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Bizarre endothelial reaction: histological mimicry of epithelial malignancy in gastric endoscopic biopsy

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DESCRIPTION

Gastric endoscopic biopsies often reveal pseudoneoplastic processes which can be misinterpreted as malignant by the unwary.^{1 2}

In this case the lamina propria of the non-ulcerated gastric mucosa was densely infiltrated by epithelioid cells with significant cytological abnormalities. There was marked non-uniform karyomegaly, with irregular nuclear contours and frequent macronucleoli in the infiltrating cells. Some of these cells showed intracytoplasmic lumen formation strongly suggesting poorly differentiated signet ring cell carcinoma (figure 1).

However, careful scrutiny by microscope revealed red blood cells in a rare intracellular lumen and the immunoprofile (vimentin, CD 34 and factor VIII related antigen positive and pan-cytokeratin, CD68 and epithelial membrane antigen negative) confirmed the reactive mesenchymal-endothelial origin of these cells (figure 2).³

Competing interests None.

Patient consent Not obtained.

Figure 1 Lamina propria infiltration by highly atypical epithelioid cells, some of which have intracytoplasmic lumens. A red blood cell is seen within one of these lumens (arrow), while the strange cell in the centre of the field shows a fibrin plug (arrowhead).

Figure 2 Atypical cells marked with von Willebrand Factor (factor VIII related antigen) on immunohistochemistry.

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