Retroperitoneal hematoma in Crohn’s disease patient with warfarin therapy

Dear Editor,

We present the case of a 49-year-old male, with sulfa, penicillin and cephalosporin allergy, previously diagnosed with Crohn’s disease at the age of 15, corticodependent, with azathioprine therapy 150 mg per day, permanent ileostomy and on warfarin therapy for 6 years due to superior limb venous thrombosis event.

We followed him as outpatient in the Inflammatory Bowel Disease Unit. He complained of lethargy with a concomitant slightly decrease in the hemoglobin and hematocrit values. For that reason, he was started on oral iron therapy and low doses of oral corticosteroids because the patient also presented an increase in the frequency of ileostomy’s drainage. Neither upper and lower endoscopies (through the ileostomy) nor videocapsule endoscopy revealed abnormalities. Although the abdominal scan showed at least two abscesses in the mesogastric area, one of 10cm in diameter and the other adjacent of 9cm, he did not refer abdominal pain, fever or leucocytes (Fig. 1A).

The patient was then started on empirical antibiotic therapy based on IV metronidazol and piperacilina/tazobactam. The abdominal magnetic resonance did not show different findings compared with previously abdominal tomography, but it demonstrated edema and periarticular fluid that produced an enlargement of the left coxofemoral articulation. The patient did not improve, and in the following days presented inguinal pain that radiated to the ipsilateral knee with a significantly functional impairment, back pain and mass sensation located on left flank associated with hypotension and tachycardia that went worse in a couple of hours. Blood analysis showed an elevated white cell count and a decrease in the hemoglobin value. Another abdominal tomography was urgently performed, and it showed a massive retroperitoneal hematoma (Fig. 1B).

Fig. 1. A. Two collections were observed at the mesogastrium level, one measured about 10 cm in diameter and the other 9 cm. B. Large retroperitoneal collection located over the left psoas muscle resulting in retroperitoneal hematoma.
We must state that our patient was on warfarin therapy for six years and 6 months before he was admitted to hospital and presented a fluctuation in his INR (international normalized ratio) value: 2.7, 1.6, 3.1 and 3.6. The patient was in hemodynamic shock so he underwent emergency surgery that showed that the retroperitoneal hematoma was due to the rupture of the psoas muscle. He entered the intensive care unit, where he was stabilized. His clinical, analytic and radiologic results improved, controlling the bleeding and the abdominal abscesses that were also drained.

Discussion

Crohn’s disease is an inflammatory chronic entity that presents periods of flare and remission. It is well known that because of its transmural character, there are more predispositions to form fistulas and abdominal abscesses, and also to produce thrombotic phenomenon due to unknown mechanisms. In our case, the patient was on warfarin therapy because of the thrombotic events he presented in the past. Warfarin is an extensively used agent in the prophylaxis of thromboembolic events, and because of its many pharmacology interactions and its significant variability in its therapeutic ranges, it is always recommended its strict follow-up.

Our case is exceptional, because although there have been reports of retroperitoneal hematoma in anticoagulated patients (1-6), up to now no cases of Crohn’s disease and retroperitoneal hematoma have been reported, in addition to an abdominal abscess formation, that we believe has enhanced and promoted retroperitoneal hemorrhage. On the other hand, as we know, corticosteroids are an essential tool in the treatment of chronic inflammatory diseases such as rheumatoid arthritis and inflammatory bowel disease, but we also know that their use is associated with multiple adverse effects. And in this sense some publications describe that warfarin interactions with other drugs increase the risk of bleeding. In fact, it has been postulated that steroids influence hepatic metabolism of warfarin, thereby increasing their availability, and thus, the risk of bleeding (7-9). As discussed before, there are reported cases of retroperitoneal hematoma secondary to rupture of the ilio-psoas muscle in anticoagulated patients, as our patient (3-5), and also it has been reported cases of retroperitoneal hematoma in anticoagulated patients receiving metronidazole and paracetamol (5,10), and we believe that because patients with inflammatory bowel disease need corticosteroid treatment on a regular basis as well as antibiotics, especially when they are with disease activity, we must emphasize the importance of studying these drug interactions that may not be taken into account in the context of a patient with poor outcome of his underlying disease as it is the case of the patient presented before, and therefore complex to treat.

In conclusion, we think it is important to notify this case, and insist in the necessity of using a more rigorous preventive strategy, with more thrombotic controls in patients with both inflammatory bowel disease and chronic anticoagulation, and even more cautious if they also are on corticoids or antibiotics therapy, because they are undoubtedly a high risk group for the development of complications.

Calixto Duarte-Chang, Luisa Castro-Laria, Federico Arguelles-Arias, Ángel Caunedo-Álvarez and Juan Manuel Herreras-Gutiérrez

UGC Digestive Disease. Hospital del Universitario Virgen Macarena. Sevilla, Spain

References