

[ PICTURES IN CLINICAL MEDICINE ]

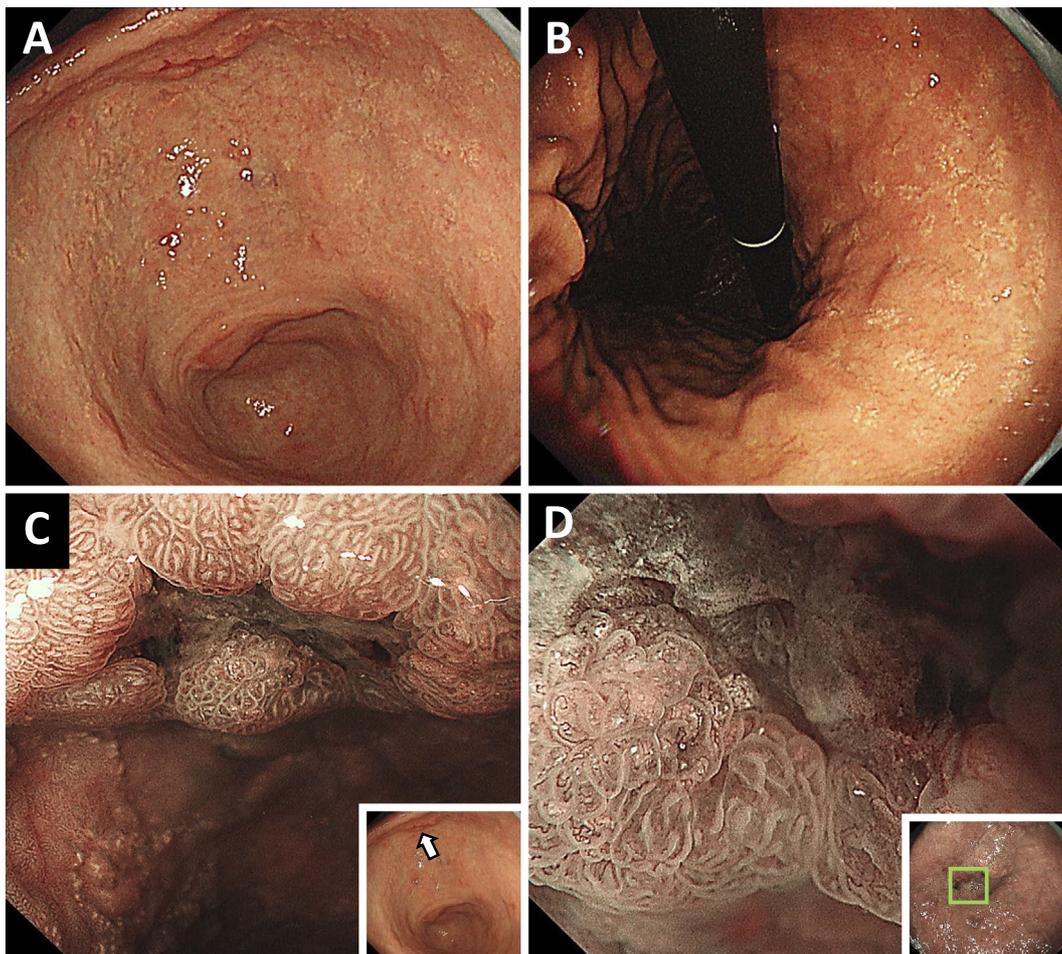
## Early Gastric Cancer with Diffuse Lanthanum Deposition

Maiko Tabuchi<sup>1</sup>, Fuminao Takeshima<sup>1</sup>, Yuko Akazawa<sup>1,2</sup> and Kazuhiko Nakao<sup>1</sup>

**Key words:** early gastric cancer, lanthanum

(Intern Med 58: 447-448, 2019)

(DOI: 10.2169/internalmedicine.1543-18)



**Picture 1.**

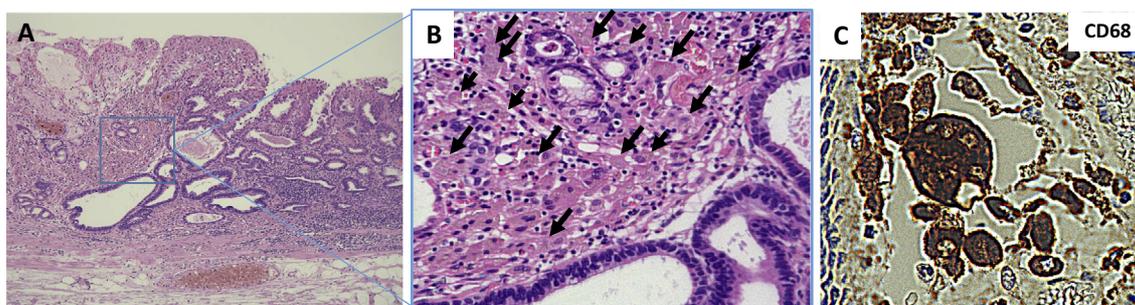
A 50-year-old man with a history of long-term dialysis and who had been treated with lanthanum carbonate hydrate (a calcium-free phosphate adsorbent) underwent screening gastroscopy. Yellowish-white depositions, similar to those in xanthoma, were observed throughout the gastric antrum (Picture 1A) and the body (Picture 1B). A depressed area

was observed among the depositions on narrow band imaging (Picture 1C, D), and the examination of a biopsy specimen confirmed Group 5 adenocarcinoma. The patient's serum was negative for anti-*Helicobacter pylori* IgG, an *H. pylori* stool antigen test was negative and the patient had no history of *H. pylori* eradication. Following endoscopic sub-

<sup>1</sup>Department of Gastroenterology and Hepatology, Nagasaki University Graduate School of Biomedical Science, Nagasaki University Hospital, Japan and <sup>2</sup>Department of Pathology, Nagasaki University Graduate School of Biomedical Science, Nagasaki University Hospital, Japan

Received: May 18, 2018; Accepted: June 27, 2018; Advance Publication by J-STAGE: August 24, 2018

Correspondence to Dr. Maiko Tabuchi, maiko.lupin@gmail.com



**Picture 2.**

mucosal dissection (Picture 2A), a histological examination showed a brownish deposition, which was suspected to be lanthanum carbonate hydrate, around papillary adenocarcinoma (Picture 2B). An immunohistochemical analysis confirmed the presence of CD68-positive macrophages, which were engulfing the brownish substance (Picture 2C).

The pathogenicity of gastric lanthanum deposition has been largely unexplored (1). To our knowledge, this is the first report of gastric mucosal lanthanum deposition that presented with neoplastic changes in the stomach. The further accumulation of cases will be necessary to clearly elucidate the relationship between lanthanum deposition and gastric cancer.

**The authors state that they have no Conflict of Interest (COI).**

### Reference

1. Murakami N, Yoshioka M, Iwamuro M, et al. Clinical characteristics of seven patients with lanthanum phosphate deposition in the stomach. *Intern Med* **56**: 2089-2095, 2017.

The Internal Medicine is an Open Access journal distributed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view the details of this license, please visit (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).