doi: 10.2169/internalmedicine.6004-20 Intern Med 60: 1139, 2021 http://internmed.jp

# [ PICTURES IN CLINICAL MEDICINE ]

# Hunter's Glossitis

## Junki Mizumoto

Key words: homocysteine, Hunter's glossitis, megaloblastic anemia, Vitamin B<sub>12</sub> deficiency

(Intern Med 60: 1139, 2021) (DOI: 10.2169/internalmedicine.6004-20)



Picture.

A 79-year-old Japanese man presented with general malaise and a loss of appetite. His mental status was intact. He had undergone distal gastrectomy for cancer 24 years previously. After the operation, he did not undergo any regular checkups. Two days prior to presentation, he went to another clinic and a multivitamin fluid was injected. His tongue was highly atrophic and looked red and smooth (Picture). There were no neurological findings. Laboratory tests revealed pancytopenia with megaloblastic anemia (hemoglobin level of 6.5 g/dL and mean corpuscular volume of 137, a white blood cell count of  $3,470/\mu$ L, and a platelet count of  $3.8 \times 10^4/\mu$ L) and an increased lactate dehydrogenase level of 330 IU/L. The vitamin B<sub>12</sub> level was 539 pg/mL, probably being modified because of preceding multivitamin fluid. The homocysteine level was elevated to 17.0 mmol/L, which suggested a vitamin  $B_{12}$  deficiency (1). A diagnosis of postgastrectomy vitamin  $B_{12}$  deficiency was thus made. The intravenous administration of 500 µg vitamin  $B_{12}$  a day was started, and his appetite thereafter improved within a few days. Although the patient did not formerly complain about dysgeusia, he reported that his sense of taste improved after receiving the above treatment.

Lingual atrophy with diffuse erythema is a typical presentation of Hunter's glossitis. The detection of oral lesions is crucial to the diagnosis because its onset may precede neurologic symptoms and macrocytic anemia (2).

### The author states that he has no Conflict of Interest (COI).

### References

- Stabler SP. Clinical practice. Vitamin B<sub>12</sub> deficiency. N Engl J Med 368: 149-160, 2013.
- Graells J, Ojeda RM, Muniesa C, Gonzalez J, Saavedra J. Glossitis with linear lesions: an early sign of vitamin B<sub>12</sub> deficiency. J Am Acad Dermatol 60: 498-500, 2009.

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/).

Received: August 4, 2020; Accepted: September 22, 2020; Advance Publication by J-STAGE: November 9, 2020 Correspondence to Dr. Junki Mizumoto, jnk\_mizu@yahoo.co.jp

© 2021 The Japanese Society of Internal Medicine. Intern Med 60: 1139, 2021

Department of Medical Education Studies, International Research Center for Medical Education, Graduate School of Medicine, The University of Tokyo, Japan