IntroductIon
Gastric intramural hematoma is extremely rare. Most ca-
ses of gastrointestinal tract hematomas are located in the
esophagus or in the duodenum, being usually associated
with anticoagulant therapy, coagulopathy, trauma, ulcer,
amyloid angiopathy, repeated vomiting, complications
of endoscopy and idiopathic disease.1-7 A case of gastric
hematoma in a patient using warfarin in a conservative
measure will be described in this short report.

A 41-year-old female patient came to a clinic complai-
ning of four-day nausea and abdominal pain. She refer-
red to a mild pain, which was intermittent, burning, ra-
diating to the left hypochondrium, associated with
nausea and one vomiting event. There was no history of
alcohol use, tobacco smoking or overeating. The past me-
dical history had shown leiomyosarcoma in the right kid-
nery one year prior to admission, treated with right nep-
hrectomy. She had also had thrombosis of inferior vena
cava extending to both common iliac veins to the right
atrium beyond pancreatic and adrenal metastasis. She
had undergone maintenance treatment with warfarin and
palliative chemotherapy with docetaxel and gemcitabine.

Initially she had been medicated with omeprazole
and tramadol with a good relief of symptoms. Labora-
tory data have shown hemoglobin 10.1 g/dL (12-15.5),
leucocytes 28.4 x 10⁹/l (3.5–10.5), thrombocytes 148 x10⁹/l
(150–450), amylase 52 U/l (0–99), creatinine 1.41 mg/dL
(0.5-0.9), INR 3.51 (0.8-1.2) and normal values of markers
of myocardial necrosis and hepatic injury. After a first
two-day assessment, she developed severe epigastric pain,
pale skin, sudoresis and lipothymia. Physical examina-
tion had shown a distressed woman with blood pressure
of 74/38 mmHg, a pulse rate of 110 per minute, a respi-
ration rate of 26 per minute and normal temperature.
Further physical examination presented pain in epiga-
stric palpatlon. Electrocardiogram showed sinusal tachy-
cardia with hemoglobin levels of 3.9 g/dL, creatinine 2.52
mg/dL and INR 8.76. She had been resuscitated by sali-
ne infusion and red blood cells transfusion. A computed
tomography scan of the abdomen demonstrated a 17.6 x
12.4 x 7.08 cm large fluid collection in the stomach, he-
terogenic with hyper attenuating areas in between, con-
sistent with hematoma, which after injection of contrast
medium, had shown foci of active bleeding (Figure 1).

The oral anticoagulation was discontinued and fresh
frozen plasma transfusion was performed. The patient
responded to these initial procedures well, being hemody-
namically stable with corrected anemia and coagulation
tests. She was treated conservatively with fasting and in-
travenous proton pump infusion for 3 days. She was dis-
charged with oral feeding five days after hospitalization.

Gastric intramural hematoma after anticoagulant
therapy is an uncommon and extremely rare disorder
with few reports published in the literature.1-6 Hemato-
ma can develop in the submucosal layer and the proper
muscle layer of the gastrointestinal wall.8 It can be ac-
companied by hematemesis, nausea, vomiting, epigas-
tric pain that can simulate acute coronary syndrome.4
In this present case study, gemcitabine had increased the effects of warfarin, contributing to the formation of hematoma.

CT scanning has become the test of choice in the diagnostic procedure. Gastrointestinal hematoma may be described as well-circumscribed, high-density homogeneous masses, lacking signs of calcification and infiltration in other organs. Angiography can be performed, according to therapeutic goals, especially when there is evidence of active bleeding.

There is no standard therapy and most cases are managed conservatively with blood transfusion and anticoagulation reversal. In hematoma with substantial bleeding and a trend toward enlargement, transcatheter arterial embolization or surgical therapy (including total gastrectomy) may be indicated. Surgery is also a treatment of choice, especially in patients with hematomas which are difficult to distinguish from tumors.

**References**