

A 6-year-old boy is brought to the physician for abdominal pain. Yesterday, he began to complain of severe, intermittent abdominal pain and has been drawing up his legs with the pain. The episodes last for 15-20 minutes, and they are occurring more frequently today. His appetite is decreased and his last bowel movement was 2 days ago. Review of systems is otherwise negative. The boy had ileocecal intussusception at age 2 that was reduced successfully by air enema. He has no other medical problems and takes no medications. Vital signs are normal. Examination shows a tired-appearing boy with abdominal tenderness and a palpable cylindrical mass on the right side of the abdomen. What is the most likely trigger for this patient's condition?

- ☐ A. Hypertrophied Peyer patches
- ☐ B. Inspissated stool
- ☐ C. Small-bowel diverticulum
- ☐ D. Small-bowel lymphoma
- ☐ E. Small-bowel wall hematoma

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- ☐ A. Hypertrophied Peyer patches [37%]
- ☐ B. Inspissated stool [27%]
- ☒ C. Small-bowel diverticulum [31%]
- ☐ D. Small-bowel lymphoma [3%]
- ☐ E. Small-bowel wall hematoma [2%]

Proceed to Next Item

Explanation:

User Id:

Intussusception	
Risk factors	<ul style="list-style-type: none">Recent viral illness or rotavirus vaccinationPathological lead points:<ul style="list-style-type: none">Meckel's diverticulumHenoch-Schönlein purpuraCeliac diseaseIntestinal tumorPolyps
Clinical presentation	<ul style="list-style-type: none">Episodic, crampy abdominal pain"Currant jelly" stoolsSausage-shaped abdominal mass
Diagnosis	<ul style="list-style-type: none">"Target sign" on ultrasound

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User Id: [REDACTED]

Intussusception	
Risk factors	<ul style="list-style-type: none"> • Recent viral illness or rotavirus vaccination • Pathological lead points: <ul style="list-style-type: none"> ◦ Meckel's diverticulum ◦ Henocho-Schönlein purpura ◦ Celiac disease ◦ Intestinal tumor ◦ Polyps
Clinical presentation	<ul style="list-style-type: none"> • Episodic, crampy abdominal pain • "Currant jelly" stools • Sausage-shaped abdominal mass
Diagnosis	<ul style="list-style-type: none"> • "Target sign" on ultrasound
Treatment	<ul style="list-style-type: none"> • Enema (air or water-soluble contrast) • Surgical removal of lead point (if present)

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Intussusception is the telescoping of one bowel segment into the lumen of another. Affected patients experience **sudden episodes of excruciating abdominal pain** that progressively increase in frequency. Children may draw up their legs in an attempt to relieve the pain and act normally between episodes. Stools may be bloody and mucousy (eg, "**currant jelly**") from bowel wall ischemia. The telescoped bowel is occasionally palpable in the shape of a cylinder or sausage and appears as a "**target sign**" on ultrasound.

Most cases of intussusception (~75%) occur before age 2 following a viral illness and have no identifiable lead point. The antecedent illness (eg, gastroenteritis) is thought to cause hypertrophy of the Peyer patches (**Choice A**) in the lymphoid-rich terminal ileum, thereby serving as a nidus for telescoping. However, intussusception in older children should raise concern for a pathological lead point, especially in the setting of **recurrence**. **Meckel's diverticulum** is the most common congenital gastrointestinal anomaly and should be suspected in all children with recurrent intussusception. The patient can be asymptomatic until the diverticulum is caught and dragged into another

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(**Choice B**) Inspissated stool in cystic fibrosis can serve as a lead point due to inability of the intestines to propel viscous stool effectively. This patient has no symptoms of cystic fibrosis (eg, recurrent respiratory infections, poor growth) and should have normal stool consistency.

(**Choice D**) Burkitt lymphoma is an aggressive, rapidly growing B-cell tumor. The sporadic variant often involves the distal ileum and presents as intussusception. This patient's prior intussusception in toddlerhood and otherwise good health favor a chronic, congenital lead point rather than a new cancer.

(**Choice E**) Henoch-Schönlein purpura increases the risk of intussusception due to small-bowel hematoma formation from the autoimmune vasculitis. **Palpable purpura** and joint pain are usually the first manifestations of Henoch-Schönlein purpura.

Educational objective:

A pathological lead point should be suspected in older children with recurrent intussusception. Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract and can be asymptomatic between episodes of telescoping. Surgical resection is required to treat and prevent complications of obstruction.

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References:

1. **Meckel diverticulum: the Mayo Clinic experience with 1476 patients (1950-2002).**
2. **Intussusception in children--clinical presentation, diagnosis and management.**

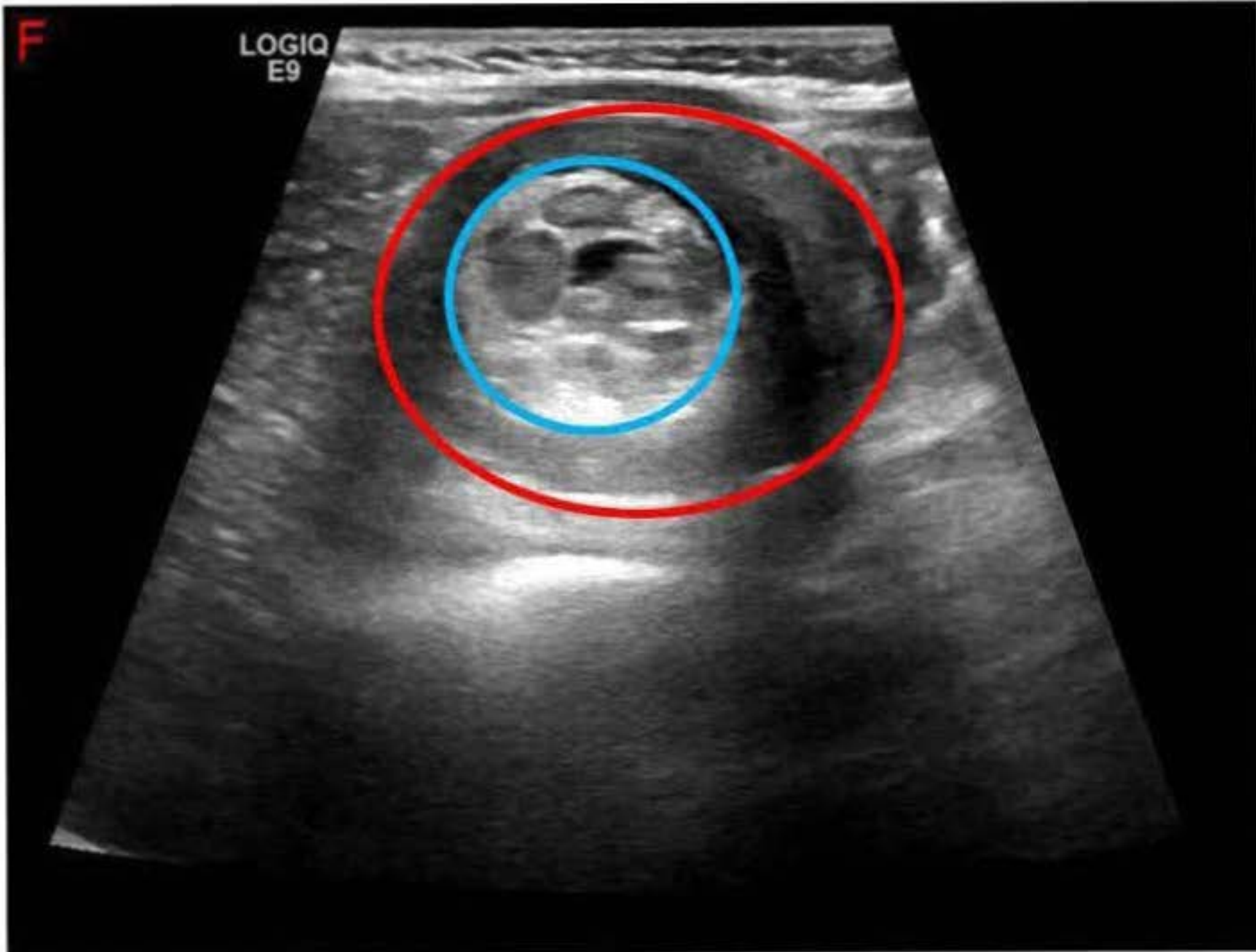
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tools in intussusception



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intussusception



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