

# Conservative management of spontaneous retroperitoneal bleeding after severe coughing

To the Editor,

A 66-year-old man was admitted to the emergency room with a sudden onset of abdominal pain after severe coughing. He had a history of excessive coughing due to acute bronchitis for 15 days and no other comorbidities. Physical examination identified mild abdominal distention and epigastric rebound tenderness. His arterial blood pressure was 70/50 mmHg, and his heart rate was 120/min. Laboratory tests were within normal ranges (hemoglobin, hematocrit, PTZ and INR were 13,80 g/dL, 40.10 %, 14.40 sec, and 1.2). Abdominal computed tomography (CT) (Somatom Spirit; Siemens, Erlangen, Germany) revealed retroperitoneal bleeding and a extremely large hematoma (Figure 1). After initial resuscitation and stabilization with intravenous fluid replacement, his blood pressure and pulse rate returned to within the normal ranges. However on the second day of admission, his hemoglobin level was 9.14 g/dL, hematocrit was 27.20 %. Four units of blood was transfused along with 6 units of fresh frozen plasma within 3 days in the intensive care unit. After supportive treatment, the patient's vital signs stabilized, and control hemoglobin was detected as 11.50 g/dL. He was discharged uneventfully on the sixth day after admission.

Spontaneous retroperitoneal bleeding (SRB) is a potentially fatal clinical entity that occurs without trauma or surgical intervention. SRB is generally seen as a result of anticoagulant therapy, tumors, or coagulopathy or in association with hemodialysis (1,2). Our case, which was free of predisposing factors such as anticoagulant therapy, tumors, vascular lesion or trauma, demonstrates that SRB can occur as a result of a sudden increase in intra-abdominal pressure due to severe coughing. To the best of our knowledge, there have been no reported cases of SRB that developed after severe coughing.

The clinical presentations vary from abdominal or back pain to abdominal compartment syndrome to hypo-



**Figure 1.** Retroperitoneal haematoma (arrow) without source of bleeding.

volemic shock related symptoms (3). Abdominal CT is the modality of choice for diagnosing SRB. Conservative management is recommended if the patient is hemodynamically stable. However, if conservative treatment fails or in the case of on-going bleeding, interventional radiologic methods or surgery can be performe (4,5). Because of the varying signs and symptoms, SRB can be difficult to diagnose. However, a delay in its diagnosis and treatment may lead to significant morbidity and mortality. Surgeons and emergency physicians should consider SRB in any patient with abdominal pain and unexplained low blood pressure or hemorrhagic shock.

## Ethics Committee Approval: N/A.

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