A Rare Complication with the Concomitant use of Warfarin and Nonsteroidal Anti-Inflammatory Drugs: Hemoperitoneum and Intramural Small Bowel Hematoma

Dear Editor,

Oral anticoagulants are recommended for the prophylaxis of venous thromboembolism in acute thrombosis and also in cases of recurrent deep venous thrombosis. However, their use has been associated with an increased incidence of hemorrhagic complications. We herein describe an elderly woman who took warfarin and nonsteroidal anti-inflammatory drugs (NSAIDs) and subsequently developed hemoperitoneum and small bowel wall hematoma presenting initially with abdominal pain.

An 80-year-old woman with a history of hypertension, diabetes mellitus, and recurrent deep venous thrombosis was admitted to the emergency department (ED) with abdominal pain. She had been on warfarin treatment for 10 years. She had performed prothrombin time testing regularly. Her last test result was 2.1 for the international normalized ratio (INR). She did not give a history of melena or hematochezia. She also occasionally took an anti-inflammatory drug for arthritis pain. She had taken this drug 3 days before this ED admission. On admission, her vital signs were 98/min for pulse, 95/60 mmHg for blood pressure, 36.7°C for body temperature, and 25/min for respiratory rate. Diffuse tenderness throughout the abdomen was found on abdominal examination. There was no melena or blood on rectal examination, and nor was there any obvious source of external bleeding. After a clinical assessment of acute abdomen, possible ischemic gut was considered and a computed tomography (CT) abdominal angiogram was undertaken. Distal jejunum and proximal ileal transmural thickening along with extensive free peritoneal fluid was found on the abdominal CT. There were no vascular abnormalities in the superior and inferior mesenteric arteries and their branches (figure 1). During observation in the ED, her hemoglobin level dropped to 3 g/dL and she developed hemorrhagic shock. Then, she was admitted to the medical intensive care unit for treatment. On admission, she had a prothrombin time of 68.9 seconds and INR of 12. Vitamin K supplements and fresh frozen plasma were transfused to normalize the INR, and red blood cells were transfused to normalize the hemoglobin level. She was clinically stabilized and transferred to the medical ward in 3 days.

NSAIDs are known to interact with warfarin. Besides the antiplatelet function of NSAIDs, their high protein binding and cytochrome P450 (CYP)-dependent clearance mechanisms can affect the pharmacological action of warfarin.¹ There have been many reports and warnings about this drug interaction between warfarin and NSAIDs.^{2,3} Hemoperitoneum and intramural small bowel hematoma formation are uncommon complications in patients with a concomitant use of warfarin and NSAIDs.^{4,5} Abdominal CT is the gold standard for the imaging of this condition. And as was the case in our patient, warfarin overdose generally requires medical treatment.

Conflict of Interest: None declared.

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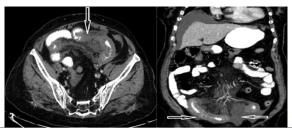


Figure 1: Abdominal computed tomography scan of our patientshows hemoperitoneum and small bowel wall hematoma.

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