
Neonatal intestinal obstruction

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137_SUMMARY Neonatal intestinal obstruction is one of the serious and challenging problems that facing the paediatric surgeon. Approximately 40% of these infants are prematures .The neonatal period extend to the end of the 4th. week of extrauterine life, during this period anatomical congenital anomalies are responsible for the great majority of cases of bowel obstruction About (30%) in the colon, (28.5%) in the duodenum, (18.5%) in ileum, (12%) in midgut, (8%) in jejunum and other sites (3%). Neonatal intestinal obstruction may be mechanical, neurogenic, infectious or functional. The mechanical obstruction may be complete or incomplete, the complete type may be due to atresia, volvulus, strangulated hernia or intussusception, while the incomplete type may be due to stenosis, malrotation without volvulus, annular pancreas, duplication or extrinsic compression by congenital bands. Neonatal septicaemia, anoxia, cerebral insult, drug administration by the mother late in pregnancy and during labour, congenital hypothyroidism are contributing factors in cases of functional intestinal obstruction in the neonates. Early diagnosis of the surgically treatable lesions is of great importance to minimize the stress upon the metabolic and respiratory reserves of such poor babies (especially the prematures), optimal conditions and facilities are required for the survival of these infants. Early diagnosis depend on a proper maternal history, clinical evaluation and accurate investigations .

38-Maternal history is of importance as (50%) of cases of maternal polyhydramnios are associated with severe congenital anomalies and about (2) of these in the gastrointestinal tract. History of anomalies in her siblings is suggestive, also the type of labour obstructed or precipitated labour are associated with cerebral insult which may lead to functional intestinal obstruction Persistent vomiting (mainly bilious), inability to pass meconium or stools and abdominal distension are the cardinal manifestations of neonatal intestinal obstruction Symptoms occur shortly after birth or may be delayed up to several days. Jaundice occur in (48%) of cases of duodenal and high jejunal atresias Plain X-ray abdomen in an erect position is diagnostic in Some cases and barium enema should be the first enema the baby received in cases of intestinal obstruction as it gives an idea about the colonic causes and also differentiate between the colon and small bowel. Other investigations include the routine haematology and serum electrolytes, which of great help in resuscitation of these infants before operation, If the early signs of the intestinal obstruction are overlooked complications will be developed as a sequence of prolonged obstruction . These complications are severe dehydration which will lead to hypovolaemia, circulatory insufficiency, metabolic acidosis, respiratory

distress with patchy pneumonia due to aspiration of vomitus, and hypothermia. Septicaemia is a serious complication which ends the baby's life. A neonate with surgical conditions requires special care based on continuous accurate observation by experienced nursing staff and medical attendants to recognize any vital disturbance which should be corrected before operation and to anticipate and prevent the possible complications. The neonate should be managed into a high intensive care unit in an Incubator with regulation of the baby's temperature, oxygen therapy. Problems in diagnosis of various types of neonatal intestinal obstruction have been discussed in this essay with proper management of each type. Also the possible complications and their management were mentioned with special reference to the short gut syndrome.