ABSTRACT:
Meckel's diverticulum is a common congenital anomaly. It usually presents in young children as rectal bleeding or intestinal obstruction. Diverticular perforation can occur due to ileal ulceration following secretions from the ectopic gastric mucosa. However, Meckel's perforation due to ingested foreign bodies in children is rare. We present such a case with review of literature.

KEY WORDS:
Meckel's perforation, fish bone, child.

INTRODUCTION:
Meckel's diverticulum roughly occurs in 2% of the general population. The rule of '2' applies to the diverticulum which is usually 2 feet from the ileocaecal valve, 2 inches long, 2cm in diameter, 2 types of heterotopic mucosa, 2 times more common in males and presenting in less than 2y of age (1).Diverticulum presenting with perforation and peritonitis is uncommon more so due to ingested foreign bodies in children.

CASE REPORT:
4 year old girl presented with vague peri-umbilical pain for 2 days. Child had no other constitutional symptoms like fever, bilious vomiting or obstipation. However, the mother gave history of consumption of fish two days back at home. On examination, the child had mild abdominal distension with peri-umbilical tenderness. X ray abdomen was taken in both supine and lateral decubitus posture. It showed air fluid levels suggestive of small bowel obstruction. Ultrasound abdomen revealed free fluid in the peritoneal cavity suggestive of perforation peritonitis. Laparotomy was done by right supra umbilical transverse incision. Meckel's diverticulum was found perforated at the tip by an ingested fish bone (fig 1). The fish bone was removed (fig 2). There was minimal contamination of the peritoneal cavity; resection of the meckel's diverticulum with a segment of the ileum was done followed by an End to end ileo-ileal anastomosis. Post op period was uneventful. Biopsy of the specimen showed no evidence of heterotopic gastric mucosa. The child is on follow – up and doing well.

DISCUSSION:
John Friedrich Meckel was a professor of anatomy and pathology and published a number of articles in 1800 describing the anatomy, embryology and clinical attributes of this diverticulum that bears his name (2). It is a true anatomical diverticulum containing all the layers of the bowel wall usually present in the distal ileum on the antimesentric border roughly 100cm from the ileocaecal valve. Meckel's diverticulum usually presents as bleeding per rectum in children. It also presents as intestinal obstruction due to Meckel's band, and intestinal obstruction due to intussusception of Meckel’s diverticulum. The bleeding Meckel’s can be identified using a pentagastrin stimulated Technetium 99m pertechnate radionuclide study. Glucagon can also be used which slows the bowel transit and allows the radionuclide to stay in the diverticulum for a longer time (3). Diverticular inflammation usually occurs in older children. Inflammation is caused by the ectopic gastric or pancreatic mucosa present in the diverticulum. There may other causes such as stasis of food due to kink in the diverticulum, fecoliths, foreign body or parasitic infections. These may present with diverticulitis, ileus, chronic pain, intestinal obstruction or diverticular perforation. However, perforation of the Meckel’s diverticulum in children is relatively rare (4).

Gastric or pancreatic secretions from the ectopic mucosa in the Meckel's diverticulum can lead to ulceration of the adjacent ileal...
mucosa. In Meckel’s diverticulum, 15 to 50% of the cases have ectopic gastric or pancreatic tissue (5). Gastric is the commonest type of the two. There are other types of ectopic mucosa such as colonic, endometrial and even pancreatic islets.

**Conclusion:**
Meckel’s diverticular perforation is uncommon in children. This is usually due to the presence of heterotopic mucosa. Foreign body ingestion causing Meckel’s perforation in adults has been reported. In this case report we have described a 4y old girl with meckel’s perforation due to ingested fish bone.

**References**