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Upper Gastrointestinal Bleeding from Gastrointestinal Metastases of a Hemangiosarcoma

A 65-year-old man was admitted because of epigastric pain, melena and anemia. Endoscopic examination of the duodenum demonstrated multiple red and purple polypoid lesions with central ulceration that were about 4–5 mm in diameter (Figure **1**). In the second and third parts of the duodenum there were at least 50 of these lesions. Several lesions showed signs of bleeding and were injected with polidocanol 1% (Aethoxysclerol). Histological examination of the biopsies revealed highly pleomorphic, medium to large sized cells arranged in tubular structures and solid cords (Figure **2**). Therefore, a diagnosis of angiosarcoma, primary or metastatic, was made.

Abdominal ultrasonography as well as abdominal CT showed ascites and two hypodense lesions in the liver.

Past medical history was remarkable for a cerebral angiography that had been performed 47 years ago with Thorotrast as contrast medium. On day 12 after admission the patient finally died of a cardiac arrest.

Autopsy demonstrated a hemangiosarcoma 40 mm in diameter as well as a cholangiocarcinoma of 150 mm in diameter, located in the right and the left lobe of the liver respectively. Metastases of the hemangiosarcoma were found in the heart, pleura, spleen, adrenal glands, dura mater, mediastinal and abdominal lymph nodes, bones, and pancreas. The intestinal metastases found in the duodenum, jejunum, and colon appeared as red and bluish polypoid lesions 2–3 mm in diameter, some of these with central ulceration. Histological examination demonstrated similar findings as in the biopsy specimens.

Hemangiosarcoma is an uncommon tumor entity which may be caused by Thorotrast, vinyl chloride, arsenic, or radiation (1). Primary sites of hemangiosarcoma are the liver, pleura, heart, and the limbs; metastases occur in the lung, bones, liver, lymph nodes, spleen, and intestine (1). Patients treated with Thorotrast have a significantly increased risk of developing cancers, mainly of the liver with a latency period of 30–40 years (2,3). About 65% of the liver tumors are carcinomas of either the cholangiocellular type or the hepatocellular type and the other 35% are hemangiosar-

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comas (2–4). In patients with hemangiosarcomas, intestinal metastases occur in more than 10% of cases (1). Intestinal metastases of hemangiosarcoma show endoscopic features typical of malignant vascular tumors in other sites. Tumors are elevated, bluish or red, and central ulcerations can occur (5). When a hemangiosarcoma is diagnosed, causal factors have to be looked for.

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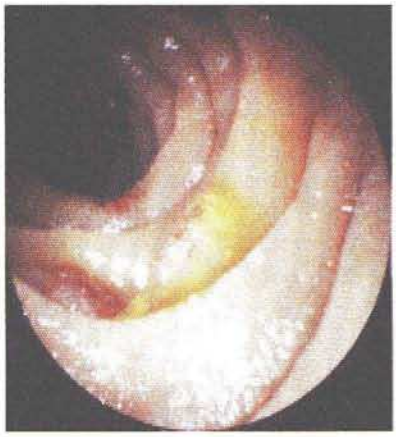

Figure 1: Endoscopic image of multiple, red and bluish, elevated tumors in the second part of the duodenum.

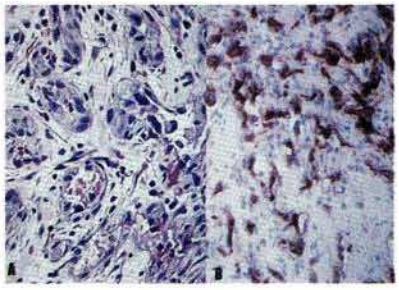

Figure 2: Histological examination shows cords and tubular structures, lined by atypical cells; some of the tubular structures contain erythrocytes (**A**, HE-stein). Immunohistological investigation reveals CD31 expression in the atypical cells (**B**).

References

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