

# Small black spots in the stomach and duodenum

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## CASE REPORT

A 40-year-old female was admitted to our hospital due to nausea, vomiting, marked weight loss, and dull upper abdominal pain lasting for two months. Her past medical history was unremarkable, but prior to her admission she had taken a proton pump inhibitor, which did not relieve her symptoms. Her physical examination was normal but she was pale; a complete blood count revealed anaemia (haemoglobin 4.9 mmol/l) and an upper gastrointestinal endoscopy disclosed multiple small black spots extending over the whole stomach (*figure 1*) and duodenum. Histopathological examination of these lesions showed tumour infiltration in the gastric lamina propria containing cytoplasmic black pigment (*figure 2*).

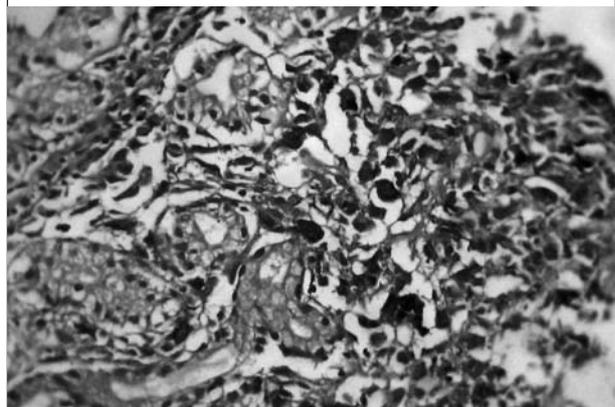
**Figure 1.** Multiple black spots on the gastric body are seen



## WHAT IS YOUR DIAGNOSIS?

See page 131 for the answer to this photo quiz.

**Figure 2.** Tumour infiltration in the gastric lamina propria containing cytoplasmic black pigments (HE x 40)



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ANSWER TO PHOTO QUIZ (ON PAGE 129)  
SMALL BLACK SPOTS IN THE STOMACH AND DUODENUM

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## DIAGNOSIS

After the histopathological examination, the diagnosis of malignant melanoma was made in this patient. As multiple lesions were detected in both the stomach and the duodenum the patient was believed to have metastatic melanoma. However, despite a clinically extensive exploration of the skin, anal region, nose, and the eyes no primary site could be detected. The patient was put on chemotherapy consisting of dacarbazine, but died after the first cycle.

Melanoma, breast and lung cancer are the most common sites for metastasis to the stomach and small intestine,<sup>1</sup> but primary melanoma of the gastrointestinal tract is a very rare entity. Although the cell of origin was not identified since normal stomach epithelium lacks melanocytes, ectopic migration of melanocyte precursors or differentiation of the APUD cells (cells with a capacity for amine precursor

uptake and decarboxylation) to melanocytes have been advocated as possible mechanisms.<sup>2,3</sup> Although we could not identify the primary tumour, the early death of our patient was accepted in favour of metastatic disease.

## REFERENCES

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