SUMMARY

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Acute intestinal obstruction is one of the most common surgical emergencies. Acute intestinal obstruction may be classified into : a-Mechanical obstruction b-Neurogenic obstruction c-Vascular occlusion obstruction .

a) Mechanical obstruction :is the blockage of the passage of intestinal contents distally. Mechanical obstruction is also subdivided to I) Simple mechanical intestinal obstruction II) Strangulated intestinal obstruction in which beside the blockage of the intestine there is occlusion of the blood supply of the affected part of the bowel.

b) Neurogenic intestinal obstruction is due to :

Failure of peristaletic movement of the intestine.

c) Vascular occlusion obstruction : due to thrombosis or embolism in the superior mesenteric artery , vein or the smallar branches of both.

Aetiology of the mechanical obstruction::

1- Causes in the lumen of the intestine which are: intussusception, large gall stone(gall-stone ileus) ,faeces , meconium (meconium ileus), polypoid tumours of the bowel, imperforate anus,and bezoars.

2- Causes in the wall of the intestine:are atresia, stenosis and duplication(congenital causes) ,stricture of the

intestine resulting from neoplasm, or from inflammation as in Crohn's disease, iatrogenic(following anastomosis), or after irradiation therapy.

3- Causes extrinsic to the bowel :are adhesions and bands from previous surgery or inflammation, external hernias, internal hernias, volvulus, extrinsic masses such as neoplasms and abscesses . Volvulus, intussusception, external and internal hernias, adhesions and bands are the common causes of the strangulation obstruction.

Aetiology of the neurogenic obstruction (paralytic ileus): early postoperative (after three days) in abdominal surgery, peritonitis, fracture of the spine, retroperitoneal haemorrhage or trauma, are the most common causes of paralytic ileus.

Diagnosis of the intestinal obstruction :to diagnose intestinal obstruction the following examinations and investigations should be done . I)Clinical picture: there are 4 main complaints a-Cramping pain b-Vomiting c-Absolute constipation d-Distention.

-Inspection: may reveal distended coils of intestine or visible peristalsis, abdominal scar of previous surgery.

Physical signs may be normal in early of the disease,later on the pulse becomes feeble and rapid, falling in temperature, blood pressure with typical signs of dehydration. Palpation and auscultation may be of help in the diagnosis.

-Rectal examination ,and double enema test should be done.

II) Investigations:

a- Laboratory tests, as: full blood count, packed red-cell volume, serum electrolytes, and blood urea level, should be estimated as soon as possible after the patient's admission.

b- X-ray investigation is the most important method of the diagnosis although there is 5% of acute intestinal obstruction have normal x-ray findings. Gas distention and multiple fluid levels are the charactristic findings in intestinal obstruction. Films may be taken in erect and supine positions.

-Barium meal may be done to locate the site of the obstruction.

-Barium enema may be done in cases of large gut obstruction to locat the obstruction and to try reduction in cases with intussusception.

c-Ultrasonography examinations , may sometimes help in diagnosis.

d-Peritoneal lavage may help in the diagnosis of strangulation.

e-Endoscopy as sigmoidoscop and proctoscop must be done.

Management of acute intestinal obstruction :

Conservative treatment : should be tried as a first line of treatment and - this may releave the disease as in paralytic ileus or this is considered as preoperative preparation and needs a careful observation, proper timing for surgical intervention. Conservative treatment consists of, 1)intravenous infusion to restore fluid and electrolytes to its normal values 2)Naso-gastric suction : by long or short tubes(intestinal tubes). 3) Antibiotics as gentamycin, flagyl, broad spectrum antibiotics.

Operative treatment: It is the main and most effective treatment for all cases of obstruction except the neurogenic type&divided to:

1) There are 4 types of obstruction in which the operation should be done as an emergency as soon as possible after admission these are 1) Strangulated obstruction 2) Closed loop obstruction 3) Colonic obstruction 4) Early simple mechanical obstruction.

2) Cases which were under conservative treatment not showing any improvement or deteriorating , should be operated upon as soon as possible. Surgical procedures for relief of the obstruction are 1) Procedures not requiring opening of the bowel: as lysis of adhesions, manipulation-reduction of intussusception, reduction of incarcerated hernia.

2) Enterotomy for removal of obturation: as gall-stone, bezoars.

3) Resection of the obstructing lesion or strangulated bowel with primary anastomosis.

4) Short-circuiting anastomosis around the obstruction.

5) Cutaneous stoma proximal to the obstruction: as caecostomy, transverse colostomy.

-During the operative treatment the intestinal viability need very careful judgement and resection should be done when the viability of the intestine is not obvious.