A 68-year-old male was admitted to our hospital due to fever and abdominal pain in the left lower quadrant that started 2 days prior to admission.

His past medical history was significant for coronary artery by-pass surgery 15 years earlier, perforation of the stomach 20 years earlier, and atrial fibrillation. His medication included acenocoumarol, isosorbide mononitrate, ramipril, furosemide, and carvedilol. The patient had dental work done 7 days prior to admission. He reported that he had stopped taking some of his medications, including acenocoumarol, prior to the visit to the dentist. However, two days prior to his admission he re-started taking acenocoumarol.

His temperature was 37.8 degrees Celsius. His blood pressure was 130/80 mmHg and his pulse rate was 120/min. Physical examination showed left lower quadrant abdominal tenderness and decreased bowel sounds. Routine laboratory testing showed: ALP 223 U/L, SGOT 41 U/L, á-GT 239 U/L, total bilirubin 2.3 mg/dL, INR 2.33, prothrombin time 28.4 sec, partial thromboplastin time 49.2 sec, white blood cell count 15.70 K/ìl, neutrophills 83.5%, red blood cell count 3.77 M/ìl, hematocrit 39.3%, C- reactive protein 26.57 mg/dL (normal values up to 0.5 mg/dL), urea 34 mg/dL, creatinine 1.2 mg/dL.

A CT scan of the abdomen showed an area of hypodensity of the spleen with a size of 9.5x3 cm (Figure). Ascites was also noted.

Diagnosis
The fact that the patient discontinued acenocoumarol 7 days prior to his admission to the hospital combined with the clinical manifestations (left lower quadrant pain and mild fever) and the CT scan findings (large hypodense area in the spleen) suggest splenic infarct as the most likely diagnosis. Blood cultures were negative.

Management
The patient did not receive anything per os for 4 days. He also received intravenous antibiotic treatment with amoxycillin/clavulanic acid 1000/200 mg every 8 hours and ciprofloxacin 400 mg every 12 hours, for 7 days, in case a splenic abscess had been formed. The patient's health improved and was discharged from the hospital. He was given treatment with oral azithromycin 500 mg once a day, for 7 days. He had no problems during a 3-month follow up.

Teaching points
- Isolated splenic infarction can be caused by embolic diseases, hematological malignancies, aortic dissection, splenic torsion, vasculitis, or vasculospasm secondary to treatment with vasopressors (1).
- Clinical features of splenic infarcts include left hypochondrial pain with fever and/or left pleural effusion. Anemia, leukocytosis and elevated LDH may occur. Diagnosis can be assisted by ultrasound, CT scan, nuclear imaging and angiography (2).
- During the last 30 years partial splenic embolization is a technique that is performed in cirrhotic patients for hypersplenism, portal hypertension, and other diseases with acceptable results. Moreover, it has been shown that splenectomy increases mortality 4-fold in adults. On the basis of the above data we proceeded initially to a conservative
management with eventually good results.
- Complications of splenic embolization are serious and include splenic abscess formation, rupture of the spleen, and septicemia (3).
- Splenic abscess is a relatively rare lesion. The most frequent agent found in the splenic abscess is Streptococcus. While splenectomy is the most preferred method of treatment, today conservative methods such as percutaneous drainage are also applied. Wide-spectrum antibiotic treatment should be given to patients that are not operated on (4).

In conclusion, the management of splenic infarct may initially be conservative provided the patient is hemodynamically stable and has no signs of uncontrolled sepsis. Otherwise, a splenectomy has to be performed, in order to treat the above mentioned complications.

References

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