

## Gastric cancer with bone marrow invasion presenting as severe thrombocytopenia

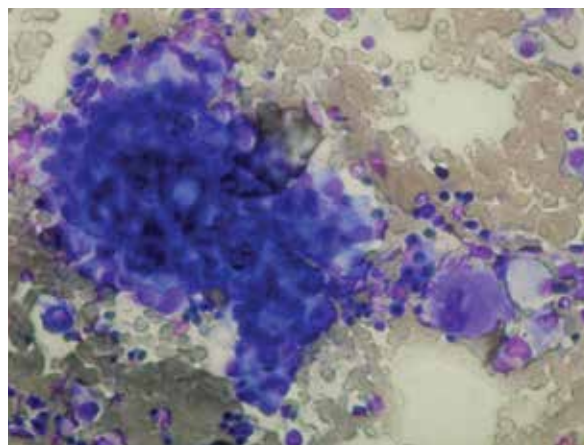
Fifty-two-year-old man presented with back pain beginning a month before coming to a hospital. Patient lost five kilograms. Para-vertebral musculature of the lower back was tense, and percussion over the lumbar spine has provoked severe pain. Laboratory tests revealed a moderate anemia and severe thrombocytopenia (hemoglobin 87 g/L, platelets  $31 \times 10^9/L$ ). Alkaline phosphatase and C-reactive protein were elevated (708 U/L and 134.3 mg/L; respectively).

Based on the gathered evidence, diagnostics focused on the bone marrow disease. Bone scintigraphy showed generalized metastases in spine. Bone marrow biopsy revealed metastasis of adenocarcinoma (Figure 1). After that, the search for a primary tumor was conducted. Upper endoscopy showed the presence of an ulcer on the lesser curvature of the stomach. Histopathology confirmed the mixed type adenocarcinoma. Investigation has not established metastases in the liver or ascites. Patient's condition steadily worsened, and although he was given a large number of platelet transfusions, numerous suffusions developed, as platelet count dropped to  $7 \times 10^9$ .

Patient was discharged on the fifteenth day after the admission, at his own request.

Gastric cancer is usually presented with abdominal symptoms, such as pain in upper abdomen, anorexia and weight loss (1). Laboratory tests in cancer of the stomach may show anemia, abnormal liver function and occult blood in the stool (2).

Metastases of gastric cancer usually involve the liver. Gastric cancer rarely spreads to the bones, which often occurs with cancers of the prostate, breast and lungs (3,4). Symptomatic bone metastases as the first presentation of gastric cancer are extremely rare (5).



**Figure 1.** Clusters of tumor cells with peripherally placed hyperchromatic nuclei in the bone marrow (May-Gruenwald-Giemsa staining x 100).

The complication of bone metastasis can be bone marrow suppression, and anemia is the most common finding.

We report on rare case of severe thrombocytopenia as a dominant sign of gastric carcinoma metastasis in the bone marrow. Findings indicated a serious disease of bone marrow with weight loss, pain in the lumbar region and extreme thrombocytopenia. After bone marrow aspiration revealed metastasis of adenocarcinoma, a survey was conducted, which found that the primary tumor was gastric carcinoma.

**Conflict of Interest:** No conflict of interest was declared by the authors.

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