

Lanthanum deposition in the gastric mucosa in a patient treated with haemodialysis

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DESCRIPTION

A 74-year-old man presented with chronic stomach discomfort and an episode of malaise that was associated with anaemia. The patient had a history of surgery for kidney cancer and was undergoing haemodialysis owing to a 7-year history of chronic renal failure; he had also been treated with lanthanum carbonate hydrate (62 months). Physical examination revealed mild pallor in his palpebral conjunctiva; however, no other abnormalities were observed. Plain CT revealed an area of high absorption along the lesser curvature of the stomach body (figure 1). Oesophagogastroduodenoscopy was subsequently performed. Although there were no signs of ulcers or tumours, white regional lesions, similar to those observed in cases involving xanthoma, were observed along the lesser curvature of the stomach body to the stomach antrum



Figure 1 Plain CT revealed lanthanum deposition as an area of high-density absorption in the gastric mucosa (arrow).

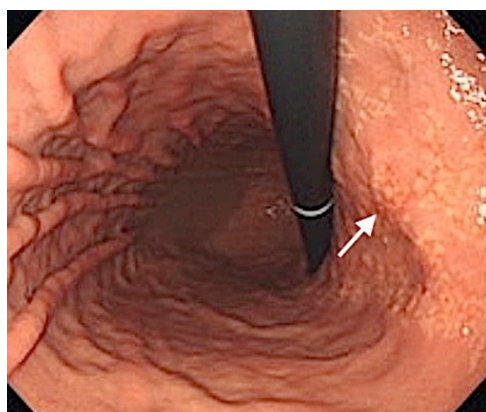


Figure 2 The white lesions were widely observed along the lesser curvature of the gastric body. The arrow indicates the biopsy sites.



Figure 3 The white lesions extended to the gastric antrum.

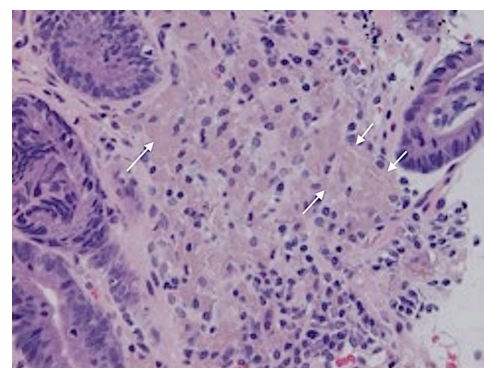


Figure 4 Biopsy of the white lesion revealed increased histiocytes and lanthanum deposition within the lamina propria (arrow). Regenerative changes and intestinal metaplasia were found in gastric mucosa.

(figures 2 and 3). Atrophic changes were not found in most of the stomach body, but map-like redness was observed along the lesser curvature of the stomach body to the stomach angle. Histopathological analysis of the lesions showed increased histiocytes and lanthanum deposition (figure 4). In terms of gastric mucosa, regenerative changes and intestinal metaplasia were found. As the patient was taking lanthanum carbonate, we believed that the white lesions were due to lanthanum deposition. Lanthanum deposition in the stomach was

Learning points

- ▶ Plain CT revealed an area of high absorption in stomach due to lanthanum deposition.
- ▶ Lanthanum deposition in stomach also occurs in *Helicobacter*-negative patients.



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classified as the endoscopic feature, diffuse whitish mucosa in the gastric body and annular whitish mucosa were observed in this case.¹ It has been pointed out that lanthanum deposition may be associated with atrophic mucosa, intestinal metaplasia or foveolar hyperplasia.²⁻⁴ Although not all, those mucosal changes were thought to be associated with *Helicobacter pylori* infection. In our patient, anti-*H. pylori* immunoglobulin G antibody level was <3 U/mL, and pepsinogen-based test was positive, so this patient was thought as the prior *H. pylori* infection. This case was a typical case of lanthanum deposition with regenerative changes and intestinal metaplasia in the stomach.

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