



## MECKEL'S DIVERTICULUM - A CASE REPORT

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**Abstract:** A Meckel's diverticulum is a pouch on the wall of the lower part of the intestine that is present at birth (congenital). The diverticulum may contain tissue that is the same as tissue of the stomach or pancreas. Meckel's diverticulum may develop pathological conditions like gastric and pancreatic tissues predominate, with the corresponding of 60 to 85% and 5 to 16%. Reports have cited other tissues such as colonic, duodenal, jejunal, hepatic and endometrial are present. Malignancies may also occur but are found in only 0.5 to 4.9% of patients. Sarcomas are the most common neoplasm, followed by carcinoids and adeno carcinomas.

**Keywords:** Meckel's Diverticulum, Sarcoma, Intestinal, Adeno Carcinoma.

### INTRODUCTION

Meckel's diverticulum, a true congenital diverticulum, is a small bulge in the small intestine present at birth. It is a vestigial remnant of the omphalomesenteric duct (also called the vitelline duct), and is the most frequent malformation of the gastrointestinal tract. It is present in approximately 2% of the population, with males more frequently experiencing symptoms. It was first described by Fabricius Hildanus in the sixteenth century and later named after Johann Friedrich Meckel, who described the embryological organ of the type of diverticulum in 1809. A memory aid is the rule of 2's : 2% (of the population) – 2 inches (in length) – 2% are symptomatic, there are 2 types of common ectopic tissue (gastric and pancreatic), the most common age at clinical presentation is 2, and males are 2 times as likely to be affected. Approximately 98% of people afflicted with Meckel's diverticulum are asymptomatic. If symptoms do occur, they typically appear before the age of two. The most common presenting symptom is painless rectal bleeding, followed by intestinal obstruction, volvulus and intussusceptions. Occasionally, Meckel's diverticulitis may present with all the features of acute appendicitis. Also, severe pain in the upper abdomen is experienced by the patient along with bloating of the stomach region. At times, the symptoms are so painful such that they may cause sleepless nights with extreme pain in the abdominal area. The radiopharmaceutical is actively secreted by gastric mucosa. Although all Meckel's diverticula do not contain functioning gastric mucosa, most that bleed do. Patients with active hemorrhage can also be studied with tagged red blood cells. While only 20% of Meckel's Diverticula contain ectopic mucosa, greater than 90% of diverticula that bleed do.

Lower GI bleeding due to ulceration by heterotrophic gastric mucosa 25-50% of symptomatic presentations

- Usually painless
- Episodic
- Hematochezia (usually maroon but may be tarry or bright red)
- Most common cause of small intestinal hemorrhage in patients under 30 y/o
- Meckel's scan is often positive patients.

### Case report:

During a routine cadaveric dissection for the undergraduate students in Alluri Sitarama Raju Academy of Medical Sciences, (ASRAM), we made the following observation.

- ❖ A diverticulum 2 cm in length and 1 cm in width was observed about 48 cm from the ileocaecal junction along the antimesenteric border of ileum. (Fig:1)

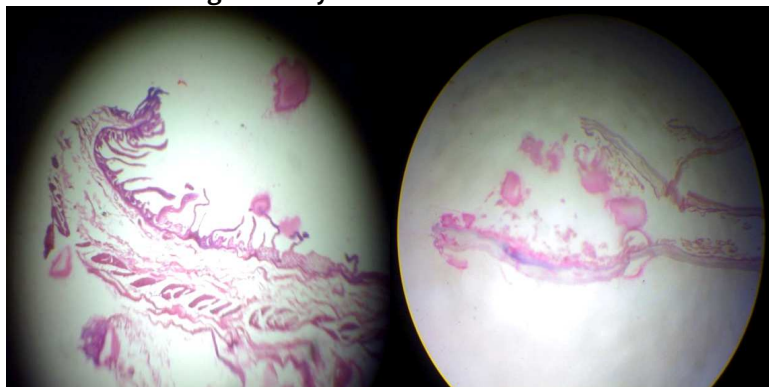


**Fig:1:** A diverticulum present along the antimesenteric border of ileum.

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**Histological study:**

Junction between Ileum and Meckel's diverticulum of Meckel's diverticulum

**DISCUSSION**

Meckel's diverticulum is the most common congenital malformation of the gastrointestinal tract. Most studies suggest an incidence of between 0.6% and 4%. It is also the most common cause of bleeding in the pediatric age group. This is due to the persistence of the proximal part of the congenital vitello-intestinal duct. It is a true diverticulum, typically located on anti-mesenteric border, and contains all three coats of intestinal wall. The rare mesenteric location of Meckel's diverticulum has been documented in literature in some surgical textbooks. It is known by the rule of two: present in 2% population, 2ft from the ileo-caecal junction and 2 inches long, although many anatomical variations exist.

**CONCLUSION**

According to Merritt and Rabe (1950) reports from necropsy series have shown an incidence of anywhere between 1 and 2.5%. It is said to occur more frequently in males than in female and we observed it in a male cadaver. The appearance of the diverticulum was that of ileum. None of the findings reported by the earlier authors like presence of gastric mucosa or pancreatic tissue were observed. Earlier in a patient we observed such diverticulum and the inflammation of it produced signs and symptoms of appendicitis and was operated.

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