Management and outcomes of congenital duodenal obstruction:

An 8-year experience

Manel Haj Mansour¹, Saloua Ammar¹, Chiraz Regayeg², Amel Ben Hamad², Mohamed Zouari¹, Hayet Zitouni¹, Afef Ben Thabet², Abdellatif Gargouri, mahdi Ben Dhaou, Riadh Mhiri¹

1. Department of Pediatric surgery. Hedi Chaker Hospital. Sfax, Tunisia

2. Department of Neonatology. Hedi Chaker Hospital. Sfax, Tunisia

Background:

Neonatal duodenal obstruction is one of the commonest causes of neonatal intestinal obstruction for almost 50% cases. Our objective was to study the characteristics of duodenal obstruction and describe the management and outcomes.

Patients and Methods:

This is a retrospective study over a period of 8 years from 2008 to 2016. Charts of patients operated in the pediatric surgery department of Sfax were analyzed. Were excluded from cases of malrotation associated with abdominal wall defect.

Results:

Thirty six patients were admitted (26 males and 10 females). Polyhydramnios was detected in 11 (30%) pregnancies. Average birth weight was 2 Kg. Average gestational age was 39 weeks with 7 (21%) preterm neonates. Presenting features were vomiting in 30 (84%) (bilious in 76% and non-bilious in 8%), epigastric fullness in 16 (44%) and dehydration in 6 (16%). Most common cause of obstruction was duodenal atresia in 15 (41%), followed by malrotation of gut in 16 (44.4%) then annular pancreas in 5 cases. X-ray abdomen was the most commonly used investigation to confirm the diagnosis. Abdominal ultrasound was performed in 13 patients for doubt diagnosis. All cases were managed surgically by open laparotomy. Twelve patients died due to sepsis and associated congenital anomalies. Nine Patients had complicated evolution. Mean follow up-period was 4years.

Conclusion:

Congenital duodenal obstruction commonly presents with features of upper GIT obstruction. Early antenatal diagnosis and surgical interventions are mandatory in achieving good outcome. The main predictors of mortality were associated congenital anomalies, prematurity and sepsis

FIG1: double bubble sign

FIG2:annularpancreas