

Title:

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Ink stained gastric lesions: a rare cause of gastrointestinal bleeding

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A 61-year-old man was hospitalized in our department due to Intermittent melena for 4 days. Laboratory test showed reduced hemoglobin level (10,7g/L). Abdominal computed tomography (CT) showed gastric wall thickening in the body (Fig.1A). Afterwards, the patient underwent a gastroscopy, where multiple pigmented deep ulcers with central depression were found (Fig.1B). Magnifying endoscopy with narrow band imaging showed a widened intervening part and a disordered microvessel structure (Fig.1C). Hematoxylin-eosin staining showed a large number of poorly differentiated heteromorphic cells (Fig.1D). Immunohistochemical staining was positive for SOX-1, S-100 (Fig.1E), Melan-A and HMB45. A gastric malignant melanoma was diagnosed. Although the patient received active treatments such as

chemotherapy and symptomatic support. Unfortunately, distant metastasis appeared soon, leading to a rapid patient's condition deterioration and finally to death.

The differential diagnosis of gastric melanoma should focus in if it is primary or secondary. In fact, there exists controversy whether solitary gastric melanoma represents a primary tumor or a metastasis from an unknow lesion (1). Positron emission tomography CT is a useful diagnostic tool which may find small primary lesions. The diagnosis of gastric melanoma mainly depends on gastroscopy. Typical endoscopic findings are a submucosal lesion with central ulcer and pigmentation, which forms the classic "bull's eye" or "target" sign (2). However, it is easy to be misdiagnosed when melanoma cells contain few or no melanin granules making histological examination necessary (3).

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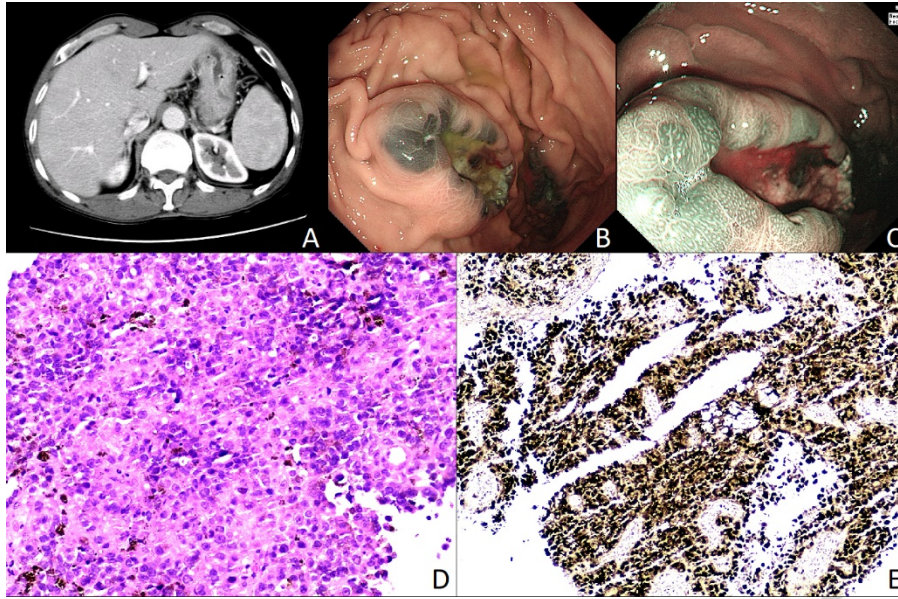


Fig. 1. (A) Abdominal computed tomography showed gastric wall thickening in the body. (B) Gastroscope showed multiple pigmented deep ulcers with central depression. (C) Magnifying endoscopy with narrow band imaging showed a widened intervening part and a disordered micro-vessel structure. (D) Hematoxylin-eosin staining showed a large number of poorly differentiated heteromorphic cells. (E) Immunohistochemical staining was compatible with melanoma pigments.