

Irregularly shaped abdominal mass

Four years earlier, our patient had multiple abdominal surgeries. Now he had a nontender mass that was growing ... and growing.

A **46-YEAR-OLD MAN** sought care at our clinic for an abdominal mass, fatigue, and shortness of breath. He also indicated that he was feeling depressed.

Four years earlier, he'd had a prolonged hospitalization for severe cor pulmonale, during which he suffered a perforated cecum. He had multiple abdominal surgeries, including a right hemicolectomy. His post-operative course was complicated by multi-system organ failure and several nosocomial infections.

In the wake of his recovery, he developed an anterior midline abdominal mass that slowly

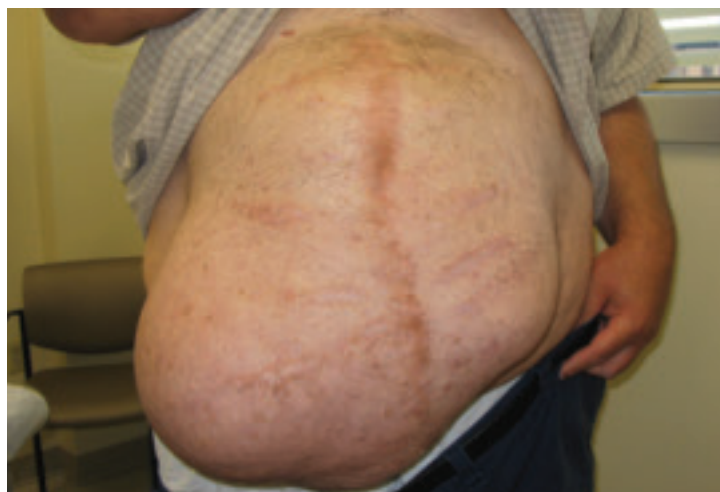
ly enlarged over the following years (**FIGURE 1**). He sought a surgical consultation, but was deferred because of his high-risk operative profile.

Our examination of the patient revealed an anterior, midline, irregularly shaped mass measuring 14 × 20 in. The nontender mass was hollow to percussion and was not as prominent when the patient was supine.

- WHAT IS YOUR DIAGNOSIS?
- HOW WOULD YOU TREAT THIS PATIENT?

FIGURE 1

Abdominal mass measuring 14 × 20 in



Four years earlier, this 46-year-old patient had undergone multiple abdominal surgeries. On this visit, he sought care for a nontender mass that was hollow to percussion.

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**5 common derm
mistakes and how
to avoid them**

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> **Incarceration becomes a significant risk if a hernia is not reducible.**

Diagnosis: Ventral hernia

An abdominal ultrasound revealed subcutaneous, peristalsing bowel loops consistent with a ventral hernia (FIGURE 2). A small amount of ascites was also found.

Most abdominal wall hernias occur in the inguinal region, but in 2003 there were 360,000 ventral hernia repairs performed in the United States.¹ Ventral hernias can be further classified as primary or incisional (depending on patient history) and according to their location—midline (epigastric and umbilical) or lateral (Spigelian and lumbar).²

An abdominal hernia typically presents as a nontender, protruding mass that is either stable in size or gradually expands. The mass may be pulsatile, depending on the contents of the hernia and their activity. Hernias may be reducible, meaning that the contents are able to return to the abdominal cavity with external pressure or if the patient is supine. If a hernia is not reducible, then incarceration becomes a significant risk. Compromised blood supply to the incarcerated organ(s) can lead to tissue necrosis and viscous perforation. Epigastric hernias, in particular, carry a high risk of incarceration.³

3 conditions comprise the differential

The differential diagnosis includes diastasis recti, ascites, and lipoma.

■ **Diastasis recti** is a separation of the rectus abdominus muscles at the linea alba. It is

seen almost exclusively in pregnant women and newborns. In this condition, the flat abdominal wall muscles remain intact, and thus abdominal contents would not protrude.

■ **Ascites** is the collection of fluid in the abdominal cavity, secondary to conditions such as cirrhosis or congestive heart failure. In ascites, the abdomen is dull to percussion, with no discrete, irregular mass.

■ **Lipoma** is a solid benign tumor composed of fatty tissue. A lipoma of this size is rare, and would be solid to percussion. Also, it would not be reducible with the patient supine.

Ultrasound or CT scan is diagnostic

After a thorough history and physical examination, ultrasonography or CT often helps differentiate a ventral hernia from other abdominal wall defects. In patients with a ventral hernia, either imaging modality will demonstrate prolapsed loops of hollow viscus.

A CT scan was not an option for our patient because none of the local machines could accommodate the size and shape of his body. He had an abdominal ultrasound instead.

Surgery sets things right

Treatment of a ventral hernia involves either an open or laparoscopic surgical correction, often with the placement of a supportive mesh⁴ (SOR: B, inconsistent or limited-quality patient-oriented evidence). Repair of epigastric hernias is crucial even in asymptomatic patients due to the high rate of incarceration.³

■ **Our patient was referred** to a hernia specialty clinic at a nationally recognized medical center. He moved out of state shortly thereafter and was lost to follow-up. **JFP**

FIGURE 2
Another view of the ventral hernia



PHOTOS COURTESY OF: WILLIAM MURDOCH, MD

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