Meckel's Diverticulitis

A Practical Guide For Patients



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Introduction: Meckel's Diverticulitis

A Meckel diverticulum is a pouch in the ileum, the final portion of the small intestine. It forms before birth when part of the embryonic connection between the intestine and umbilical cord does not disappear completely. Most people with a Meckel diverticulum never develop symptoms or know that it is present.

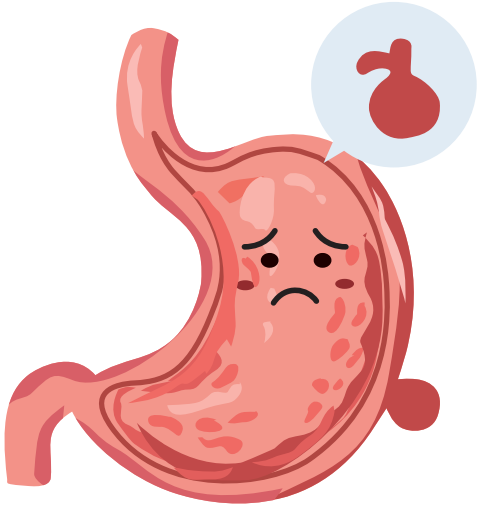
Meckel's diverticulitis occurs when this pouch becomes blocked, irritated, infected, or inflamed. The resulting symptoms often resemble appendicitis, including pain near the navel or in the lower-right abdomen, fever, nausea, vomiting, and tenderness. Inflammation may progress to an abscess, intestinal obstruction, tissue death, perforation, peritonitis, or sepsis. Because these complications can become life-threatening, suspected Meckel's diverticulitis generally requires urgent hospital evaluation and surgical consultation.

Key Takeaways

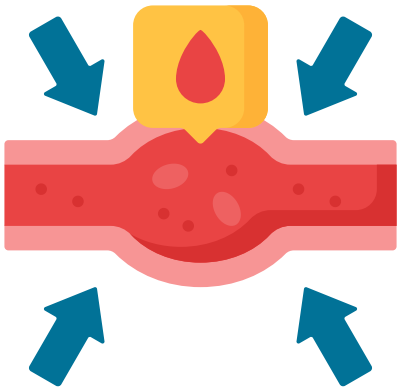
- A Meckel diverticulum is a congenital pouch in the small intestine.
- It develops from incomplete disappearance of the vitelline or omphalomesenteric duct.
- Most people with the pouch never experience symptoms.
- Meckel's diverticulitis means that the pouch has become inflamed.
- Symptoms frequently resemble acute appendicitis.
- Pain may begin around the navel and move toward the lower-right abdomen.
- Nausea, vomiting, fever, and abdominal tenderness may occur.

What Causes Meckel's Diverticulitis?

Known Causes:



- **Congenital Meckel diverticulum:** The pouch results from incomplete closure of an embryonic intestinal structure.
- **Obstruction of the diverticular opening:** Trapped mucus, stool, or intestinal contents may promote inflammation.
- **Enterolith formation:** A hardened stone-like mass may obstruct or injure the diverticulum.
- **Ectopic gastric tissue:** Stomach-type tissue may produce acid and cause ulceration in nearby small intestine.
- **Ectopic pancreatic tissue:** Pancreatic tissue may occasionally be found within the diverticulum.
- **Bacterial overgrowth:** Trapped intestinal contents may allow bacteria to multiply.
- **Reduced blood flow:** Swelling or pressure may compromise circulation and cause tissue damage.
- **Twisting or torsion:** The diverticulum or an attached fibrous band may twist and interfere with blood flow.



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Common Signs & Symptoms

Meckel's diverticulitis may begin with vague pain around the navel and later cause more localized lower-right abdominal pain. Because this pattern resembles appendicitis, the correct diagnosis may not be recognized until CT imaging, laparoscopy, or surgery is performed.

Core Symptoms Include:



- Pain around the navel
- Lower-right abdominal pain
- Persistent or worsening abdominal discomfort
- Abdominal tenderness
- Pain that becomes worse with movement
- Reduced appetite
- Nausea

Severe cases can also cause:



- Bright red, maroon, or black stool
- Significant intestinal bleeding
- Severe weakness or dizziness
- Fainting
- Rapid heartbeat
- Low blood pressure
- Abdominal abscess
- Intestinal obstruction

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Diagnosis & Medical Testing

Meckel's diverticulitis can be difficult to diagnose before surgery because the symptoms overlap with appendicitis, Crohn's disease, intestinal obstruction, gastroenteritis, kidney stones, and other causes of acute abdominal pain. CT imaging is often the most useful test for adults with suspected inflammation. It may show a blind-ending pouch connected to the ileum, surrounding inflammation, thickening, an enterolith, abscess, obstruction, or perforation. Ultrasound may help identify the condition in children and selected adults. A technetium-99m Meckel scan primarily detects ectopic gastric tissue and is most useful when unexplained intestinal bleeding is the main symptom.

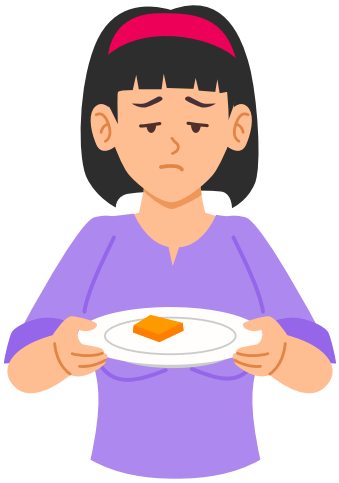
Diagnostic Tools:

- **Blood cultures:** May be obtained when sepsis or bloodstream infection is possible.
- **Urinalysis:** Helps exclude urinary infection or kidney stones.
- **Pregnancy testing:** May be required when pregnancy-related causes of abdominal pain are possible.
- **Abdominal ultrasound:** May identify an inflamed blind-ending structure, fluid collection, or other cause of pain.
- **CT of the abdomen and pelvis:** Evaluates inflammation, obstruction, abscess, perforation, and alternative diagnoses.
- **Technetium-99m Meckel scan:** Detects ectopic gastric mucosa, particularly in patients with unexplained bleeding.

Diet

Diet cannot resolve an inflamed Meckel diverticulum. During an acute episode, patients may be instructed not to eat or drink because urgent imaging, anesthesia, or surgery may be required. Attempting to treat severe symptoms with a liquid diet, additional fiber, laxatives, or home remedies may delay necessary treatment.

Key Insights:



- Receive intravenous fluids when dehydration or surgery prevents oral intake.
- Resume clear liquids only when the surgical team confirms that it is safe.
- Advance to soft foods as intestinal activity returns.
- Eat smaller meals during early recovery.
- Chew food thoroughly.
- Maintain adequate protein to support wound healing.
- Drink enough fluid after oral intake resumes.
- Avoid alcohol during recovery and while using pain medication.
- Limit foods that repeatedly worsen nausea, bloating, or diarrhea.
- Follow temporary postoperative food restrictions as instructed.
- Maintain balanced nutrition after complete recovery.



Medications & Treatment Options

Medication alone generally does not provide definitive treatment for Meckel's diverticulitis. A symptomatic and inflamed Meckel diverticulum is usually surgically removed because continuing inflammation may lead to perforation, abscess formation, obstruction, or recurrent symptoms.
Medications and supportive care are used to stabilize the patient, control symptoms, and treat infection before and after surgery.

Treatment Options

- **Intravenous fluids:** Correct dehydration and support circulation.
- **Bowel rest:** Temporarily avoids food and drink while urgent treatment is planned.
- **Pain medication:** Relieves abdominal and postoperative pain.
- **Anti-nausea medication:** Controls nausea and vomiting.
- **Antibiotics:** Treat suspected infection, perforation, abscess, or peritonitis.
- **Electrolyte replacement:** Corrects abnormalities caused by vomiting, dehydration, or illness.
- **Blood transfusion:** May be required when substantial intestinal bleeding has occurred.
- **Iron supplementation:** Treats iron-deficiency anemia following slower or recurrent bleeding.
- **Acid-reducing medication:** May provide temporary support when ulceration from ectopic gastric tissue contributes to bleeding.
- **Sepsis treatment:** May include fluids, antibiotics, oxygen, and blood-pressure support.

Advanced Therapies & Procedures

The definitive treatment for Meckel's diverticulitis is removal of the diverticulum. Surgery may be completed laparoscopically through small incisions or through open abdominal surgery. The exact procedure depends on the length and width of the diverticulum, the condition of its base, the health of the adjacent ileum, and whether perforation, bleeding, obstruction, or ectopic tissue is present.

Therapy Options:

- **Diagnostic laparoscopy:** Examines the appendix, small intestine, and abdominal cavity when the cause remains uncertain.
- **Laparoscopic diverticulectomy:** Removes the diverticulum through minimally invasive surgery.
- **Open diverticulectomy:** Removes the pouch through a larger abdominal incision when required.
- **Wedge resection:** Removes the diverticulum and a small portion of the adjacent ileal wall.
- **Segmental ileal resection:** Removes the diverticulum together with damaged nearby small intestine.
- **Intestinal anastomosis:** Reconnects the healthy ends of the ileum after segmental resection.
- **Appendix evaluation:** Confirms whether appendicitis is also present or was the suspected diagnosis.
- **Release of fibrous bands:** Treats obstruction or twisting caused by an embryonic attachment.

Coping With Meckel's Diverticulitis

Meckel's diverticulitis often occurs unexpectedly because most patients do not know that they have a Meckel diverticulum. Recovery depends on whether the condition was treated before perforation and whether a simple diverticulectomy or intestinal resection was required.

Practical Strategies

- Resume food gradually according to tolerance.
- Maintain adequate hydration.
- Include sufficient protein for healing.
- Monitor the incision for redness, swelling, warmth, or drainage.
- Check body temperature when infection is suspected.
- Track bowel movements and ability to pass gas.
- Report persistent nausea or vomiting.
- Attend the postoperative surgical appointment.
- Report increasing pain rather than assuming it is normal recovery.
- Seek urgent care for fever, wound drainage, abdominal swelling, or gastrointestinal bleeding.
- Inform future healthcare professionals about the surgery and any intestinal resection.



FAQS

Q1: What is Meckel's diverticulitis?

A: Meckel's diverticulitis is inflammation of a congenital pouch in the ileum called a Meckel diverticulum. The condition may cause abdominal pain, fever, nausea, vomiting, tenderness, and complications such as perforation, abscess, or intestinal obstruction.

Q2: What causes Meckel's diverticulitis?

A: Inflammation may develop when the diverticulum becomes obstructed by intestinal contents, an enterolith, swelling, or another process. Trapped bacteria and reduced blood flow may then cause infection, ulceration, tissue death, or perforation. Rare causes include foreign-body injury, twisting, and a tumor.

Q3: How is Meckel's diverticulitis diagnosed?

A: Diagnosis may involve a physical examination, blood tests, abdominal ultrasound, and CT imaging. A Meckel scan is especially useful when ectopic gastric tissue and intestinal bleeding are suspected. Some cases are confirmed only during diagnostic laparoscopy or surgery.

Q4: How is Meckel's diverticulitis treated?

A: Treatment usually requires surgical removal of the inflamed diverticulum. Depending on the extent of inflammation, the surgeon may perform diverticulectomy, wedge resection, or removal and reconnection of a short segment of ileum. Fluids, pain control, antibiotics, and other supportive treatments may be provided before and after surgery.

Take Action

Meckel's diverticulitis can closely resemble appendicitis and may progress to perforation, peritonitis, intestinal obstruction, or sepsis. Persistent or worsening lower-right abdominal pain—especially when accompanied by fever, nausea, vomiting, bleeding, or abdominal tenderness—should be evaluated urgently.

After emergency treatment or surgery, schedule follow-up care with GastroDoxs for guidance on digestive recovery, anemia, persistent bowel symptoms, or postoperative concerns.

For additional resources, visit **GastroDoxs.com**.

Your health starts with knowledge.
Take the first step today!

SCHEDULE AN APPOINTMENT



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