Surgical management of congenital omphalocele in kid

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Abstract
A newborn female kid was admitted to the Veterinary dispensary with ruptured amnion covering and intestinal mass protruding out through umbilical opening. It was diagnosed as congenital omphalocele. Under proper anesthesia, the soiled protruded intestine was washed with normal saline and pushed through the opening followed by suturing. The proper post-operative care and aseptic measures were taken to prevent any kind of contamination. On 10th day the suture was removed and the kid appeared apparently healthy. It has been concluded that the surgical management done for treating congenital omphalocele in kid has good prognosis.

Keywords: Congenital Omphalocele, Umbilical opening, kid

Introduction
Omphalocele is a rare type of congenital abdominal wall defect that allows intestines (and sometimes a portion of liver) covered by a paper thin membrane (amnion) to protrude from the body. The condition occurs when one of the four body folds fails to migrate normally in embryologic development (Baird, 2008) [2]. Congenital ventral umbilical defects are very common in kids, occurred more often in the females than the males.

Case history
A young female kid was admitted within 3 hours of birth at Veterinary dispensary, T.palur, Ariyalur (Dt), Tamilnadu, India with an intestinal mass protruding from the umbilical area. The kid was full term and born unassisted. On clinical examination, the kid was found mildly dehydrated, amniotic covering had ruptured and the intestines were hanging from the umbilicus (Fig1). The diameter of the umbilical opening was 1 cm. The exposed intestinal mass was grossly contaminated with soil. It was resorted to repair the umbilical defect by surgical intervention.

![Fig 1: A kid with eviscerated intestine hanging from umbilicus](image)

Treatment & Discussion
The kid was anesthesized with diazepam @ 0.20 mg/kg intravenously followed by fluid therapy @ 10ml/kg using 20% dextrose saline. The kid stabilized at dorsal recumbency. The protruding mass was rinsed carefully with lukewarm normal saline and kept covered with a moist sterile drape. The area around umbilicus was carefully prepared for aseptic surgery by using tincture iodine. The body area around the umbilical opening was infiltrated with 3 to 4 ml of 2% of lignocaine hydrochloride.
An incision was made on both cranial and caudal end of umbilical opening. The protruded intestinal mass replaced inside the abdominal cavity and abdominal incision closed in a proper manner (simple continuous suture) by using chromic catgut No.1. Skin lesion sutured with nylon (monofilament) in a horizontal suture type. Antibiotics (cefotaxim @10mg/kg body weight) treatment continued upto 5 days and anti-inflammatory (meloxicam @ 0.5 mg/kg) was given for 3 days. Dressing was done and on 10th day the suture was removed.

Omphalocele is a developmental problem that is not necessarily a heritable abnormality, however, other congenital defects and chromosomal abnormalities may be seen concurrent with an omphalocele (Baird, 1993) [1]. Unlike umbilical hernia, omphalocele is an emergency surgical condition of neonatal animals that requires utmost care right from the moment it is noticed and early treatment has to be instituted (Baird, 2008) [2].

Patients with evisceration require early aggressive supportive therapy. Therefore, the kid was given intravenous fluid, antibiotic and analgesics pre-operatively (Daniel, 2002). Diazepam and local infiltration of the anaesthetic being comparatively safer in patients with dehydration, which was satisfactorily used in this case. Sedation and local anaesthesia are considered adequate and appropriate in the surgical management of umbilical masses in most cases (Baird, 2008) [2].

There was no post-operative complication like incisional hernia and kid had recovered completely. It has been concluded that the surgical management of kid with omphalocele has good prognosis with the provided surgical management.

References