Internal Medicine Quiz – Case 9

A 63 year-old woman was admitted to our department due to severe diffuse abdominal pain that started 4 days earlier, after meal ingestion, and was accompanied by diarrhea containing blood, vomiting, abdominal distention and low grade fever. Her past medical history included polycythemia vera diagnosed 20 years earlier and treated with hydroxyurea; systemic hypertension under treatment with p.o. medication, and mild renal failure. She suffered an acute myocardial infarction 4 years ago, and recurrent deep venous thrombosis of the right lower limb followed by 3 episodes of pulmonary embolism. Due to these problems a vena cava filter had been put. The patient has been under treatment with acenocoumarol for the last 4 years. The physical examination revealed that the patient's heart rate was 115 bpm, her blood pressure was 120/70 mmHg, her temperature was 37.5 °C, and her respiratory rate 22 breaths/min. The patient had also reduced bowel sounds, tympanic sound on percussion, and abdominal rebound tenderness. Rectal examination was painful and no content was identified.

Upon admission, the full blood count was as follows: Ht 52%, Hb 16.6 g/dL, WBC: 47,710/μL (WBC differential: neutrophils 96%, lymphocytes 2%, monocytes 2%) and PLT: 179,000/μL. The biochemical analysis showed an increased serum creatinine (1.9 mg/dL), amylase (512 U/L) and LDH (1163 U/L) with no abnormalities in serum electrolytes and liver function tests. The patient's arterial blood gases were as follows: pH: 7.39, PO₂: 74 mmHg, PCO₂: 32 mmHg, HCO₃⁻: 17 mmol/L. Her prothrombin time was prolonged (PT: 42.8 sec). Her ECG and chest X-ray were normal, while the abdominal X-ray revealed multiple small bowel air-fluid levels (fig. 1).

An abdominal CT scan was performed (fig. 2), and the results led the patient to undergo an urgent surgical operation.

Comment

Acute insufficiency of mesenteric arterial blood flow accounts for 60% to 70% of cases of mesenteric ischemia and results to mortality rate, which exceeds 60%. The diagnosis of acute mesenteric ischemia depends upon a high clinical suspicion, especially in patients with known risk factors and rapid diagnosis is essential to prevent its catastrophic consequences.

The above patient underwent surgical exploration and wide excision of her small intestine, developed acute renal failure 3 days postoperatively and died 7 days later.

Corresponding author:
P. Diamantopoulos, First Department of Internal Medicine, National and Kapodistrian University of Athens, School of Medicine, “Laiko” General Hospital, Athens, Greece, Tel.:+30210.7456212, Fax:+20210.7788830 e-mail:pandiamantopoulos@gmail.com

Figure 1

Figure 2