induce incompatibility with life.

### Correspondence

**Dr. M Thirunavukkarasu**

Assistant Professor,  
Department of Veterinary and  
Animal Sciences, TNAU,  
Coimbatore, Tamil Nadu, India

In this case farm was selectively bred and maintained 20+2 as a closed population for past 15 years hence the monstrosity might resulted due to error in the cell division at embryonic stage due to inbreeding depression from small closed population. However gene expression studies are required to confirm the hypothesis.

### Summary

A Four year old Tellicherry goat kidded two live kids and one dead kid without head based on the examination it was diagnosed as acephalic monster. Acephalic monstrosity of kid in this case might be due to inbreeding depression arose from the small closed population.

### Reference

1. Arthur GH, Noakes DE, Pearson H, Parkinson TJ. Veterinary Reproduction and Obstetrics, 8<sup>th</sup> edition. W. B. Saunders Company Ltd. London. 2001, 269-315.
2. Chandrasekaran D, Selvakumar S, Sureshkumar R, Pothiappan P, Anangakumar D, Balasubramanian S. Per vaginal delivery of anasaruous foetus in a tellicherry doe. Indian journal of Animal Reproduction., 2015; 36(1):60-61.
3. Jackson PGG. Handbook of Veterinary Obsterics, Saunders Company limited, 2004, 15.
4. Jena D, Patra BK, Das S. Mohanty DN. Acephalic Monster: A case report, Indian Vet J., 2016; 93(02):85-86.
5. Rahilly O, Muller Human embryology and teratology. New York: Wiley. Liss, Inc. 1992, 253.
6. Roberts SJ, Veterinary obstetrics and genital diseases, 2<sup>nd</sup> edition, CBS publishers and distributors, New Delhi, 1971, 50-52.
7. Sharma A, Kumar P, Singh M, Vasishta NK, Jaswal R. Rare fetal monster in Holstein cross bred cow, Open Vet. J. 2013; 3(1):8-10.