Spontaneous Retroperitoneal Hematoma Arising from an Adrenal Gland Mass

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Spontaneous retroperitoneal hematoma (SRH) is a rare but potentially fatal diagnosis. SRH is defined as bleeding into the retroperitoneal space without preceding traumatic or iatrogenic causes. The history and exam are often nonspecific which may lead to misdiagnosis. Abdominal pain is the most common symptom, but leg, back, and hip pain are also reported. The most commonly reported risk factors for SRH include anticoagulation therapy and coagulopathies. One less commonly reported risk factor is the presence of highly vascular retroperitoneal lesions such as neoplasms. In this case report, we report a case of SRH in a patient with known cirrhosis and hepatocellular carcinoma (HCC) arising from an adrenal gland mass.

A 55-year-old male presented to the emergency department with abdominal pain. The pain started approximately two hours prior to arrival while at rest and is associated with nausea, vomiting, and constipation. Patient's medical history included cirrhosis secondary to a history of alcohol use and hepatitis B, HCC, recently diagnosed adrenal mass, and multiple previous intraabdominal surgeries. He denied any chronic anticoagulant use. On exam, the patient was in significant distress refractory to multiple doses of analgesics and antiemetics. Computed tomography (CT) of the abdomen and pelvis with intravenous (IV) contrast showed a large retroperitoneal hematoma measuring 10.2 x 6.2 x 9.7 centimeters (cm) with active extravasation of contrast within the hematoma with the left adrenal gland as the likely source. The patient was transferred for CT angiography and evaluation by interventional radiology (IR). The patient became hypotensive and did require one unit of blood transfusion. The patient was taken for embolization, but no source of active bleeding was identified, and the patient was admitted to the intensive care unit (ICU) for observation. His pain improved, and he did not require any additional therapies or procedures and was discharged home.

The presentation of SRH is often nonspecific, and some of the commonly reported risk factors may be unreliable. In one of the largest cohort studies of patients with SRH conducted, only 89 cases of SRH were identified over an 8-year period, and one third were not on chronic anticoagulation therapy. In this group of patients, a thorough history is important as those with coagulopathies are at increased risk for SRH, and those with a potential source of bleeding, such as a retroperitoneal malignancy, as in this case, are at even higher risk. Although most cases of SRH respond well to medical management alone, timely diagnosis remains important as up to a fourth may require emergent IR intervention and some may require surgical intervention. Even with appropriate management, short- and long-term mortality remains high. SRH remains a rare but life-threatening diagnosis that should always be considered in high-risk patients.