SUMMARY

Intestinal obstruction in the newborn may be due to a wide variety of causes. The majority have complete mechanical obstructions present at birth. There are, however,,an important proportion of incomplete and intermittent obstructions which may present later in the neonatal period. Furthermore functional obstruction is also seen, due to neurogenic causes, often the result of cerebral birth trauma, infective causes, and sometimes from sheer immaturity.

Neonatal intestinal obstruction can be viewed as intrinsic, e.g. atresia, stenosis, meconium ileus, Hirschsprung's disease and imperforate anus, or extrinsic, e.g., malrotation (with or without volvulus), constricting bands, annular pancreas, intra-abdominal hernias and alimentary duplications. An attempt should be made to locate the lesion preoperatively in order to guide the surgical approach. When the obstruction is complete, there should be little difficulty in clinical recognition, but when incomplete, there may be considerable difficulty.

Vomiting (bilious or non bilious), abdominal distension, and failure to pass normal meconium stools are, in varying degrees, symptoms common to the various forms of

neonatal intestinal obstruction. High obstruction such as duodenal and jejunal atresia produces early vomiting in the first 24 hours of life. The later the onset of vomiting, the lower the obstruction is likely to be. Failure of passage of meconium is characteristic of lower ileal and colonic obstruction. Distended loops of bowel and air-fluid levels on upright abdominal films are seen commonly and may be the only diagnostic studies necessary before surgery. Usually, 30 to 40 ml of air injected into the stomach is a satisfactory contrast material for high obstructions, and barium given from above is rarely necessary. Contrast enema may show a micro or unused colon in low obstruction.

The importance of very early diagnosis lies in the fact that the distension above the obstruction soon becomes so great that the vascular supply of the intestinal wall is impaired resulting in gangrene and perforation. Also the loss of gastric, biliary, pancreatic, and intestinal secretions in the vomitus rapidly leads to hypovolaemia, dehydration and acid-base imbalance. Further, the aspiration of vomitus causes airway obstruction, followed by a chemical and bacterial pneumonia.

The greatest problem of managing these cases is that of dealing with the infant who is premature as well as having a congenital anomaly. Resuscitation commences with

the passage of nasogastric tube and the administration of intravenous fluids and antibiotics. Relief of the obstruction and restoration of continuity of the gastro-entestinal tract pose a major challenge for the surgeon.

Maintenance of body temperature is of special importance in all newborns because they are small and thin and this is especially true in premature babies. It is important to remember that if the need to give blood quickly arises then it must be warmed before reaching the body. It is wise to give 1 mg of vitamin K before operating on the newborn.