

## A prospective study of antenatal and clinical suspected duodenal obstruction with their etiological diversities.

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### Abstract:

**Introduction:** Congenital duodenum obstruction is usually diagnosed in the neonatal period, but partial obstruction may present at a later age. A prospective study of 84 congenital duodenal obstruction cases was conducted at our institute from July 2012 to October 2016. **Materials and method:** The cases were selected by antenatal diagnosis and postnatal clinical manifestation. We included antenatal diagnosis, age at presentation, gender distribution, clinical manifestation, investigation, diagnosis, associated anomalies, intra-operative finding, surgical procedure, complications and outcomes as study parameters. **Result:** Congenital duodenal obstruction was diagnosed in 60.71 % (n=51) patients in neonatal life, 21.4 % (n=18) patients below 1 year and 17.89% (n=15) patients after 1 year. Eighteen cases were diagnosed on antenatal ultrasonography. Forty patients (48.5%) were diagnosed on plain X-ray. Ultrasonography and Contrast study were required in 44 cases (51.5%). We found complete obstruction in 40 (48.5%) cases (duodenal atresia- 34, annular pancreas-6) and partial obstruction in 44 (51.5 %) cases (malrotation-32, duodenal web-12). Kimura's Duodeno-duodenostomy was performed in 40 patients (34-duodenal atresia, 6-annular pancreas). Duodenotomy with web excision and duodenoplasty was done for 12 patients. Ladd's procedure was performed for 32 patients. Twelve patients (14.28%) died postoperatively. **Conclusion:** Congenital duodenal obstruction is a common surgical entity in neonates with diversity of embryonic developmental etiologies. Duodenal atresia is most common cause. Antenatal ultrasonography is important in early diagnosis. The treatment is always surgical.

**Keywords:** -Congenital duodenal obstruction; Duodenal atresia; Kimura's duodenoduodenostomy.