Oral Changes Associated With Hypovitaminosis
Alteraciones orales asociadas a la hipovitaminosis

B.C. Bianco a,*, A.R. Camargo b, L.J. Grando c

a Post-graduation Program, Federal University of Santa Catarina, Florianópolis, Santa Catarina State, Brazil
b Professor, Department of Dentistry, Federal University of Santa Catarina, Florianópolis, Brazil
c Professor, Department of Pathology, Federal University of Santa Catarina State, Florianópolis, Brazil

A 35-year-old woman complained of a burning mouth similar to a thermal burn for 2 months. On physical examination, multiple areas of erosion and flaking of the mucosa in the palatoglossal arch (Fig. 1) and tongue belly (Fig. 2) were observed bilaterally. In laboratory tests, the results showed vitamin B12 deficiency (87 pg/mL), vitamin D deficiency (17 ng/mL), serum iron deficiency (47 mcg/dL), elevated iron-binding capacity (439 mg/dL), low serum ferritin (6.2 mg/dL), elevated homocysteine (50 μmol/l). The patient was then referred for ferritin replacement, vitamins D and B complex; presenting improvement in oral lesions, which indicated, together with previous data, the diagnosis of oral manifestation of iron deficiency and pernicious anemia.

Iron deficiency anemia is caused by iron deficiency, which is essential for the functioning of epithelial cells, its absence can cause signs such as tongue desperation – or glossitis atrophic- and is often preceded by a burning sensation. On the other hand, anemia pernicious is a type of anemia caused by vitamin B12 deficiency, caused by autoantibodies against intrinsic factors and/or gastric parietal squid. Glossitis, when present, is a sign that is part of the classic triad of this deficiency consisting of the presence of macroloblastic anemia, gastrointestinal symptoms or glossitis, and symptoms of athletic neuropsychic.