**Case details.** A Caucasian female 70 years old was referred presenting painful and diffuse eryithematosus gingivitis. A biopsy was performed with PCG evidence. A professional oral hygiene regimen was started to deal with the gingival status. Severity of pain was detailed using a Visual Analogue Scale (VAS). Patient received non-surgical periodontal therapy, including personalized oral hygiene instructions, and thorough supragingival scaling and polishing with the removal of all deposits and staining combined with the use of antimicrobials as Fertomcidina-U. Clinical outcome variables were recorded at baseline and after the intervention and included full-mouth plaque scores (FMPS), full-mouth bleeding scores (FMBS), and the clinical extension of gingival involvement. After finishing the proposed protocol, a significant and statistical reduction was observed for FMPS, FMBS, and clinical gingival involvement. **Conclusion.** Professional oral hygiene procedures and non-surgical periodontal therapy, including antimicrobials medication as Fertomcidina-U, were associated with a striking improvement of gingival clinical outcomes in this female with important gingivitis PCG related.

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**Case report** 

## Optical coherence tomography as a simple and non invasive tool for the diagnosis of oral disease: a case report

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**Introduction.** Optical Coherence Tomography (OCT) is a new biomedical imaging modality that provides high resolution cross-sectional images of tissue. Conceptually, it has been compared with ultrasound scanning but it uses infrared light and records reflections below the surface to produce a cross-sectional architectural image of the tissue. OCT has been applied in ophthalmology and recently in dermatology; several studies have shown the validity of the use of OCT in *ex vivo* oral lesions but, to date, it does not exist a bank of normative and pathological OCT data of the oral tissues to consent identification of cellular structures of normal and pathological processes.

We report a case of fibroma, analyzing in vivo OCT use and comparing data with microscopic evaluation.

**Case report.** A 44-year-old woman was referred to the Department Surgical, Oncological and Oral Sciences, University of Palermo, with a neoformation on the apex region of the tongue, clinically compatible with the diagnosis of fibroma or papilloma. Firstly, *in vivo* OCT analysis demonstrated the presence of a white area, due to the presence of hyper-reflective area for collagen storage that is strongly scattering. After, exeresis was performed and histological examination confirmed the diagnosis of fibroma.

**Conclusion.** Optical coherence tomographic imaging can produce detailed cross-sectional images of tissue of oral cavity and it could be a new non-invasive approach that will help improve the diagnosis and the follow up of oral lesions. The validity of OCT in *ex vivo* oral lesions is confirmed in literature, while *in vivo* OCT validity should be supported by comparation of data of several oral disease: further researches are needed.

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