STOMACH AND DUODENUM

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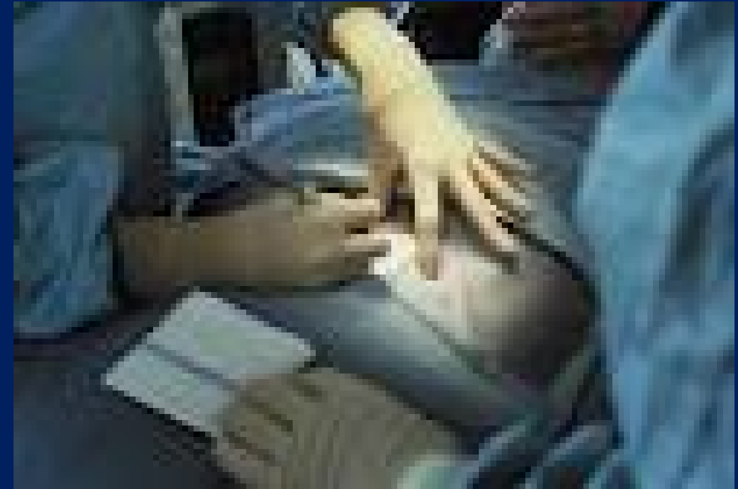
- Surgery rarely used in uncomplicated PU.
- Used in complicated ulcer:
- Bleeding.
- Perforation.
- Obstruction.
- Failure of medical treatment.
- Suspected Malignancy in GU.
- Intractability. 5y treatment ? Risk/benefit?

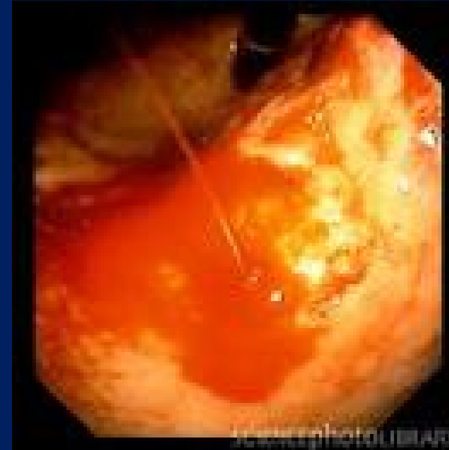
Sequelae of peptic ulcer surgery

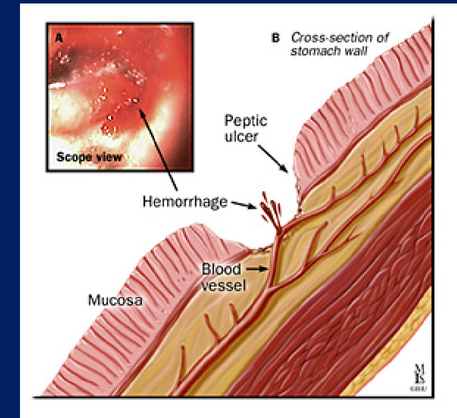


- Recurrent ulceration.
- Gastro- colic fistula.
- Small stomach syndrome.
- Bile vomiting.
- Early & late dumping.
- Post vagotomy diarrhoea.
- Malignant transformation.
- Nutritional consequences.
- Gall stone.

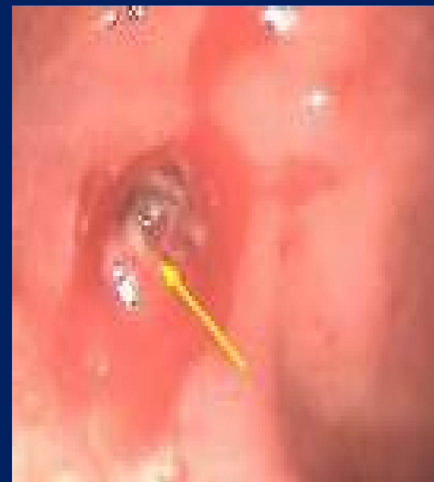
Surgical treatment of upper GIT Bleeding

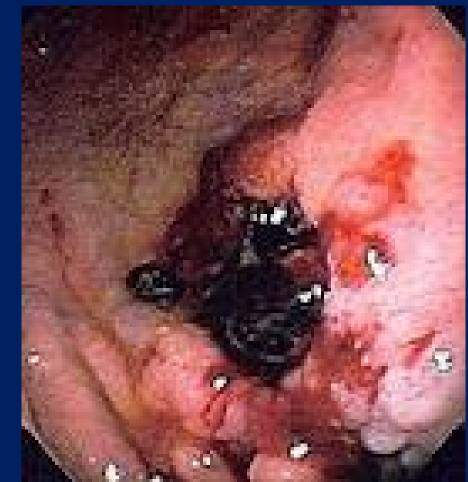
- Indication:
- Continuous bleeding. That demands massive blood transfusion.
- Failed endoscopic Rx,
- Rebleeding after endoscopic Rx.



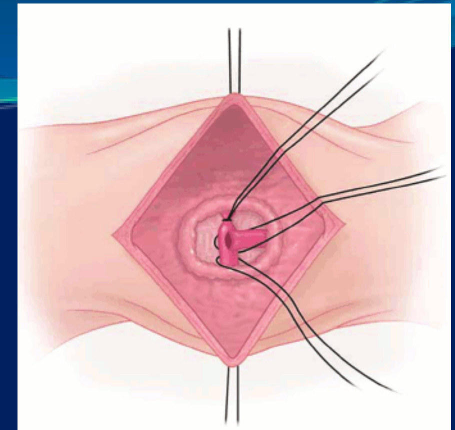


- Endoscopic stigmata of high rebleeding rate:
- Spurting vessel.
- Visible vessel at ulcer base.
- Clot overlying ulcer base.





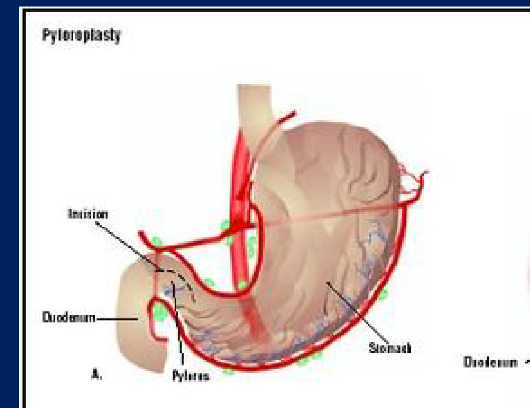
Aim of treatment:



- Stop the bleeding :
- Commonest site of ulcer:

Posterior Or superior first part of duodenum.

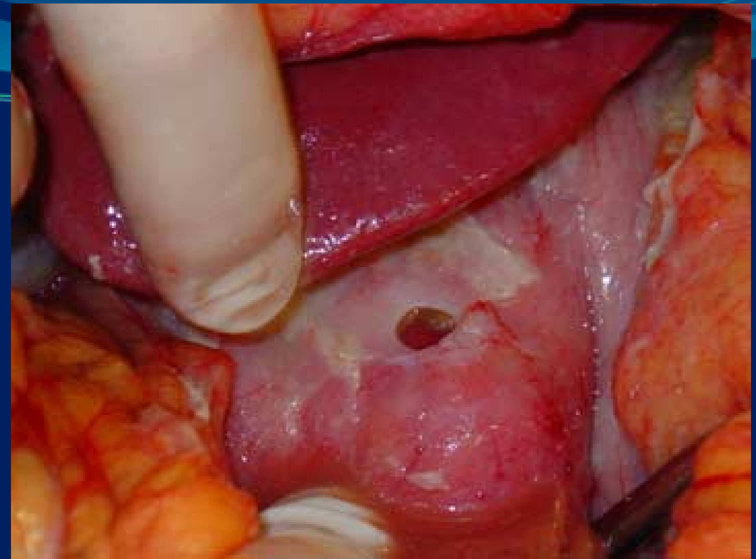
- Longitudinal duodeno-pylorotomy.
- Under- running of bleeding vessel.
- Closure by pyloroplasty.
- Vagotomy . TV, HSV.

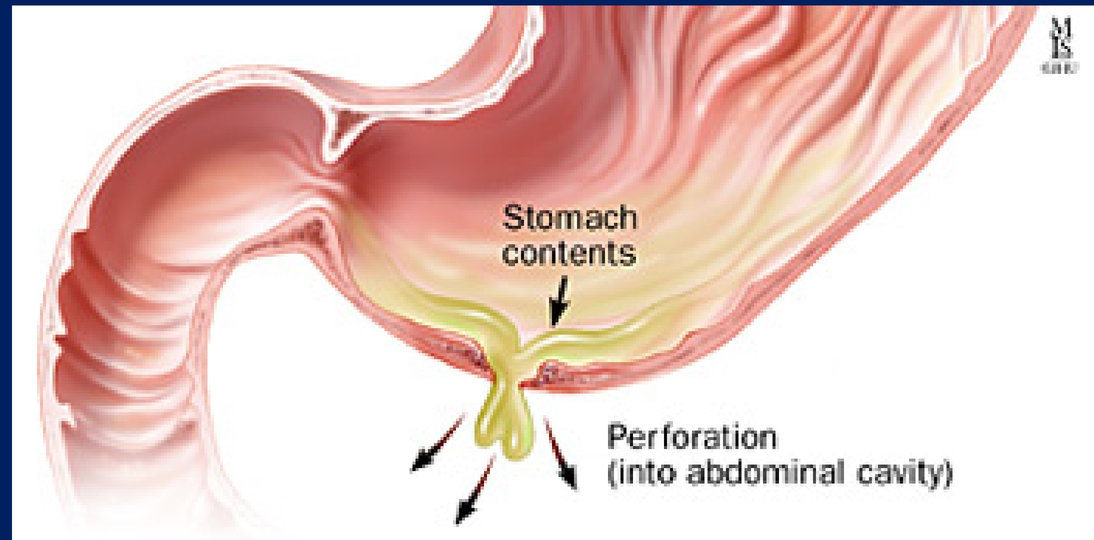


- Bleeding gastric Ulcer, splenic a. Bx.
- Stress ulcer, gastric erosion, Mallory-Weiss tear.
- Same principles of Rx.
- Dieulafoy's disease: gastric arterial venous malformation. Rxed by local excision.

Perforated peptic ulcer:

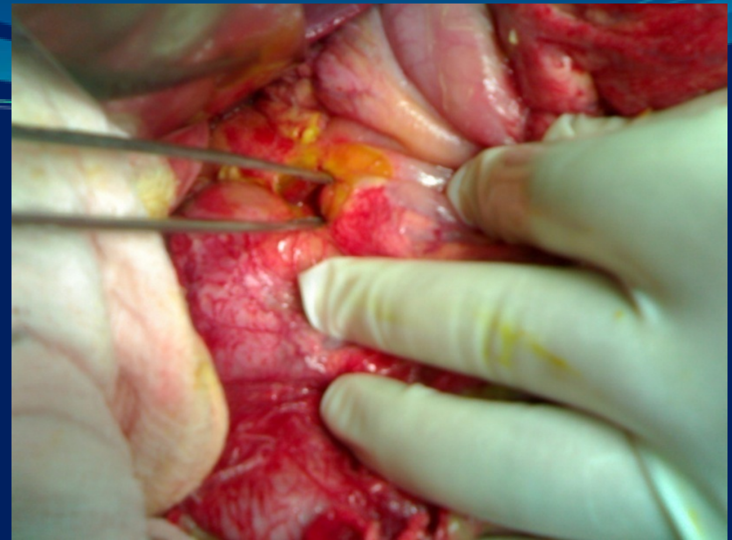
- Incidence little changed .
- Previously middle age.
- 2:1 M: F.
- Now more elderly.
- More F.

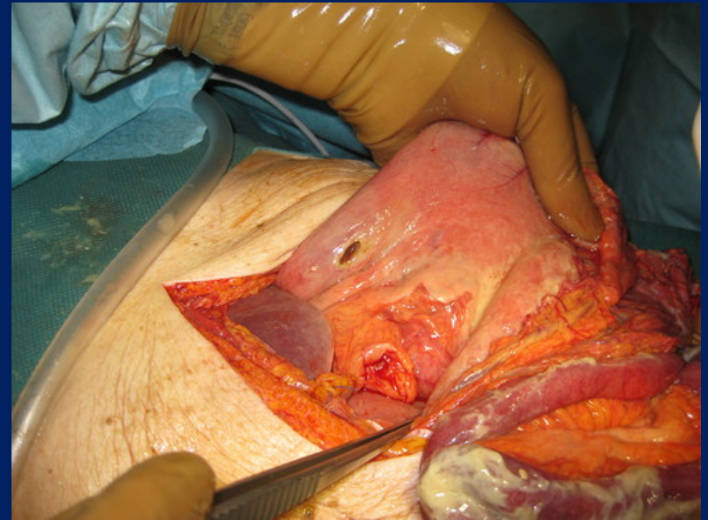




Pathogenesis

- Site of perforation: ant. aspect of duodenum. (commonest)
- Ant. gastric or post. Gastric (into lesser sac).
- Irritant effect of gastric content and acid cause chemical peritonitis
- After few hrs, bacterial peritonitis.
- Septic peritonitis and septic shock.

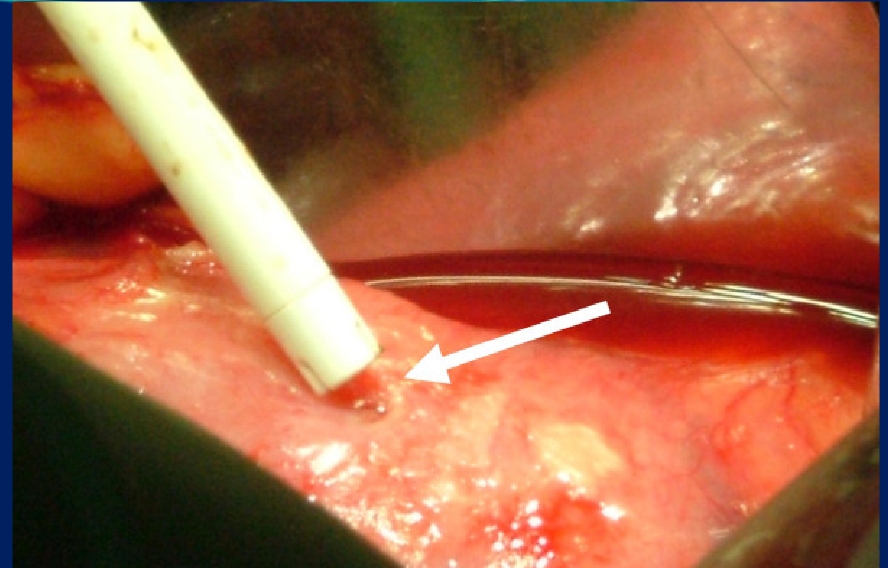


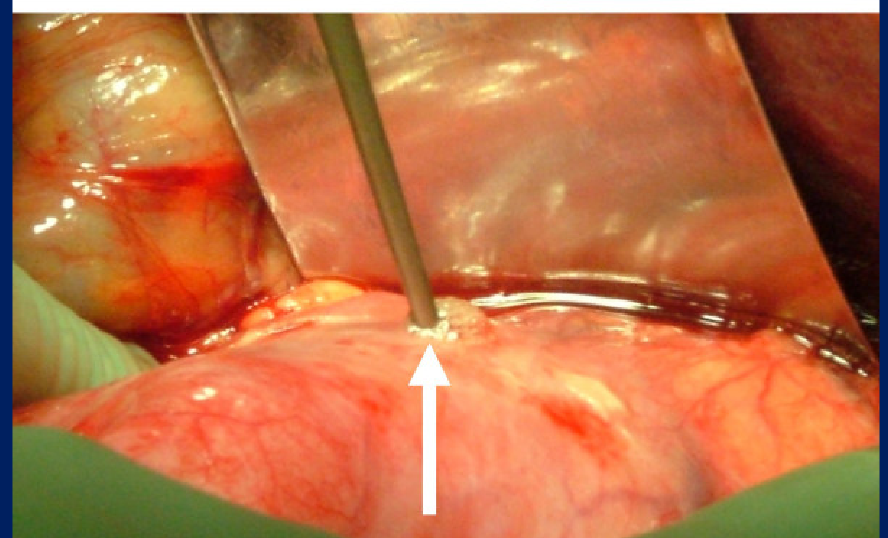


Pathogenesis

- If only leak(small perforation):
- the fluid track down from epigastric through Rt paracolic gutter to Rt iliac fossa. (Mimic acute appendicitis).

- Some perforation will seal by inflammatory response and adhesion, self- limiting.



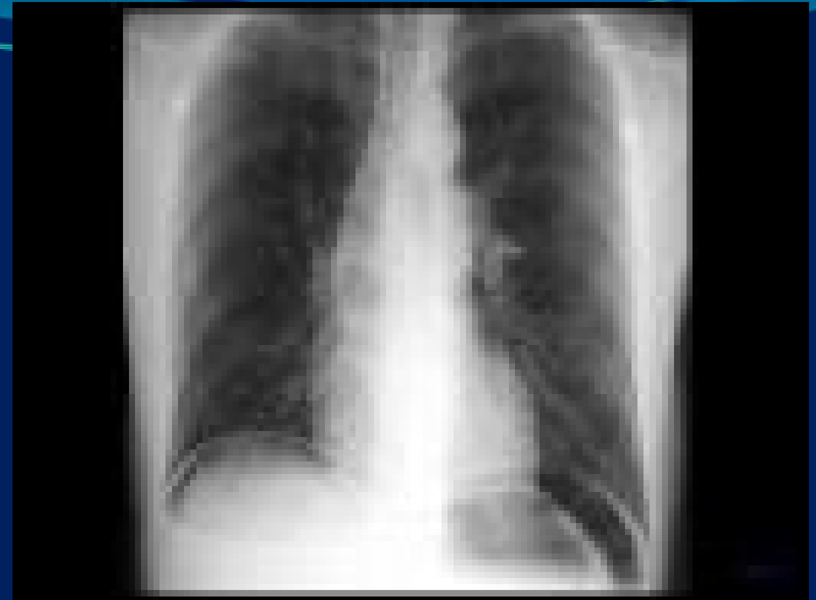


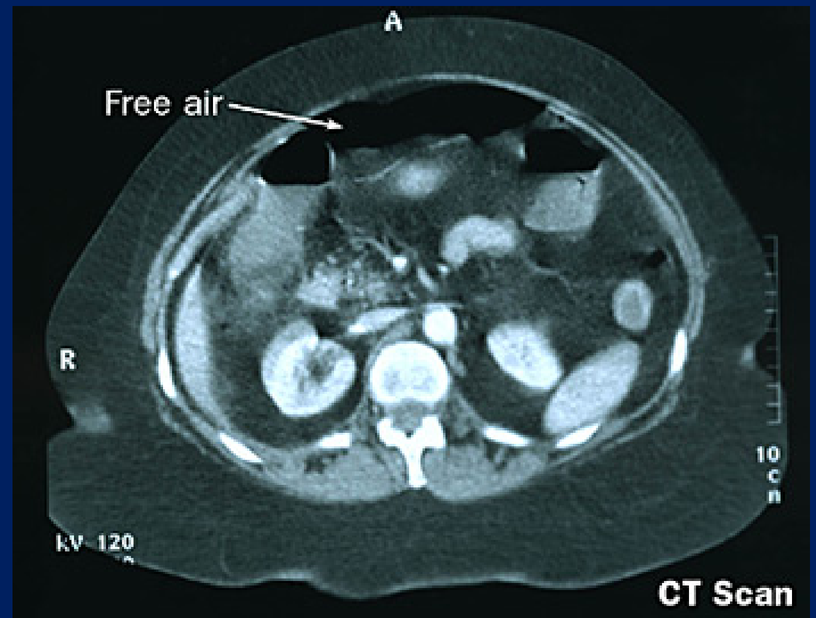
Clinical features

- Sudden onset severe upper abdo pain then became generalized.
- Hx of PU, NSAID
- Tachycardia or shock state.
- Fever (late)
- Restricted abdominal movement with respiration.
- Pointing sign (early).
- Signs of peritoneal irritation:
- Tenderness, rebound, gaurdining or rigidity (board-like).
- -ve BS.
- Septic shock.

Investigations

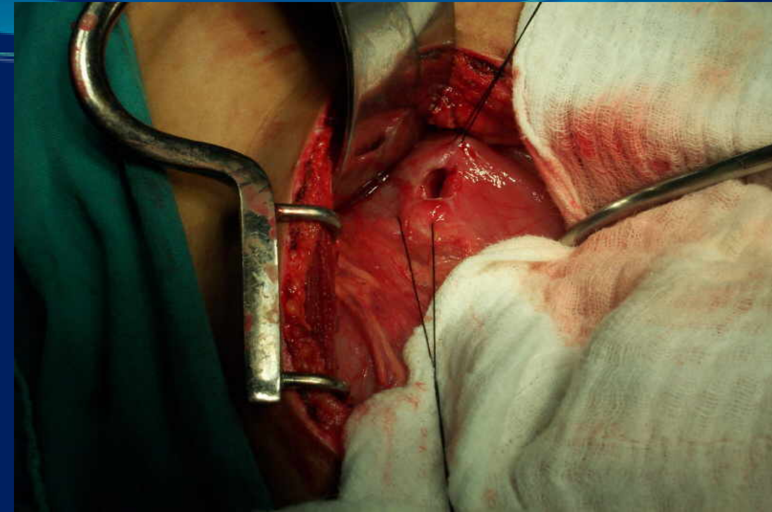
- Plain chest X-ray: air under diaphragm.(50%)
- CT scan more accurate.
- it differentiate perforation from other possible pathology as acute pancreatitis(both have elevated serum amylase).





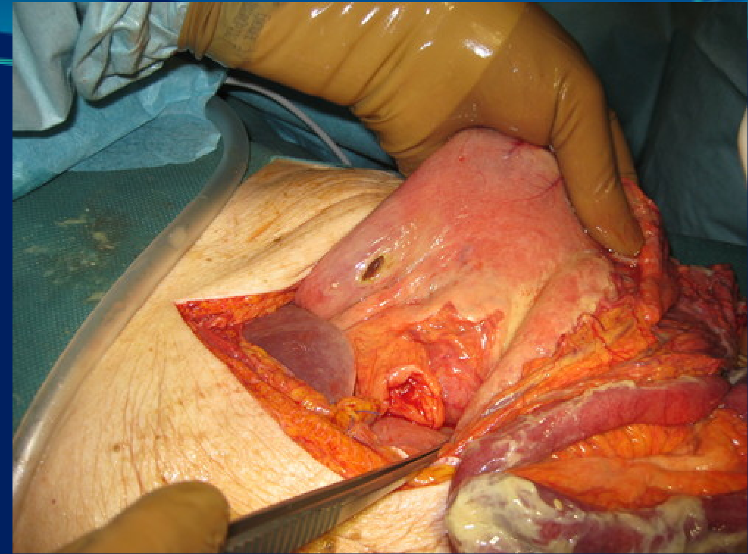
Treatment

- Admission, Resuscitation
- IV fluid and analgesia.
- IV Antibiotics.
- Opened surgery. OR
- Laparoscopic surgery.
- Duodenal perforation:
- Closure over omental patch(Graham patch).
- Through peritoneal toilet.
- NG tube.
- Anti- ulcer Rx. Eradication of H. pylori.

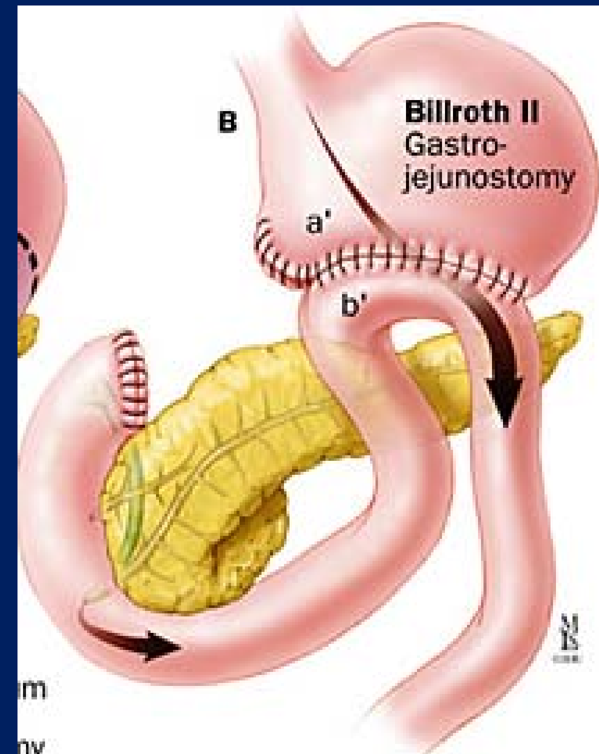


Treatment cont.

- Gastric perforation:
- Excision of the ulcer and suturing. OR
- Closure and biopsy..



- Rarely if closure is impossible Gastrectomy may be needed. (Bilroth II).
- Conservative Rx. Controversial, in Selected patients.

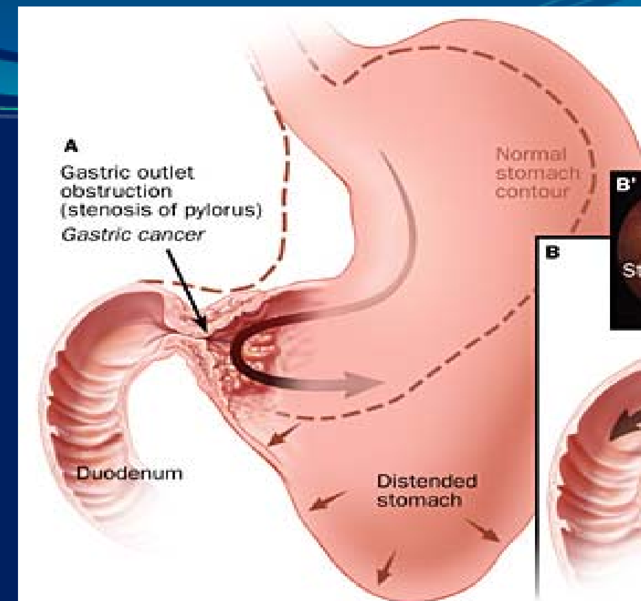


Gastric outlet obstruction (GOO)

- Two common causes:1

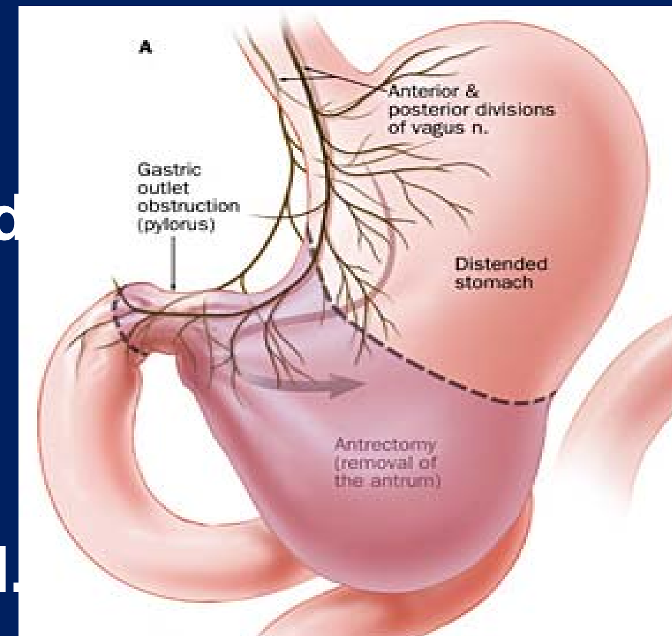
1- Gastric cancer.

2- Stenosis secondary to PU.



- other causes:
- \- adult pyloric stenosis.
- Rare, unclear relation with childhood condition. Rxed by pyloroplasty.
- \- pyloric mucosal diaphragm.
- Rare , unknown etiology.

Rxed by excision of the mucosal fold.



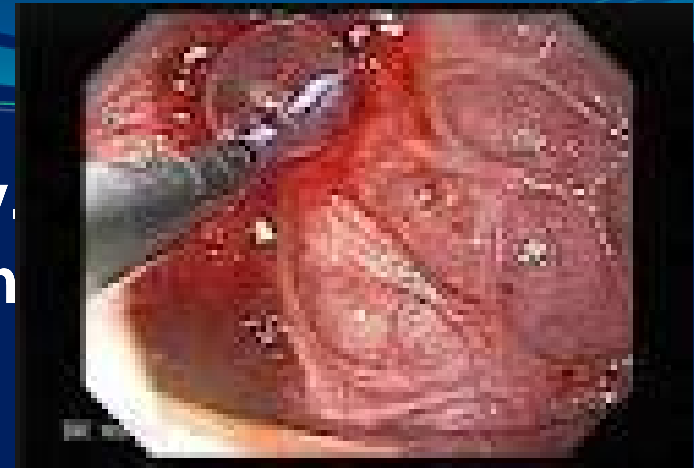
Clinical features

- Benign GOO:
- Hx of chr. PU symptoms.
- Vomiting , no bile(if complete),
Undigested food of previous meal.
- Wt loss, un well.
- Dehydration.
- Distended abdomen.
- Succussion splash.

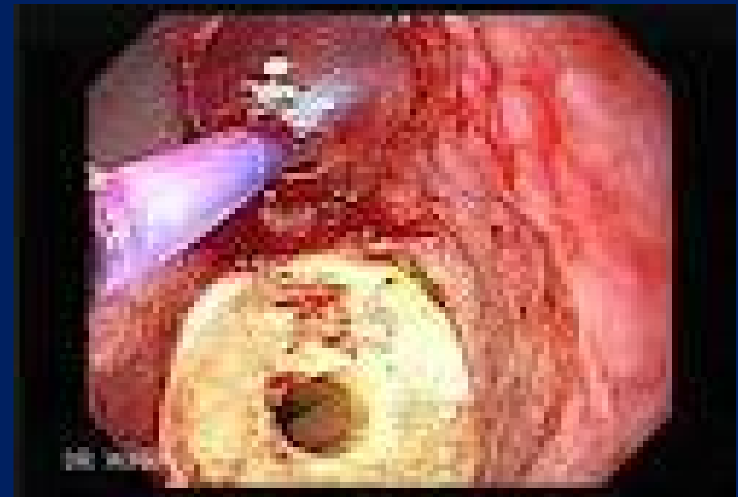
Metabolic effect:
- Hypochloremic alkalosis.
- Hyponatremia.
- Urine acid paradox.
- Hypokalemia.
- Alkalosis lead to low ionized calcium,
- Tetany.

Management:

- Correction of metabolic abnormality.
- Treating the mechanical obstruction



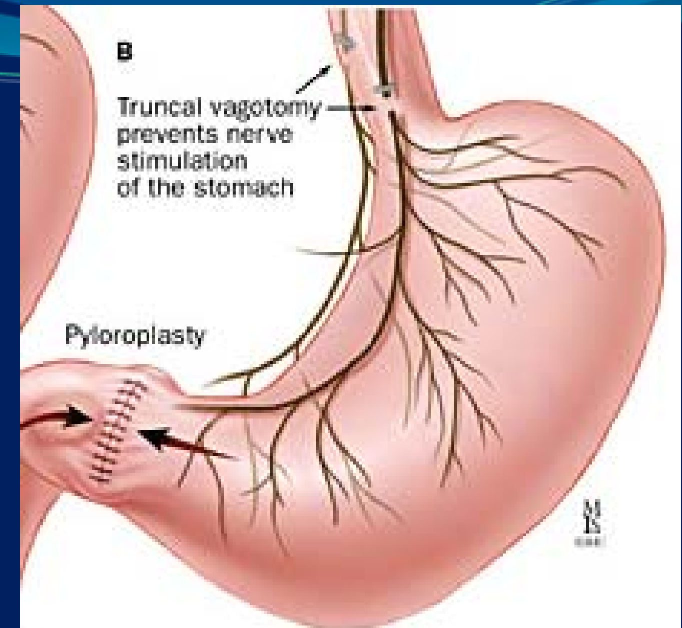
- Rehydration 0.9% Nacl with k^+ suplement.
- Correction of associated anemia.
- Decompression of stomach.
- Investigation by OGD, contrast radiology.
- Biopsy to prove or exclusion of malignancy.
- Conservative Rx in early case as the edema subside.
- Endoscopic balloon dilatation / risk.

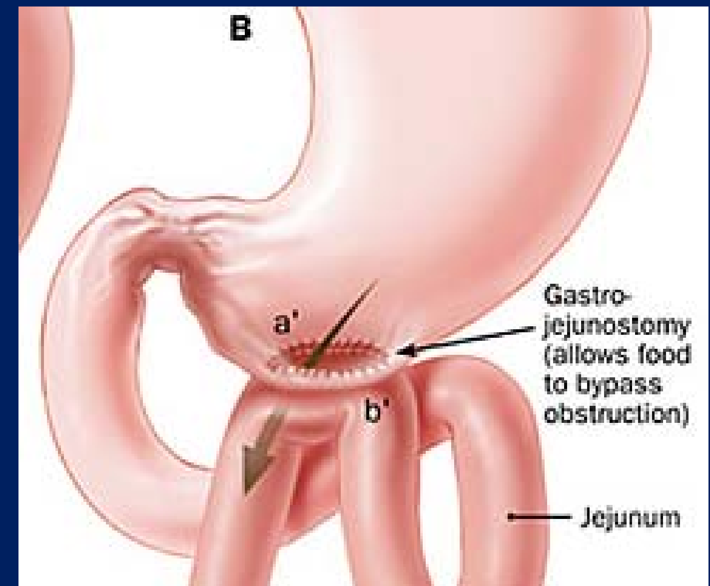


Management: cont.

- Surgery: drainage
- PP.
- GJ.

- Resection for malignancy.

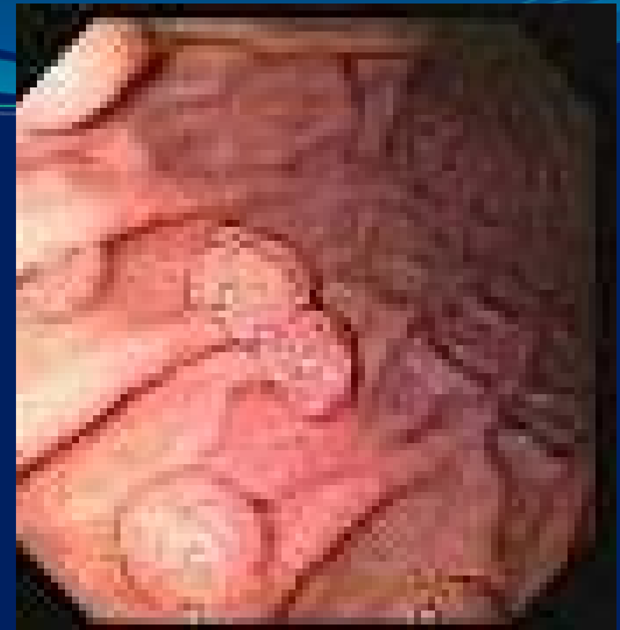


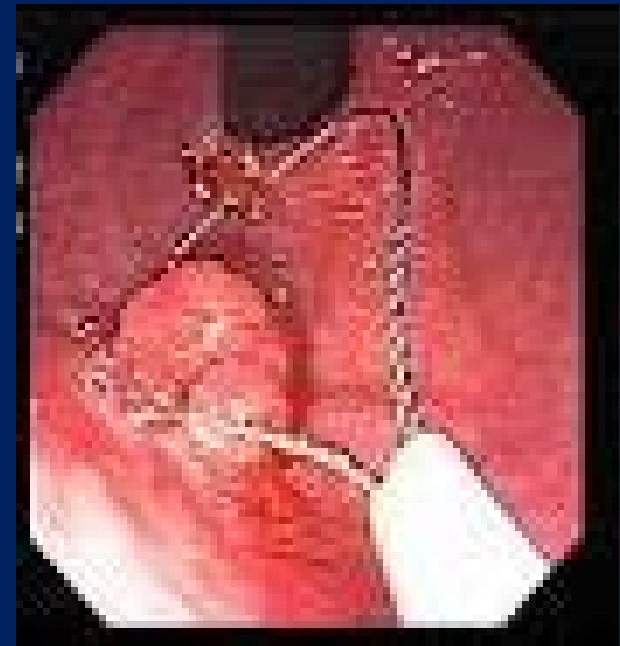


Gastric polyps

- Metaplastic polyp: H.pylori realted.
- Inflammatory polyp.
- Fundic gland polyp: PPI related.
- Adenomatous polyp: 10%, has a malignant potential.
- Gastric carcinoid polyp: ECL cells.

- Biopsy is essential.
- Snaring polypectomy.
- Surgical excision.





Gastric Cancer