

Surgical Treatment of a Giant Spontaneous Abdominal Wall Hematoma

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To the Editor: Spontaneous abdominal wall hematoma (SAWH) is an uncommon cause of acute abdominal pain and is always misdiagnosed. Herein, we report a successful treatment of a case diagnosed with SAWH; to the best of our knowledge, this is an extremely rare case of giant SAWH from China.

On January 3, 2016, a 65-year-old man was transferred to our hospital for developing increasingly severe abdominal pain after standing up rapidly on the morning. He denied any medical history, except hypertension for 3 years. On arrival, a moderate tenderness, painful mass measuring approximately 12 cm × 10 cm could be palpable on the right abdomen. His vital signs and hematological and biochemical parameters were normal, except neutrophil ratios 82.4%, hemoglobin 83 g/L, and C-reactive protein 24.01 mg/L. The ultrasound revealed a hypochoic mass in the right abdomen with invisible blood flow signal. Computed tomography (CT) [Figure 1a] and contrast-enhanced CT scan [Figure 1b] revealed a high-density lesion with CT value of 54–73 HU displacing in the abdominal cavity. Magnetic resonance imaging (MRI) showed a giant mass in the abdomen [Figure 1c]. The mass was suspected as an abdominal wall hematoma and the diagnosis was confirmed in operation. Operative finding was a giant hematoma (about 13 cm × 12 cm × 10 cm) that between the rectus abdominis and peritoneum and it was removed thoroughly. The coagulants and antibiotics were used postoperatively. The patient recovered well during 1-year follow-up [Figure 1d].

SAWH is very rare with limited case reports present in literature and poses a diagnostic challenge as their symptoms are nonspecific.^[1] The risk factors included older age, systemic anticoagulation, abdominal wall trauma, and diseases such as leukemia, hemophilia, hypertension, or arteriosclerosis.^[2,3] In this case, we believe that the hematoma is secondary to the excessive contraction of muscle caused by standing up rapidly since no other physical trauma occurred or use of any anticoagulants during this time. Acute abdominal pain or painful mass in the abdominal wall may be the primary symptoms of SAWH. Carnett's test^[4] is useful for differentiating abdominal wall pain from intra-abdominal pain. It might also present with dysuria or intestinal obstruction if the hematoma displaces the urinary bladder or the intestines. If bleeding is uncontrollable in the short time, signs of shock will be presented. The rarity and the failure to consider the diagnosis might lead to delay in treatment and unnecessary surgery. Ultrasound, CT, MRI, and computed tomography angiography are

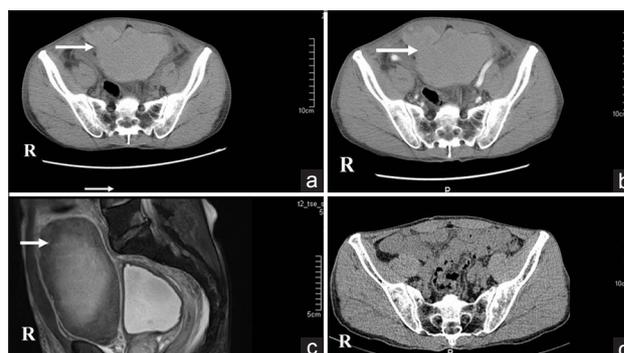


Figure 1: (a) Computed tomography scan with arrow pointing to a mass in the right lower quadrant. (b) Contrast-enhanced computed tomography scan with arrow pointing to a mass in the right lower quadrant. (c) Magnetic resonance imaging scan demonstrates a 12.7 cm × 11.4 cm × 6.7 cm abdominal wall mass in the right lower quadrant. The white arrow indicates the mass lesion. (d) One-year later, follow-up computed tomography shows no mass lesion in the abdominal wall.

useful diagnostic methods, which are high sensitivity and specificity for diagnosis. Diagnosis of the hematoma can also be confirmed by ultrasound-guided aspiration.

Conservative treatment for abdominal wall hematoma is acceptable when the hematoma is not increasing in size and the hemodynamic monitoring is stable. If failed, transcatheter arterial embolization with gelfoam or microcoils^[5] will be effective and less invasive than surgery in controlling active bleeding. Surgery is usually reserved for a patient who has failed less invasive approaches or complications exist.

Declaration of patient consent

The authors certify that they have obtained all appropriate

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patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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