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**Pushkar Sharma**

Department of Veterinary  
Gynaecology and Obstetrics,  
College of Veterinary Science &  
Animal Husbandry, Narendra  
Dev University of Agriculture &  
Technology Kumarganj,  
Faizabad, Uttar Pradesh, India

**Shaurya Kumar**

Department of Veterinary  
Surgery and Radiology, College  
of Veterinary Science & Animal  
Husbandry, Narendra Dev  
University of Agriculture &  
Technology Kumarganj,  
Faizabad, Uttar Pradesh, India

**Vipin Kumar Yadav**

Department of Veterinary  
Surgery and Radiology, College  
of Veterinary Science & Animal  
Husbandry, Narendra Dev  
University of Agriculture &  
Technology Kumarganj,  
Faizabad, Uttar Pradesh, India

**Shri Prakash Verma**

Department of Veterinary  
Surgery and Radiology, College  
of Veterinary Science & Animal  
Husbandry, Narendra Dev  
University of Agriculture &  
Technology Kumarganj,  
Faizabad, Uttar Pradesh, India

**Correspondence****Pushkar Sharma**

Department of Veterinary  
Gynaecology and Obstetrics,  
College of Veterinary Science &  
Animal Husbandry, Narendra  
Dev University of Agriculture &  
Technology Kumarganj,  
Faizabad, Uttar Pradesh, India

## Still birth with omphalocele (Congenital umbilical hernia) in fetus of goat

**Pushkar Sharma, Shaurya Kumar, Vipin Kumar Yadav and Shri Prakash Verma**

### Abstract

A case of dystocia in goat was presented to Teaching Veterinary Clinical Complex, College of Veterinary Science & Animal Husbandry, Faizabad. It was a non-described breed goat with protrusion of a fore limb through vulvar region and on labor for 12 hours but it failed to expel out the fetus. Per-vaginum inspection was conducted, dystocia diagnosed due to deviation of neck and unilateral flexion of a fore limb, fetal reflexes were absent. The fetal forelimb which was protruding, repelled inside the birth canal, faulty disposition was corrected. At the time of expulsion, it was seen that the fetus visceral organs were protruded out through abdominal wall. It was a case of congenital umbilical hernia (omphalocele). It is Common hereditary defects in pigs; due to recessive gene, progeny with defect (%) in large white and Landrace is 0.13% and 0.07% respectively. It is very rare in goats.

**Keywords:** unilateral flexion, dystocia, omphalocele, still birth

### 1. Introduction

The effects of dystocia on the profitability of goat enterprises are not extensive compared than large dairy animals. The losses will be largely restricted to the increased incidence of kid mortality. Faulty fetal disposition can cause dystocia<sup>[14]</sup>, it was reported that 94.5% of presentations were anterior longitudinal and only 3.6% were posterior. The commonest faulty disposition was unilateral flexion of one forelimb; if the lamb is small, this may not result in dystocia<sup>[2]</sup>. The facility with which faulty fetal disposition can be corrected will depend in large measure on the operator's ability to pass a hand through the pelvis into the uterus<sup>[1, 9, 10]</sup>. Congenital umbilical hernia in Large White pig is 0.13% and landrace is 0.07%<sup>[15]</sup>, it is uncommon in cats<sup>[12]</sup> and in calves it was 0.1 Percent<sup>[8]</sup>. Omphalocele is the defect of the cephalic fold results in a wide range of cardiac, thoracic, and abdominal anomalies, often cause problems in the development of the abdominal cavity and the lungs. It is a rare type of congenital abdominal wall defect that permit intestines and sometimes a portion of liver<sup>[3, 4]</sup>. The umbilical hernia is a failure of the umbilical ring to close but the skin is unaffected. Thus, it has been hypothesized that omphalocele may be an intermediate stage between umbilical hernia and schistosomus reflexus<sup>[13]</sup>. In this paper, the authors put on record about the details of still birth due to omphalocele in a kid.

### 2. History and observation

A case of dystocia in goat was presented to Teaching Veterinary Clinical Complex of College of Veterinary Science & Animal Husbandry, Faizabad. The fore limb of fetus was protruded through a vulvar region of the dam. It was a 3-year-old non-descriptive breed goat. According to owner goat was completed their full gestation time. The animal was in labor for 12 hours but it failed to expel out the fetus. After per vaginum inspection, dystocia was diagnosed due to deviation of neck and unilateral flexion of a fore limb, fetal reflexes were absent. All the clinical parameters were subnormal.

### 3. Treatment

The goat was treated as emerged situation. The fetal forelimb which was protruding through the vulva was repelled inside the uterus. The operator's hand was passing through the pelvis into the uterus. A gentle approach was applied to manipulative procedures and reduces the likelihood of trauma, Replacement of lost fetal fluids with infusion of 400 ml liquid paraffin for correction of a faulty disposition are made much easier by elevating the hindquarters of the

dam. The cervix was fully dilated, so the hand could easily be passed through vagina. The flexed fore limb was brought to a normal posture, and then both the fore limb was pulled into the birth canal then the head was brought to the normal position by holding the mandible and take upon the legs. The dead fetus was manually delivered by applying moderate traction on the head and both forelimbs. At the time of their presentation it was seen that, the fetus visceral organs (intestines, liver and spleen) were protruding through abdominal wall. It was congenital omphalocele. Therapeutic management for dam, Inj. Gentamicin @ 5 mg/kg b.wt. I/m and Inj. Meloxicam 0.5 mg/kg b. wt. I/m daily for 5 days to manage the infection and inflammation, respectively for the prevention of uterine infection. The case showed uneventful recovery.

#### 4. Result and Discussion

Stillbirth is typically defined as fetal death; it results in fetus parturition without signs of life [16]. In this case the kid died due to early detachment of umbilical cord and dystocia due to malposition of fetus. When the umbilical cord is constricted and the fetus experiences periods of hypoxia, and may respond by unusually high periods of kicking or struggling, to free the umbilical cord. These were sporadic if constriction was due to a change in the fetuses or Dam's position, and may become worse or more frequent as the fetus grows. Probably prenatal mortality in pregnancies with omphalocele is due to respiratory distress, congenital heart defects, and neural tube defects.

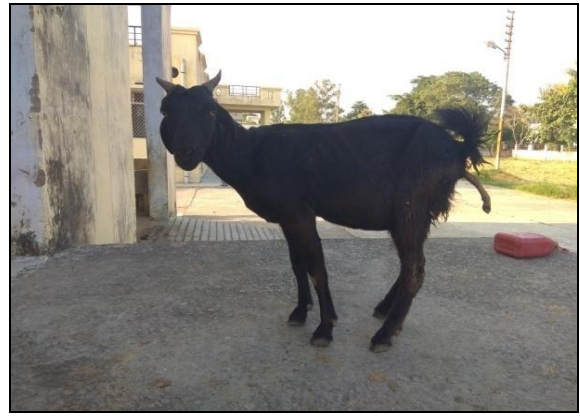
Umbilical hernia, omphalocele is an emergency surgical condition of neonatal animals that requires almost care right from the moment it is noticed. The animal showed anorexia, abdominal distension and lethargy. It was not presented for further treatment and reportedly died in 48 hours later. If the fetus is live then surgical management of omphalocele is possible, omphalocele has a good prognosis if the initial vigil is taken by the owner or attendant at delivery, quick separation from the dam and early presentation for surgery [5]. Omphalocele is a developmental problem that is not necessarily a heritable abnormality; however, other congenital defects and chromosomal abnormalities may be seen concurrently [3]. Such a hernia in children often contains the liver and intestines [7]. In humans, it is frequently associated with other congenital abnormalities; especially one's affecting the heart [4]. In calves reported that this study was additionally suffering from atresia ani and anury. The sinus tachycardia detected in one calf that had been handled could have resulted from pain and distress [11].

#### 5. Conclusion

In this case; Omphalocele was responsible for prenatal mortality of kid. If the fetus parturate live with umbilical hernia; then protruding organs are repossess in abdominal cavity so, it is surgically curable. Chances of uterine infection also increase due to left some portion of protruding visceral organs in uterus.

#### 6. Acknowledgement

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**Fig 1:** Protrusion of hind limb of kid through vaginal region



**Fig 2:** Dead fetus due to omphalocele after relieves the dystocia



**Fig 3:** Protrusion of intestine, liver and spleen outside through umbilical region



**Fig 4:** Dam after successful treatment

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