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Quick Response Code:

Clinical Image

Detection of amalgam tattoo in oral mucosa by wide-field optical fluorescence

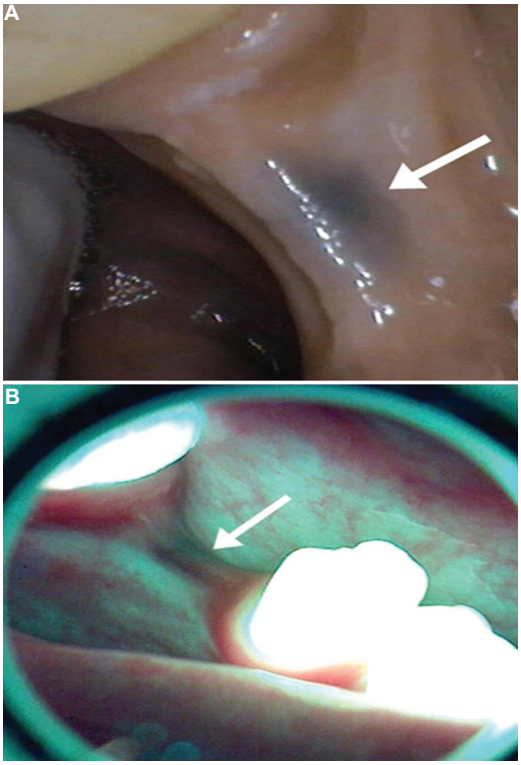

Fig. 1. (**A**) Oral mucosa showing blackish macula (arrow). (**B**) Wide-field optical fluorescence image. Fluorescence image was made using an EVINCE® device (MMOptics, São Carlos, São Paulo, Brazil) with a light-emitting diode emission centered at 400±10 nm and an optical filter that allowed the visualization of the fluorescence. Under fluorescence, normal mucosa appeared pale green and a suspect area, in this case, showed loss of fluorescence, resulting in a darkened image. White arrow indicates a blackish macula.

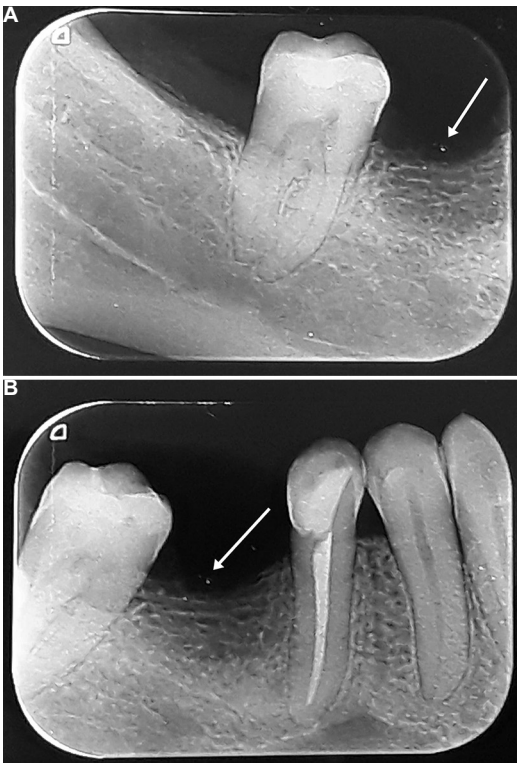

Fig. 2. Periapical X-ray image. View of (**A**) second right lower molar, (**B**) region of first right lower molar. White arrows indicate a small particle with intense radiopacity.

A 53 yr old feoderm man presented at the Dental Specialties Center of the department of Oral Diagnosis, Federal University of São João del-Rei, Divinópolis, Brazil, in March 2017, during a campaign for oral cancer screening, by appointment of a practitioner with suspicion of melanoma in the oral mucosa. The patient[†] had an asymptomatic blackish macula (about 0.7 cm) in the region of the oral mucosa of the inferior alveolar ridge. In anamnesis, the patient reported only surgery for extraction of the right lower molar about 30 yr ago. The patient reported an amalgam restoration in the removed teeth. Thus, the probable origin of amalgam particle was thought to be related to fracture of restoration during the surgery of removal,

[†]Patients's consent obtained to publish clinical information and images.

with the consequent incorporation of the particle into the oral mucosa. On visualization by wide-field optical fluorescence, the region exhibited a loss of fluorescence with consequent darkening likewise presented clinically (Fig. 1). A periapical radiograph was performed and it verified the presence of a small particle with intense radiopacity, compatible with the image of a dental amalgam (Fig. 2). Thus, the diagnosis of an amalgam tattoo was made. In this case, no treatment was necessary. The patient was asked to come for follow up during routine visits every six months for evaluation of general oral health.

***Conflicts of Interest*:** None.

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