

Cavernous Hemangioma of the Abdominal Wall: A Case Report

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Abstract

Cavernous hemangioma is a benign vascular malformation that is often asymptomatic but can present diagnostic challenges when located in the abdominal wall. These lesions, formed by blood-filled cavities, are typically discovered incidentally during imaging studies. Although most do not require treatment, some may cause pain or complications, necessitating active monitoring, surgical resection, or endovascular embolization to reduce their size. Early diagnosis and appropriate treatment are crucial to minimize risks. We report the case of a cavernous hemangioma of the abdominal wall treated surgically, along with a review of the literature.

Keywords: Cavernous hemangioma, abdominal wall, surgical resection.

Introduction:

Cavernous hemangioma of the abdominal wall is a rare benign vascular malformation characterized by clusters of abnormally dilated blood vessels. While often asymptomatic and incidentally discovered, it can sometimes lead to pain or complications that require medical intervention. Accurate diagnosis and careful evaluation are essential to determine the appropriate treatment. We present a case of a symptomatic cavernous hemangioma of the abdominal wall that was treated surgically.

Case Report:

The patient was a 56-year-old male with no significant medical history who presented with a gradually enlarging, painful mass in the right iliac fossa. The mass measured six centimeters in its longest dimension and was tender upon palpation. The patient was otherwise in good general health. A soft tissue ultrasound revealed a subcutaneous tissue structure in the right flank (Figure 1), with an intramuscular appearance within the right anterolateral abdominal wall muscles. This was followed by an abdominal CT scan, identifying a tissue mass in the right abdominal wall (Figure 2).

A decision was made to perform a monobloc resection of the mass. Histopathological examination confirmed the diagnosis of a cavernous hemangioma. The postoperative course was uncomplicated.

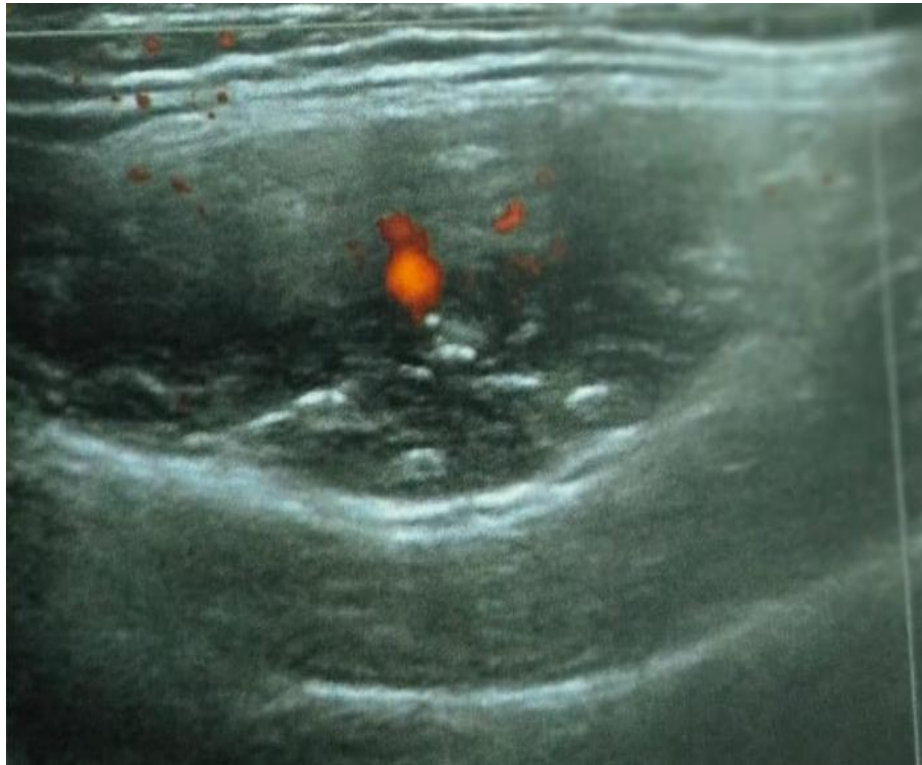


Figure 1: Ultrasound Appearance of the Mass

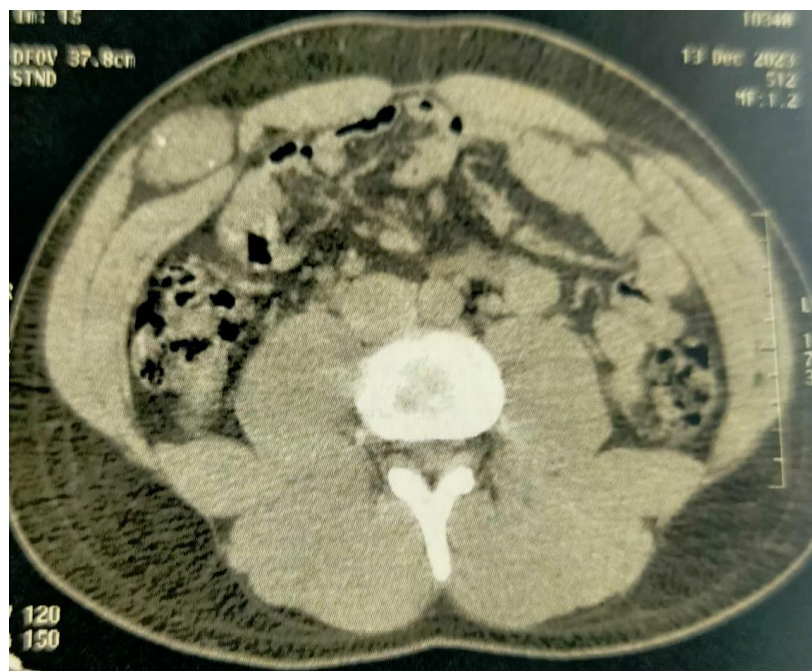


Figure 2: CT Scan Section Showing the Abdominal Wall Mass



Figure 3: Operative Specimen

Discussion:

Cavernous hemangioma is a benign vascular malformation characterized by abnormal collections of blood vessels. Although these hemangiomas can form in various body parts, those located in the abdominal wall are relatively rare and can present diagnostic and therapeutic challenges (1).

Cavernous hemangiomas typically develop from capillaries that dilate and form blood-filled cavities resembling cysts. When these lesions occur in the abdominal wall, they can develop within soft tissues, potentially leading to complications due to their proximity to internal organs.

Most cavernous hemangiomas of the abdominal wall are asymptomatic and are often incidentally discovered during imaging studies conducted for other reasons. However, in some cases, they can cause abdominal pain present as a palpable mass in the abdominal wall or even lead to complications such as internal bleeding (1,2).

The diagnosis of cavernous hemangiomas in the abdominal wall primarily relies on imaging techniques such as abdominal ultrasound and computed tomography (CT) scans, which provide detailed visualization of the lesion and its relationship with surrounding structures. Magnetic resonance imaging (MRI), though less commonly used, can offer valuable information about the tissue characteristics of hemangiomas.

Most cavernous hemangiomas do not require treatment, particularly if they are asymptomatic. However, in cases where they cause pain or complications, various treatment options may be considered—these range from active surveillance for asymptomatic cases to surgical resection for symptomatic lesions (2,3). Endovascular embolization can also be proposed to reduce blood supply and decrease hemangioma size (4,5).

In summary, cavernous hemangioma of the abdominal wall is generally a benign lesion, but it may require medical attention in certain cases. Early diagnosis and an appropriate therapeutic approach are crucial for managing this vascular malformation and minimizing the risk of complications.

Conclusion:

The treatment choice for a cavernous hemangioma of the abdominal wall depends on the clinical presentation, ranging from simple surveillance to more invasive interventions such as surgical resection or embolization. Early diagnosis and appropriate management help minimize risks and ensure a favorable prognosis.

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