

AN INTERESTING CASE OF DUODENAL WEB

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CASE PRESENTATION

- A 1year 6months old male patient came with the complaints of nonbilious vomiting after having food since birth
- Neonatal age- vomiting every 8-10 days
- Infancy- frequency of vomiting every 3-4 day
- Projectile vomiting with food particles as content
- Failure to thrive present

ON EXAMINATION

PER ABDOMEN:

- Upper abdomen - Distended
- Non tender
- No visible peristalsis
- No palpable mass

DIFFERENTIAL DIAGNOSIS

Duodenal obstruction

- Duodenal stenosis
- Duodenal atresia
- Duodenal web
- Annular pancreas

Malrotation of gut

Gastric outlet obstruction

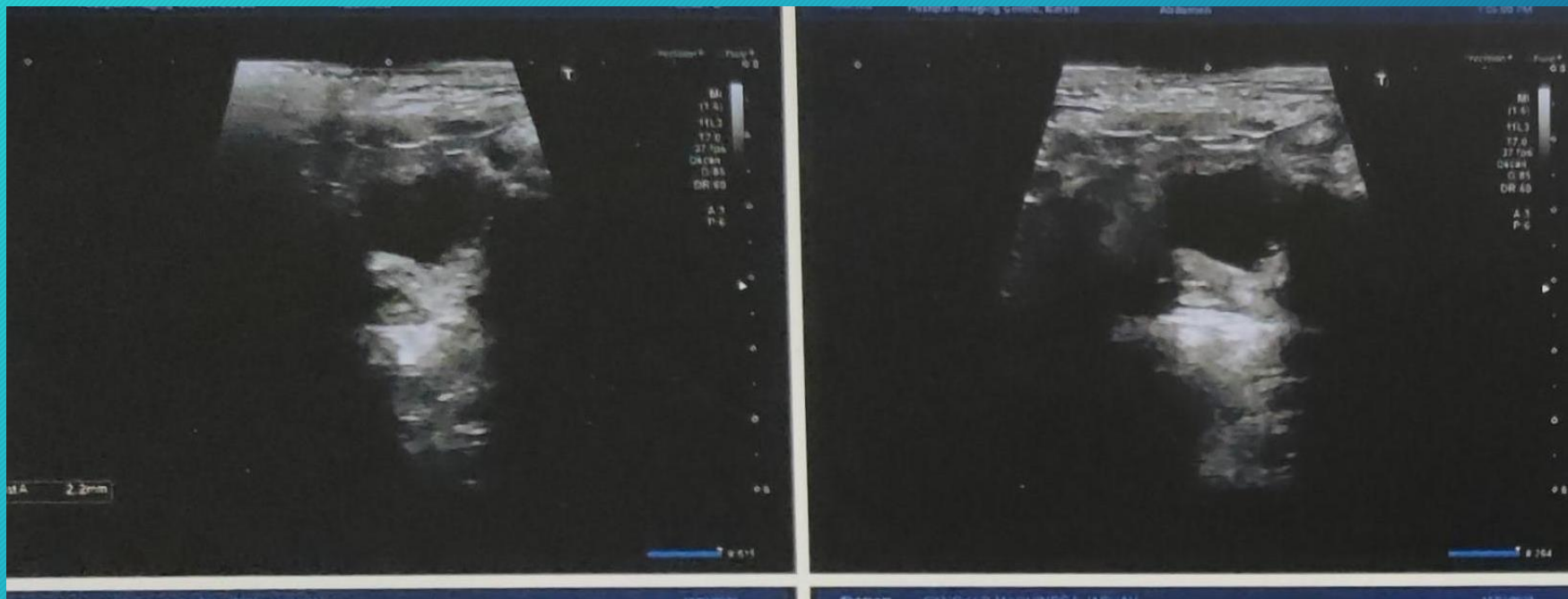
GERD

Intussusception

USG(A+P)

- Overdistended stomach shows active peristalsis suggestive of gastric outlet obstruction
- Advised CECT to rule out malrotation/volvulus

USG - A+P



BARIUM MEAL

- Stomach dilated
- Duodenum grossly dilated
- Delayed passage of barium in jejunum
- Jejunal loops not dilated

Findings suggestive of **Duodenal obstruction**

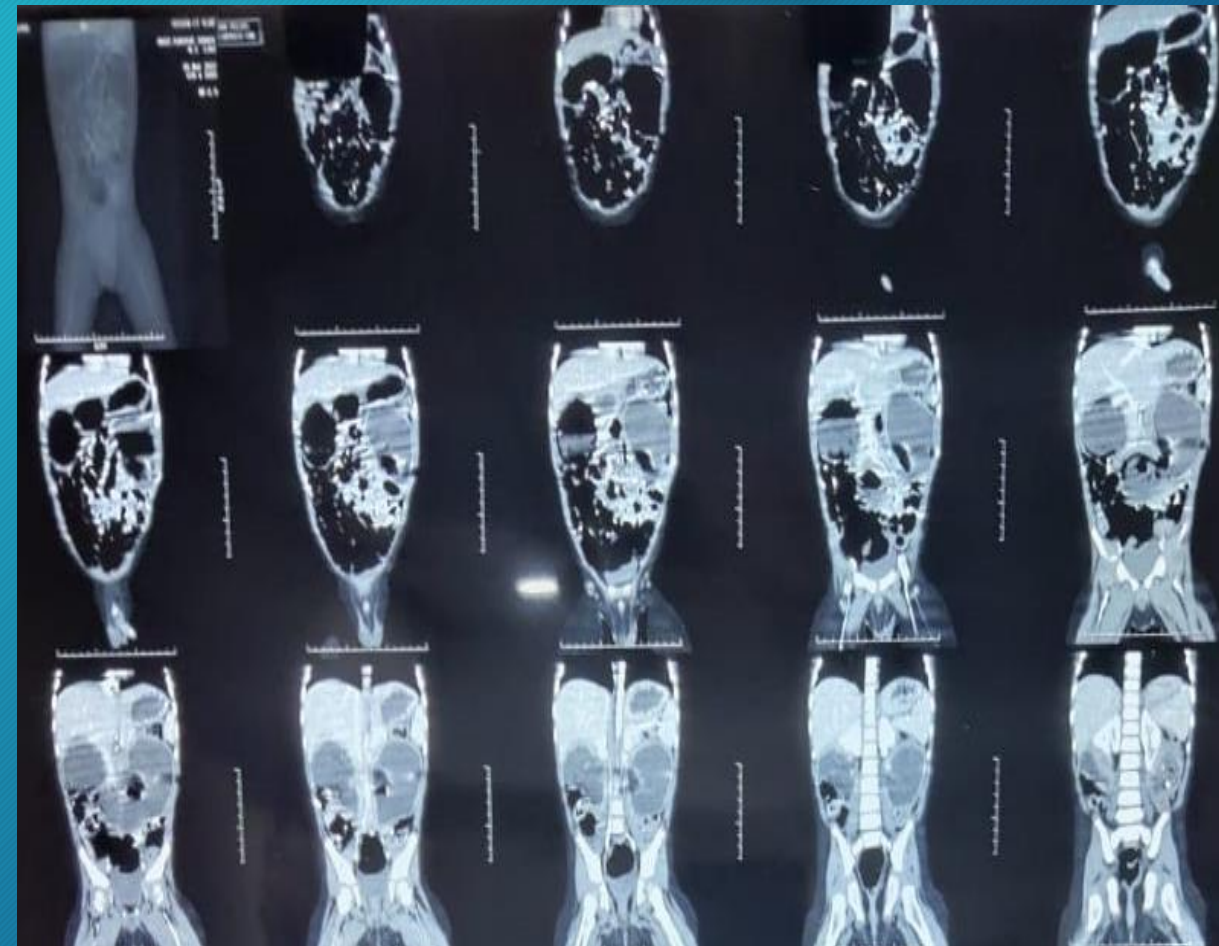
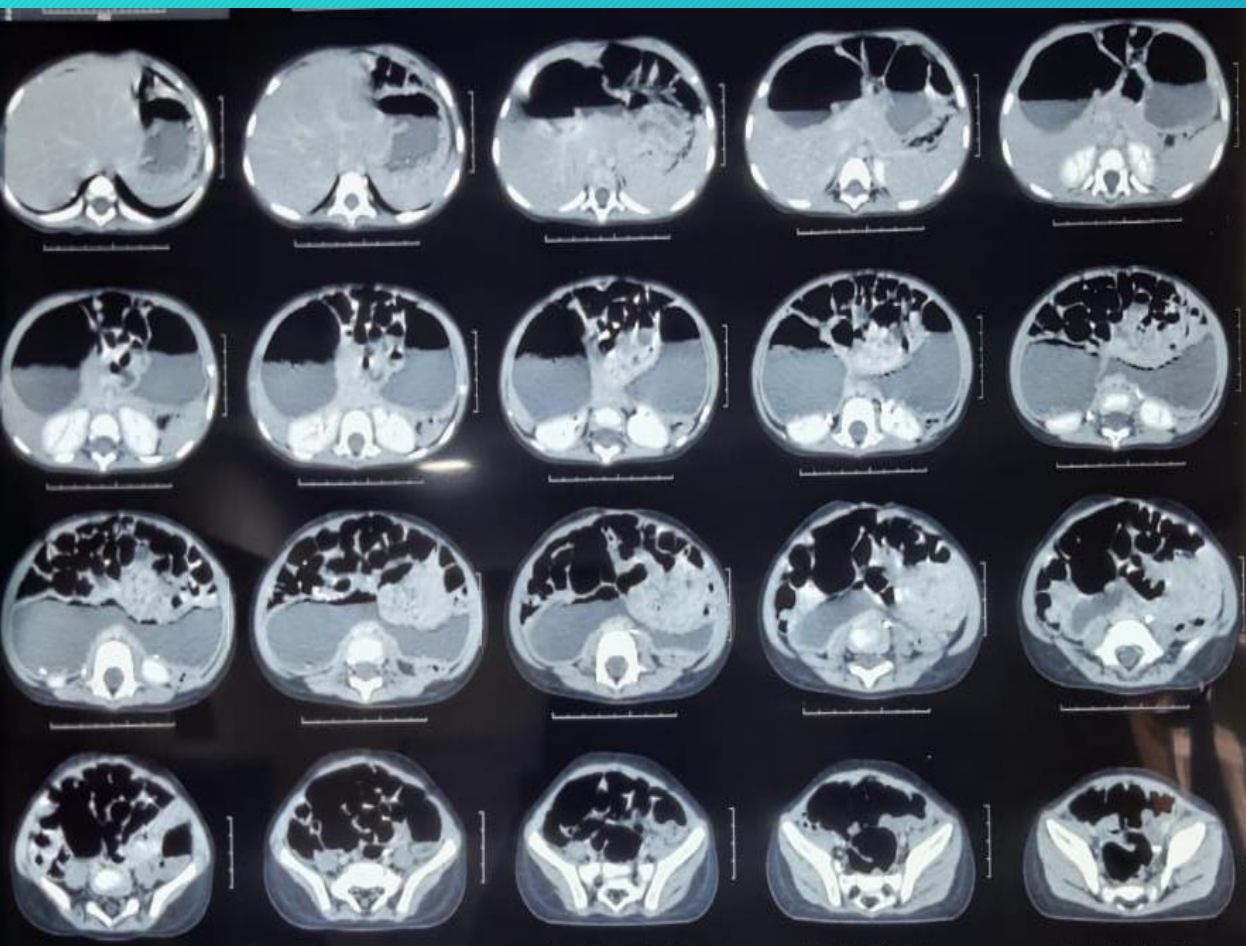
BARIUM MEAL



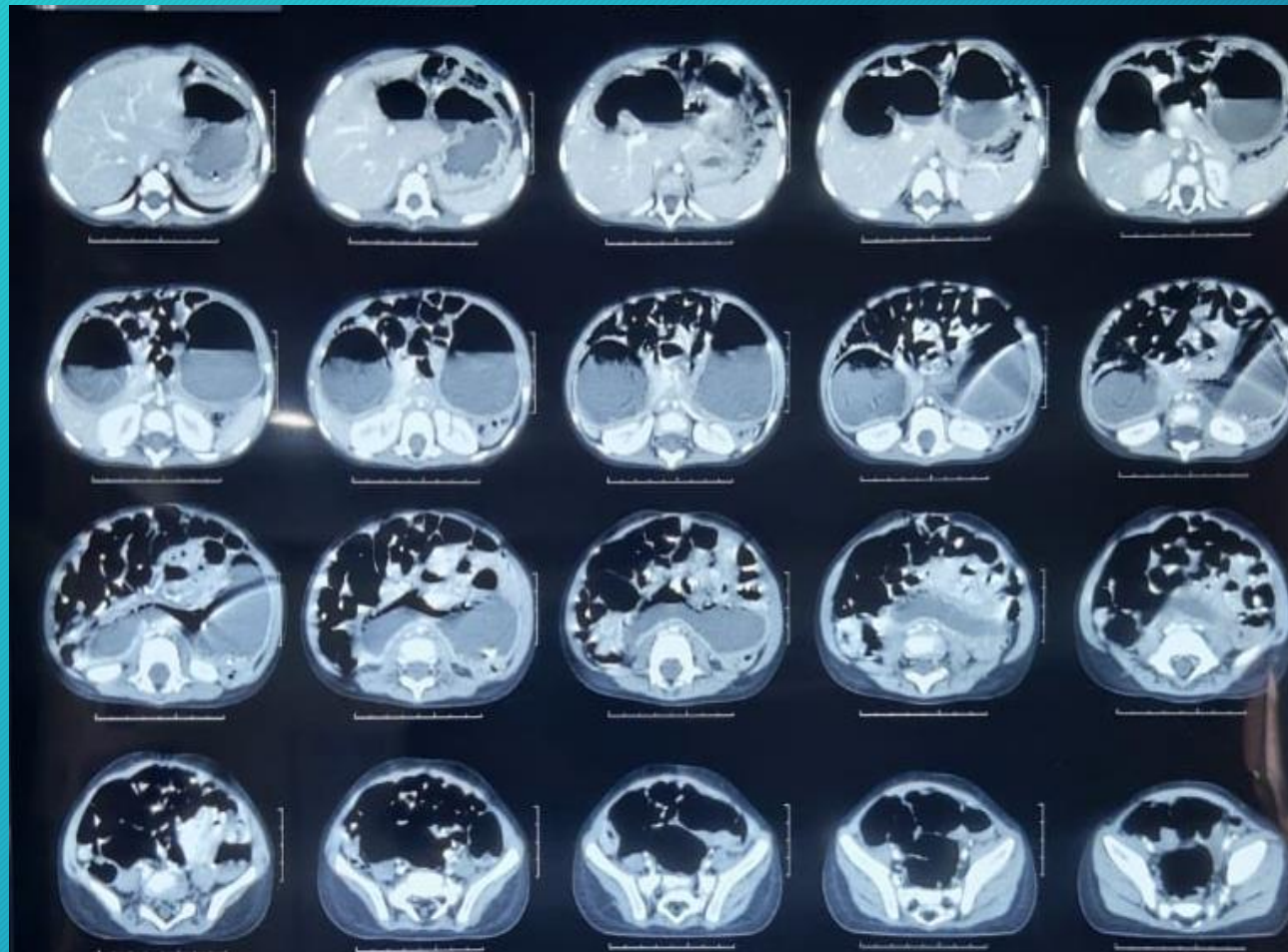
CT SCAN (A+P)

- Grossly dilated Stomach and duodenum filled with fluid and food particles. Enhancing thickening of wall of stomach and duodenum is seen. Rest of the small bowel loops appear normal.
- Superior mesenteric artery and vein relation is well maintained.
- No evidence of any obvious mass lesion.
- Large bowel appears normal.
- Features suggestive of upper GI obstruction secondary to? Fibrotic band.

CECT- ABD + PELVIS



CECT ABD + PELVIS



BLOOD INVESTIGATIONS

On admission

Haemoglobin_12.4mg/dl

Total leucocyte count_ 15,200

Platelets_ 2,69,000

- Electrolytes:

Sodium_134

Potassium_3.5

Chloride_101

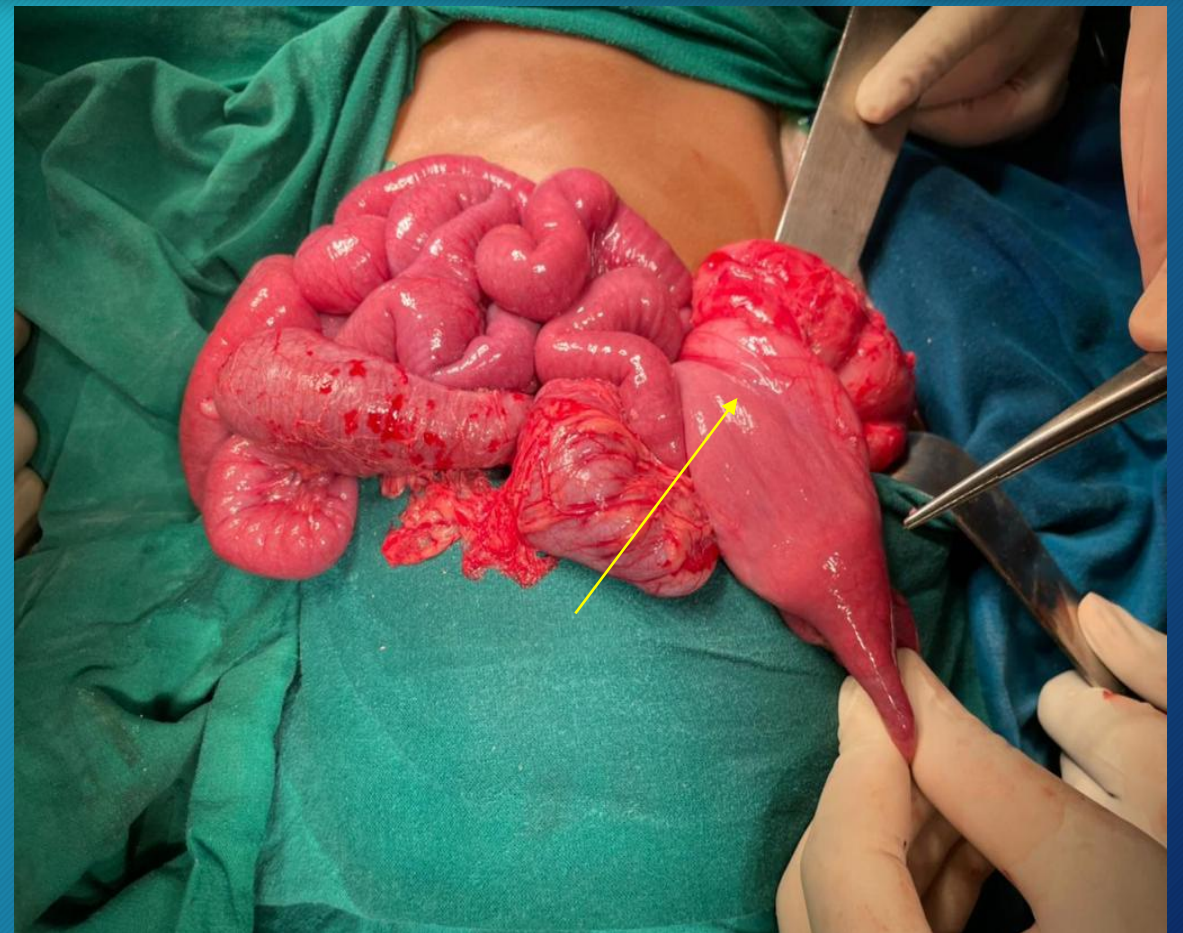
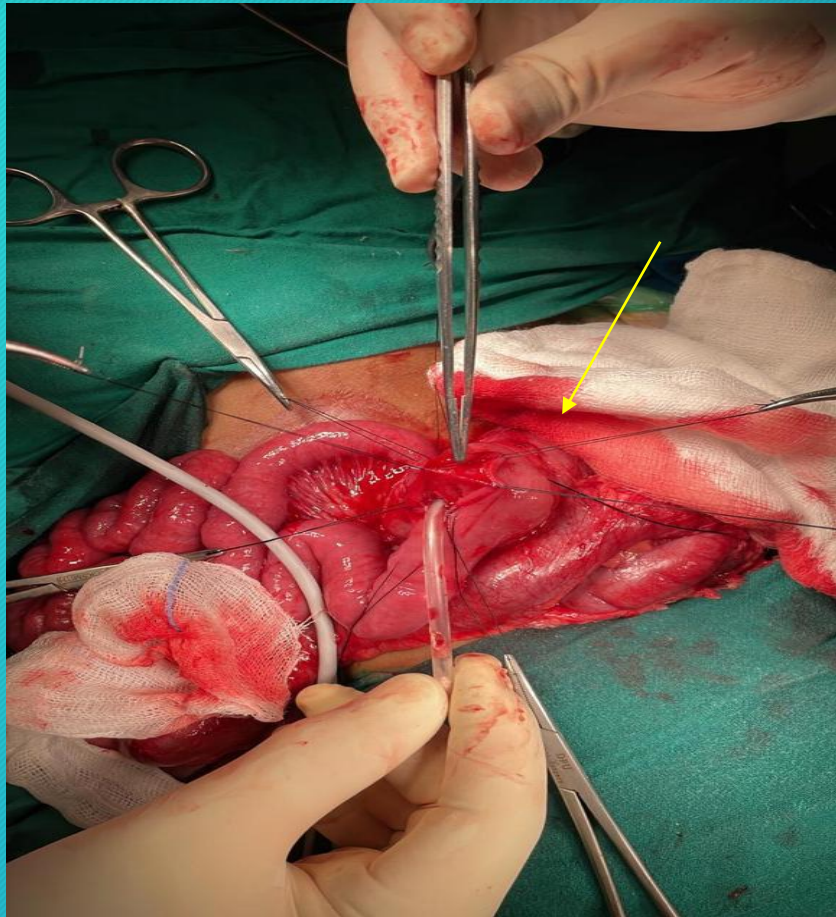
SURGERY

EXPLORATORY LAPAROTOMY

Duodenal web excision with Heineke Mickulicz duodeno-jejunostomy with Ladds procedure

- Grossly dilated Stomach and duodenum upto 4th part.
- Diaphragm at DJ with central fenestration.

INTRA OPERATIVE IMAGES



POSTOPERATIVE

- Post operatively patient initially was shifted to PICU for observation for a day
- On day 7-started on feeds, tolerated well
- On day 12 -patient discharged

DISCUSSION

- Congenital duodenal web is a rare condition that usually presents early in life
- Congenital duodenal web has an incidence of 1 in 10,000 live births
- In 25-40% of cases the duodenal web is associated with trisomy21 {Down's syndrome}
- Among all causes of duodenal obstruction, congenital duodenal web (CDW) or diaphragm is uncommon
- The second part of the duodenum is the most common location (85%-90% of cases), followed by the third and fourth parts of the duodenum

DISCUSSION

- There are two types of Duodenal web- membranous web or Intraluminal diverticulum
- The cause of intramural diverticula is not clear
- Webs and atresias occur due to failure of the duodenum to recanalize during the period of the 6th to 8th weeks of gestation.
- This abnormal process leaves behind a web made out of mucosa and sub mucosa layers
- Surgery-excision of web and duodenoplasty
 - by-pass procedures like duodeno-duodenostomy and duodeno-jejunosomy
 - Endoscopic balloon dilatation (recently)

CONCLUSION

- High degree of suspicion in cases of bilious vomiting
- To work up the patients properly
- Web excision with duodeno-duodenostomy is curative

THANK YOU