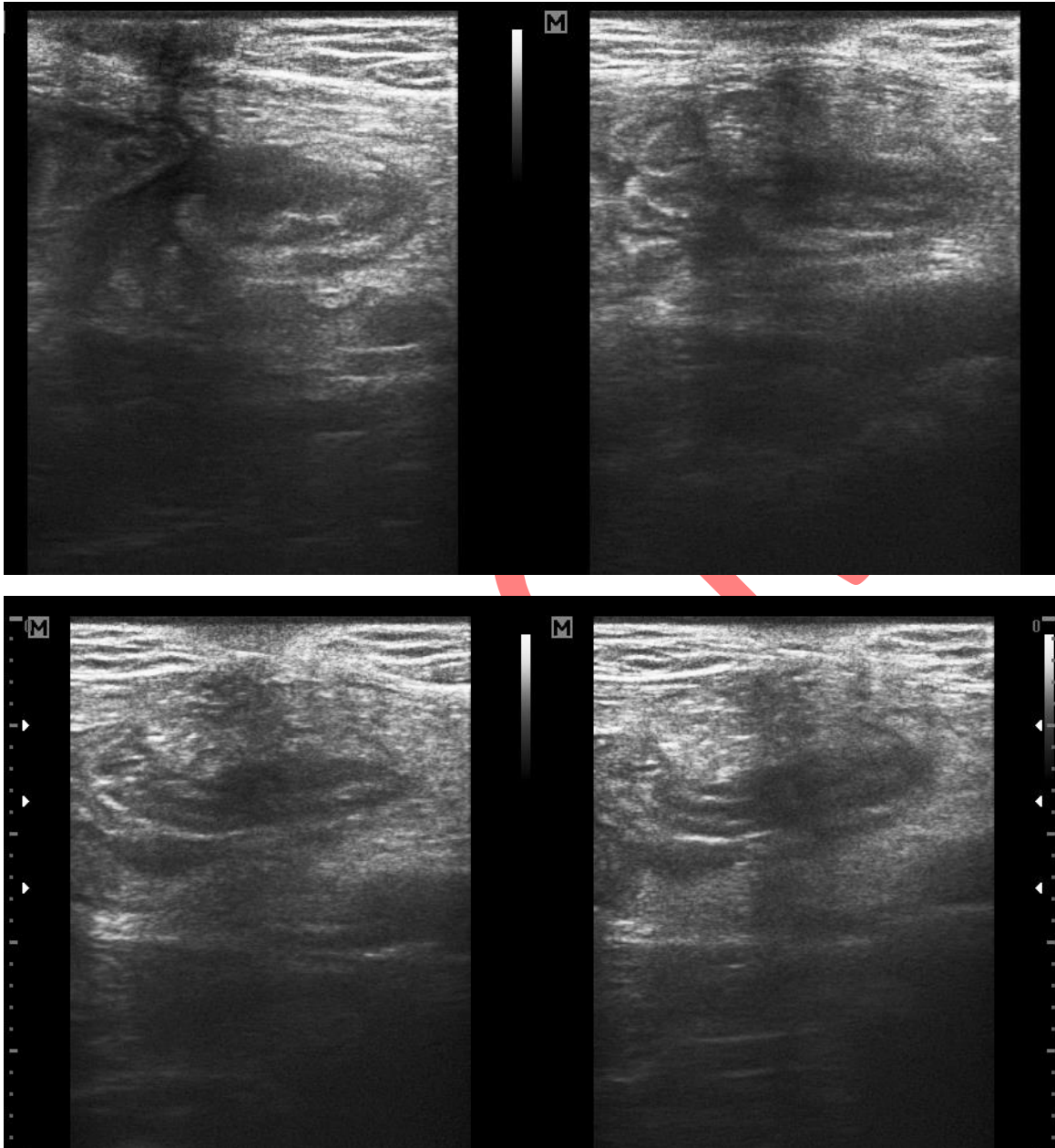
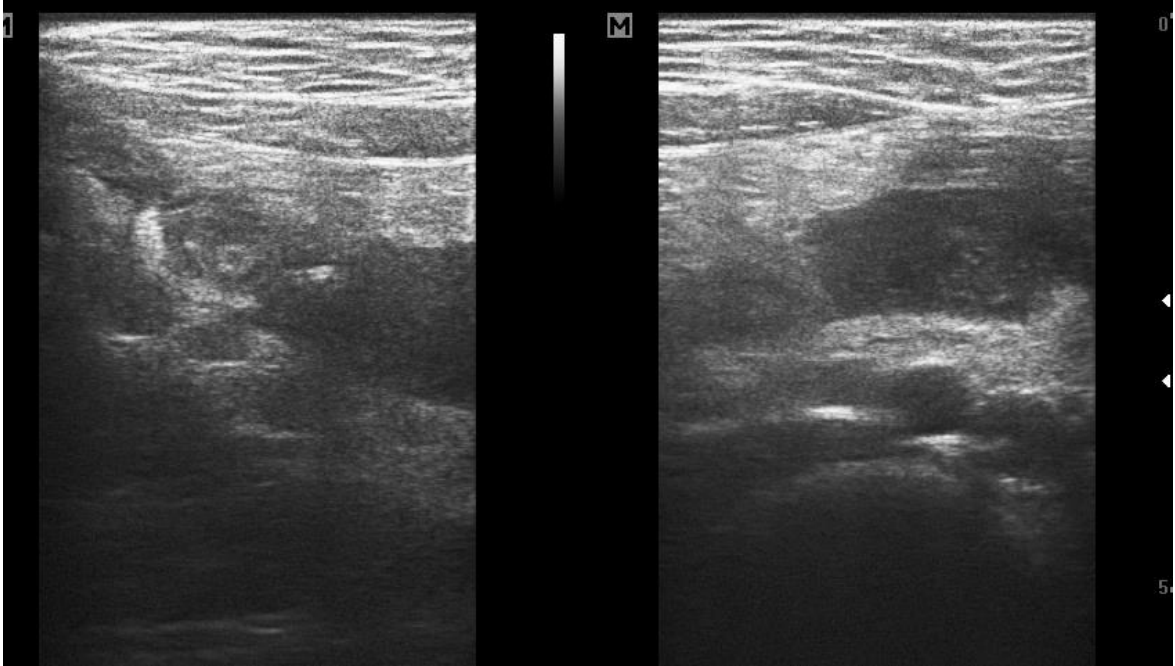
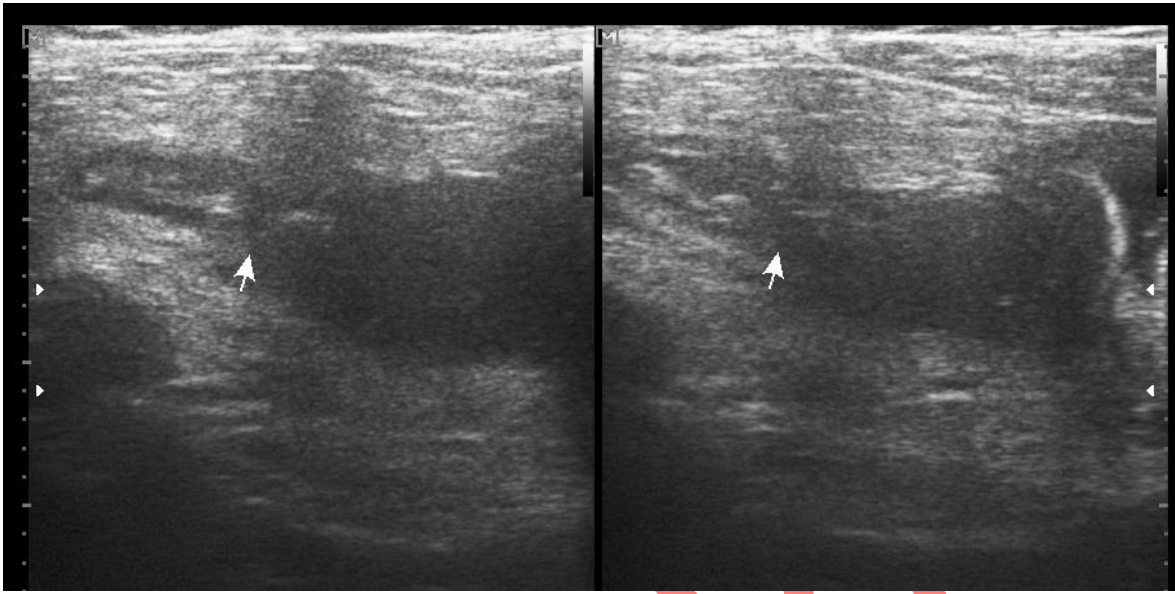


Case- 9 yrs girl came with H/o pain in abdomen since 2 days.

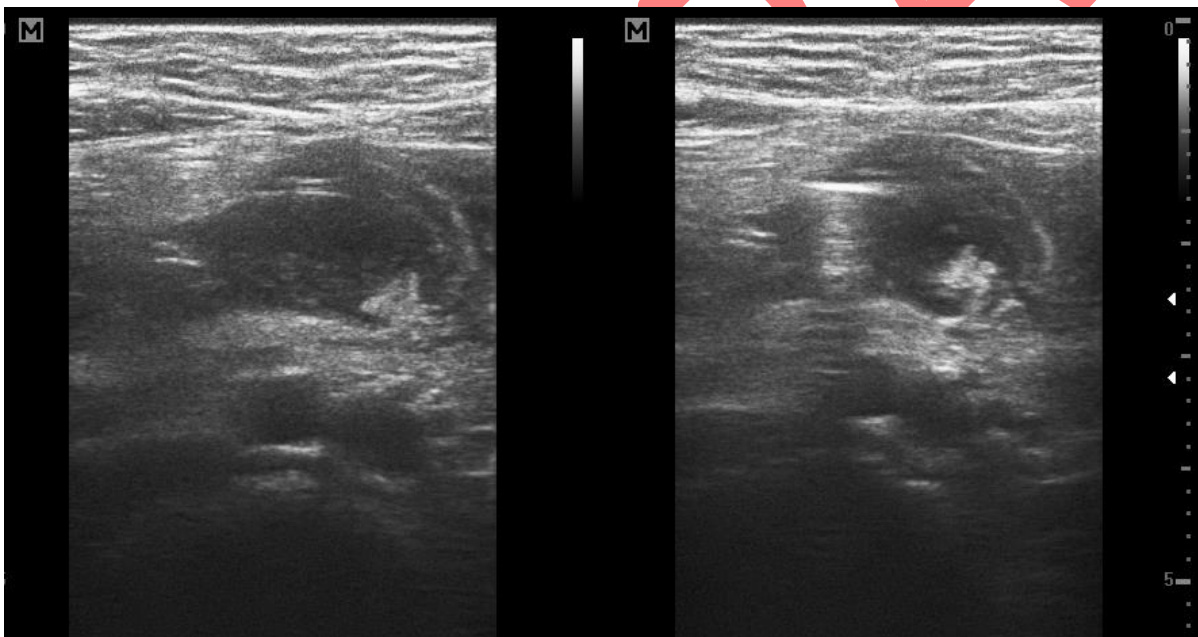
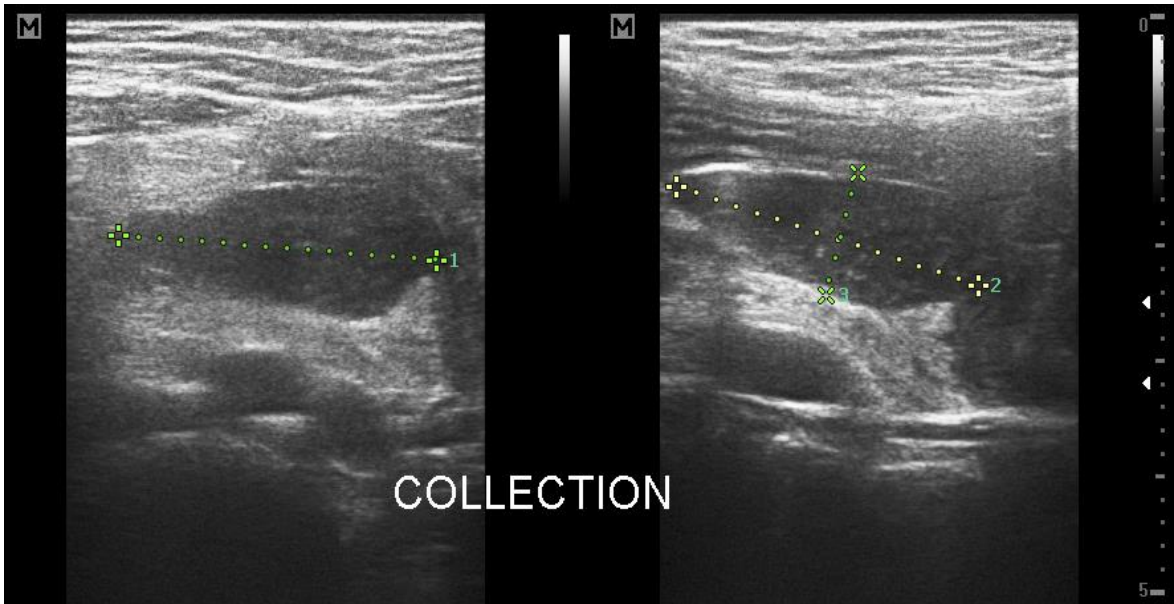
USG Images in infraumbilical/hypogastric region-



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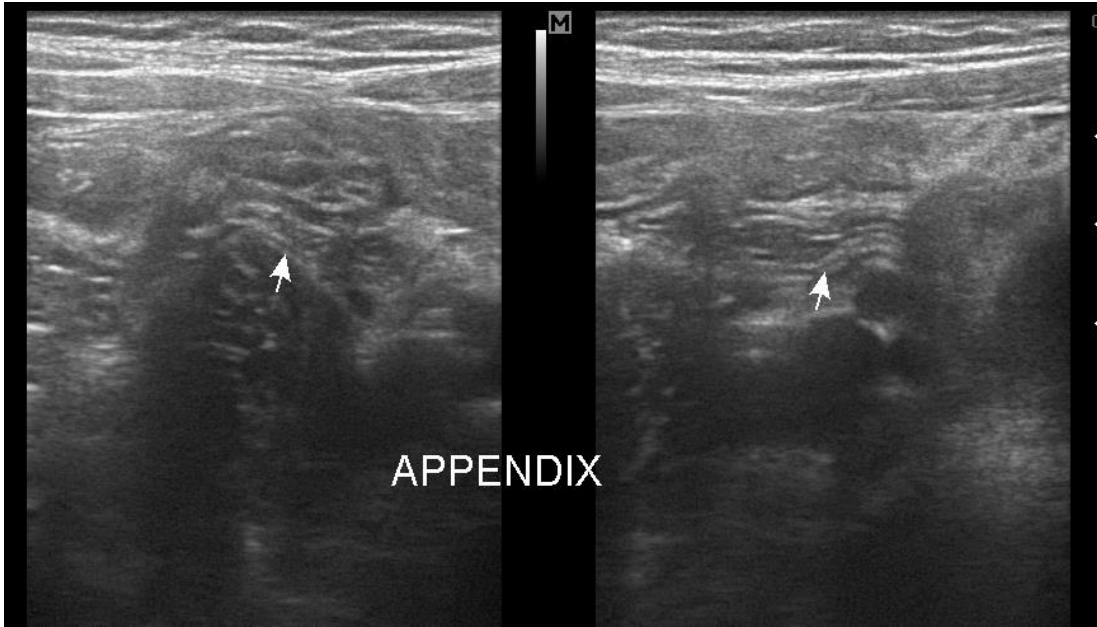


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Nigdi, Pune.



What is this structure? What is the diagnosis?

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Appendix was normal on USG.

PCMCRT

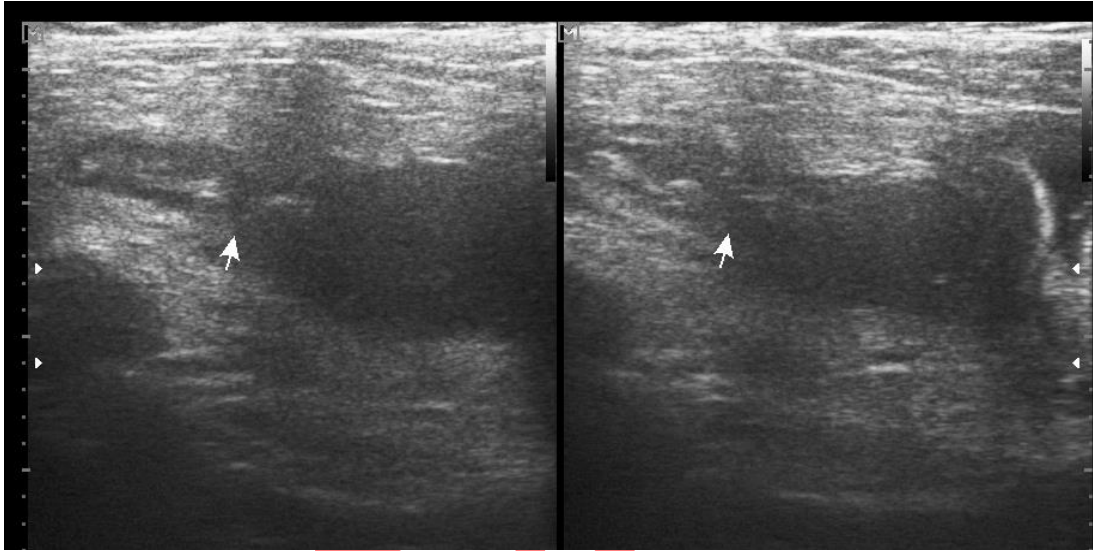
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Nigdi, Pune.

Diagnosis –

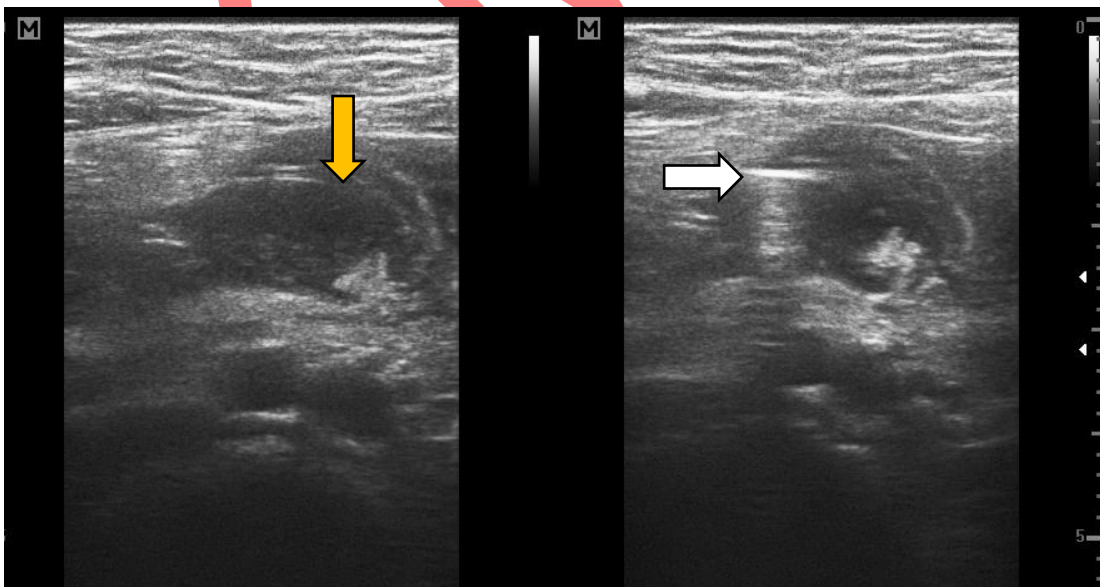
Considering all these imaging findings diagnosis of **Meckel diverticulitis with sealed off perforation** was given.

So why I reported it as Meckel diverticulitis with sealed off perforation?-

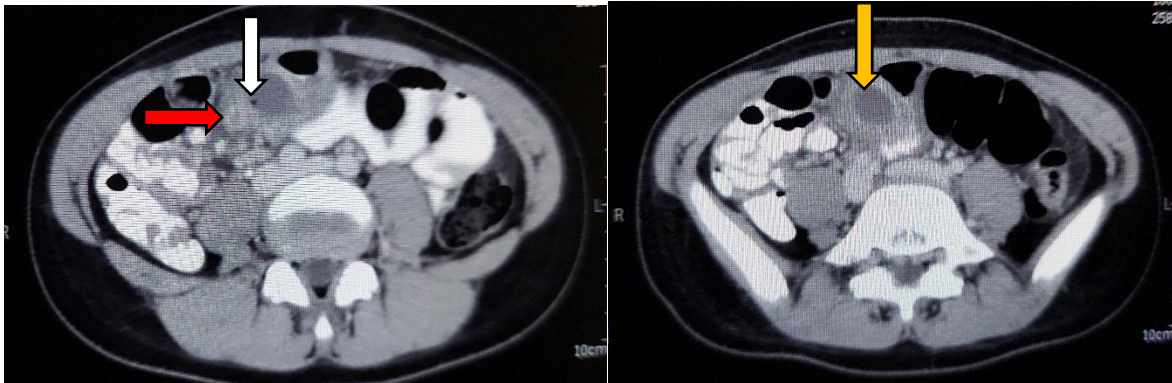
1. As fat stranding was seen surrounding Diverticulum so there is inflammation.
2. As these was small breach at the tip of diverticulum as shown in following images (white arrow)-



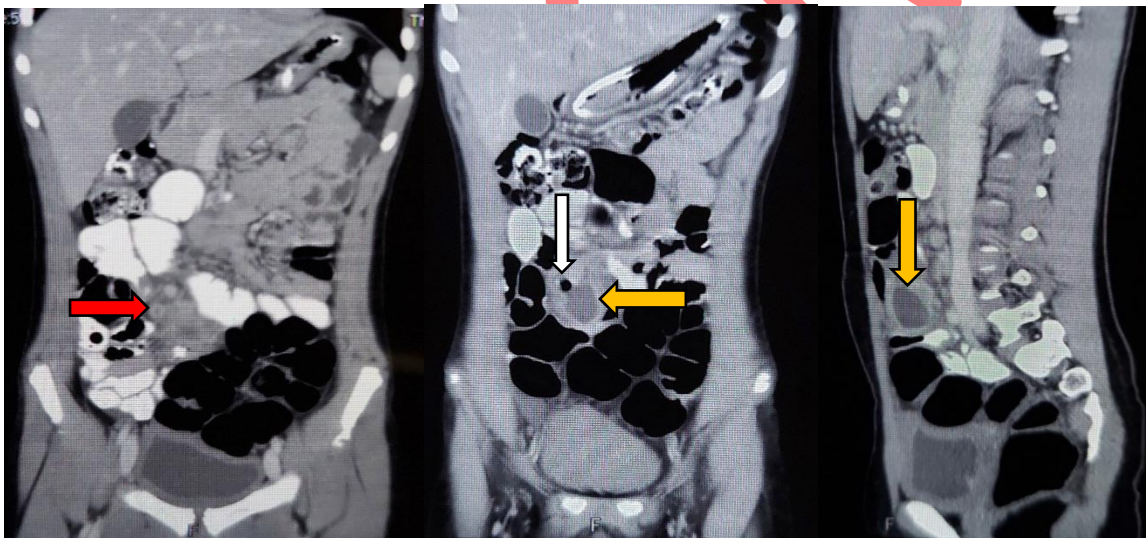
3. As there was adjacent collection with air within- shown in following image- (Air -White arrow).....(Collection- Yellow arrow).



CT Images- Diagnosis of Meckel Diverticulitis with sealed off perforation was confirmed.



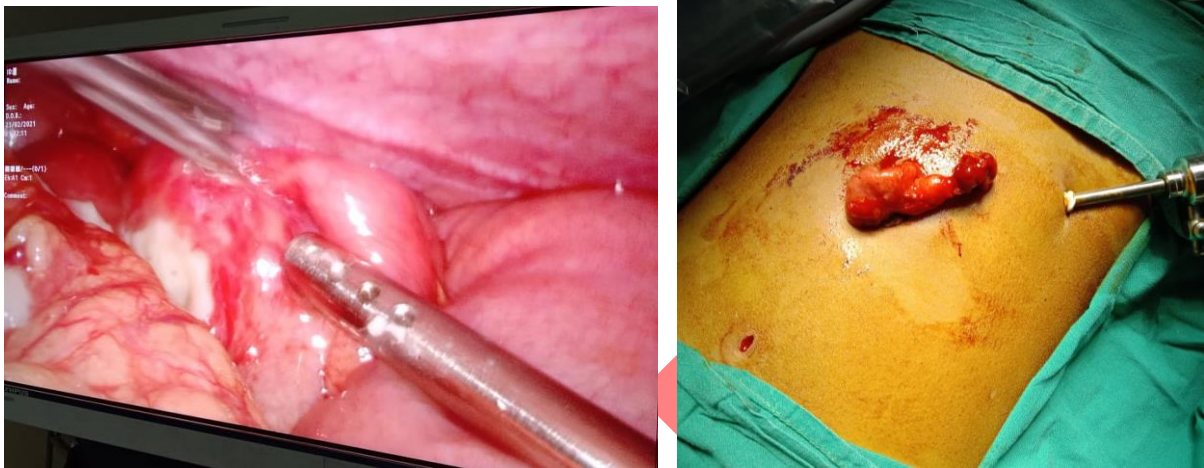
(Tubular Bowel Segment- Meckel Diverticulum-Red arrow) (Air -White arrow)
(Collection- Yellow arrow).



(Tubular Bowel Segment- Meckel Diverticulum-Red arrow) (Air -White arrow)
(Collection- Yellow arrow).

Patient underwent laparoscopic surgery for that, and Surgeon found Meckel diverticulitis with sealed off perforation. The collection along tip of diverticulum and sealed within omentum.

Following are the operative images-



(Intra-operative photographs- Courtesy by Dr. Abhijit Benare- Paediatric Surgeon)

Above photograph show Meckel diverticulum specimen. The portion of tip of diverticulum appear enlarged due to collection and sealed of perforation by omentum.

Histopathology reveals- Meckel Diverticulitis with ectopic gastric mucosa.

PCMC

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Few points about Meckel diverticulum-

1. Meckel diverticulum is a congenital intestinal diverticulum due to fibrous degeneration of the umbilical end of the omphalomesenteric (vitelline) duct that occurs around the distal ileum. It is considered a remnant of the omphalomesenteric-vitelline duct, which connects the yolk sac to the midgut through the umbilical cord. **This duct is typically obliterated by 5-8th week of gestation. Failure of closure results in: A. Diverticulum (~90% of cases) B. Omphalomesenteric fistula C. Enterocyst D. Fibrous band.**
2. Rule of 2 for Meckel diverticulum- A. Less than 2 yrs age B. 2 times more common on males C. 2% of population D. 2 feet proximal to IC valve E. 2 inches in length F. 2 % adults asymptomatic G. 2% ectopic tissue-gastric/Pancreatic.
3. Meckel diverticulum is a true diverticulum i.e. all layers of the gastrointestinal tract are present in its wall and arises from the antimesenteric border of small intestine.
4. Complications of diverticulum- **A. Gastrointestinal haemorrhage** (melena/hematochezia): most common complication and may account for 30% of symptomatic cases.
B. Small-bowel obstruction: second most common complication- Due to adhesion, luminal obstruction from diverticulitis, Volvulus, intussusception, internal hernia.
C. Inflammation (diverticulitis): Meckel diverticulitis.
D. Perforation
E. Neoplasm arising in a Meckel diverticulum.