



## An unusual method to diagnose a rare disease: Upper gastrointestinal endoscopy

Tolga Düzenli<sup>1</sup>, Mustafa Kaplan<sup>1</sup>, Alpaslan Tanoğlu<sup>1</sup>, Musa Salmanoğlu<sup>2</sup>

<sup>1</sup>Department of Gastroenterology, Sultan Abdulhamid Han Training and Research Hospital, İstanbul, Turkey

<sup>2</sup>Department of Internal Medicine, Sultan Abdulhamid Han Training and Research Hospital, İstanbul, Turkey

**Cite this article as: Düzenli T, Kaplan M, Tanoğlu A, Salmanoğlu M. An unusual method to diagnose a rare disease: upper gastrointestinal endoscopy. Turk J Gastroenterol 2017; 28: 522-3.**

### Question:

A 73-year-old male with complaints of extensive rash, fatigue, myalgia, dyspepsia, and loss of appetite persisting for 3 weeks was admitted to our clinic. He had no drug use history, allergic background, pet-feeding habit, contact with animals, or travel history and did not consume fresh cheese. Physical examination revealed distinctive, itchy, faded, maculopapular, and pustular rashes on his extremities, particularly on the palms and soles of the feet. Apart from those; systemic examination findings were normal. Laboratory test results were as follows: leucocyte count, 9100/mm<sup>3</sup>; hemoglobin level, 14.4 g/dL; platelet count, 310000/

mm<sup>3</sup>, alanine aminotransferase level, 80 IU/L; aspartate aminotransferase level, 70 IU/L; alkaline phosphatase level, 890 IU/L; gamma-glutamyltransferase level, 880 IU/L, total bilirubin level, 0.8 mg/dL, albumin level, 1.86 g/dL; erythrocyte sedimentation rate, 120 mm/h; and C-reactive protein level, 75 mg/dL. The result of the 24-h urine protein test was 14 g/day. Upper gastrointestinal endoscopy, i.e., gastroscopy, revealed multiple ulcers with variable dimensions and minimal central depression. They were covered with white exudates and spread in the complete stomach from the cardia and fundus (Figure 1a) through the corpus (Figure 1b) to the antrum (Figure 1c).



**Figure 1. a-c.** Gastroscopic findings. Multiple irregular, shallow ulcers covered with whitish exudates and central depression in the cardia and fundus (a), corpus (b), and antrum (c)

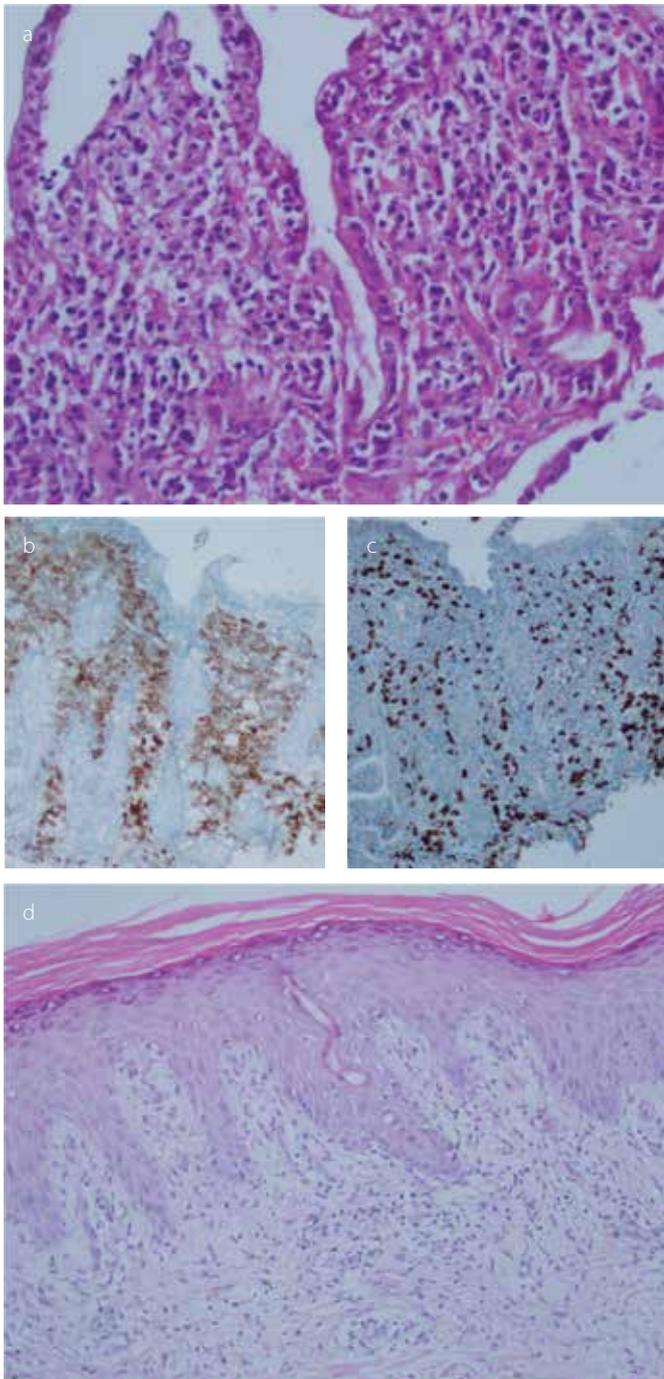
**Address for Correspondence:** Tolga Düzenli E-mail: [tolgaduzenli@yahoo.com](mailto:tolgaduzenli@yahoo.com)

**Received:** May 4, 2017

**Accepted:** May 31, 2017

**Available Online Date:** September 19, 2017

© Copyright 2017 by The Turkish Society of Gastroenterology • Available online at [www.turkjgastroenterol.org](http://www.turkjgastroenterol.org) • DOI: 10.5152/tjg.2017.17224



**Figure 2. a-d.** Histopathological study of gastric and skin samples; severe inflammation with lymphoplasmacytic infiltrates (a), immunohistochemical test was positive for *Treponema pallidum* (b, c), and skin biopsy showed lymphocyte dominant inflammation (d)

### Answer: Gastric syphilis

By upper gastrointestinal endoscopy, multiple biopsies were obtained. Pathological result was lymphocytic infiltration compatible with syphilis, with skin biopsies favoring the diagnosis

(Figure 2). The venereal disease research laboratory test (VDRL) result of the patient was positive with 1/64 titer and *Treponema pallidum* hemagglutination test (TPHA) was positive with a 1/1280 titer. With these findings, the patient was diagnosed as having second stage syphilis. The patient was administered a single intramuscular dose of benzathine penicillin G (2.4 million/ $\mu$ M). Clinical findings improved after 1 week of treatment. After 3 weeks, the liver function test results normalized. At the third month, the TPHA test was negative and VDRL test was regressed to 1/8 titer from 1/64.

Syphilis is a sexually transmitted disease that is caused by *T. pallidum*, and its clinical, pathological, and radiologic features may mimic many other diseases (1). The most common endoscopic findings are diffuse erosive, ulcerative, or infiltrative lesions that mimic gastric cancer or lymphoma (2). Nephrotic syndrome, liver involvement, and gastric syphilis are well documented but uncommon manifestations of syphilis; however, the co-occurrence of these complications in the same patient is exceptionally rare. In our case, the recognition of syphilis was mainly because of gastroscopy and gastric biopsies. Clinical and pathological changes usually return to normal after antibiotic treatment despite the level of damage; therefore, we expect that our case will help to raise awareness regarding this rare entity among clinicians by increasing attention concerning the typical features of gastric syphilis.

**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

**Peer-review:** Externally peer-reviewed.

**Author contributions:** Concept - T.D., M.K., A.T., M.S.; Design - T.D., M.K., A.T., M.S.; Supervision - T.D., M.K., A.T., M.S.; Resource - T.D., M.K.; Materials - T.D., M.K.; Data Collection and/or Processing - T.D., M.K.; Analysis and/or Interpretation - T.D., M.K., A.T., M.S.; Literature Search - T.D., M.K., A.T., M.S.; Writing - T.D., M.K.; Critical Reviews - T.D., M.K., A.T., M.S.

**Conflict of Interest:** No conflict of interest was declared by the authors.

**Financial Disclosure:** The authors declared that this study has received no financial support.

### REFERENCES

1. Mylona EE, Baraboutis IG, Papastamopoulos V, et al. Gastric syphilis: a systematic review of published cases of the last 50 years. *Sex Transm Dis* 2010; 37: 177-83. [CrossRef]
2. Kim K, Kim EJ, Kim MJ, et al. Clinicopathological features of syphilitic gastritis in Korean patients. *Pathol Int* 2009; 59: 884-9. [CrossRef]