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## Surgical management of abdominal intestinal evisceration (Omphalocele) through persistent umbilical opening in a new born calf

**KP Singh, RV Singh, Praneeta Singh and SK Singh**

### Abstract

The present case was a rare case of congenital abdominal intestinal evisceration (Omphalocele) through the defects in the umbilicus. A newly born female cow calf was brought to the hospital with the history of prolapse of abdominal viscera through the umbilical opening since birth. Clinical examination revealed that prolapse abdominal viscera contained intestinal loop and surrounded by parietal peritoneum. Surgical correction was done. Calf showed recovery and began natural suckling after 3 days of treatment and suture were removed after 11 days.

**Keywords:** Abdominal evisceration, Calf, Congenital, Intestinal loop, surgical correction

### Introduction

Congenital defects, abnormalities of structure or function present at birth, may be caused by genetic or environmental factors or a combination of both. In many cases, the causes are unknown. Developmental defects may be lethal, semi lethal or compatible with life causing aesthetic defects or having no effect on the animal (Johnson *et al.*, 1985) [4]. Omphalocele is a congenital defect in the body wall in which eviscerated abdominal organs are covered by amnion rather than skin (Barid, 1993) [1]. The umbilical opening is present to provide passage of the urachus, the umbilical vein carrying placental (oxygenated) blood and the two large umbilical arteries carrying blood to placenta. Due to improper closing of umbilical opening at time of birth or hypoplasia of the abdominal muscles and skin may results to this condition. This paper presents a rare case of congenital abdominal intestinal evisceration (Omphalocele) through the defect in the umbilicus and its successful surgical correction.

### Case History and observation

A newly born female cow calf was brought to the Government Veterinary Hospital, Deoranian, and Bareilly with the history of prolapse of abdominal intestinal viscera through the umbilical opening since birth. On clinical examination, the abdominal viscera contained intestinal loop and surrounded by partial peritoneum (Figure 1). The peritoneal fluid was also present. The heart rate and respiration rate was very slow. The rectal temperature was 98.2°F.

### Treatment and Discussion

Protruded visceral mass was washed with sterile normal saline solution. After aseptic preparation of the site, Xylocaine hydrochloride (2%) was infiltrated around the umbilical opening. For proper reposition of prolapse abdominal viscera into abdominal cavity, the opening was enlarged craniocaudally by giving incision. The peritoneum, abdominal muscle and skin were sutured with standard procedures (Figure 2).

Post operatively the animal was administered Ceftriaxone + Tazobactam @ 15 mg / Kg body weight, IM, SID for 5 days), Injection Meloxicam, 4 ml, IM, SID for 3 days, Injection B<sub>1</sub>, B<sub>6</sub> & B<sub>12</sub>, 4 ml, IM, SID for 5 days, Injection dexamethasone, 2ml, IM along with 350 ml DNS (5%), intravenously. Antiseptic dressing was done with betadine solution. The suture was removed on 11<sup>th</sup> day. The calf showed recovery and began natural suckling after 3 day of treatment. Various workers had also reported congenital abdominal prolapse through the

Umbilical opening in a new born calf (Sharma, 2003; Jana and Gosh, 2005; Jana and Jana, 2009; Singh *et al.*, 2009) [2, 3, 5, 6].



**Fig 1:** Evisceration of intestinal loop and surrounded by partial peritoneum in a calf



**Fig 2:** Surgical correction of evisceration of intestinal loop surrounded by partial peritoneum in a calf

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