EARLY DIAGNOSIS OF ORAL CANCER WITH FLUORESCENCE: CLINICAL CASE

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Clinical case study

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Early detection of cancer oral squamouscell, the cancer that originates from the epithelium of the oral mucosa, reduces morbidity and increases the survival of patients. Histopathological analysis of suspected lesions is the gold standard for the precise diagnosis of oral cancer.

The finding of lesions of the premalignant mucosa or malignant, initial and small requires more clinical experience and is sometimes more complex. This is fundamental for the anticipation of the diagnosis of cancer, both in patients who had never manifested suspected lesions of the mucosa and in patients already treated for oral cancer and in follow-up.

Scientific evidence (1-4) shows that screening for oral cancer with conventional visual examination can reduce mortality in high-risk individuals.

Optical aids with good sensitivity and acceptable specificity can be used in combination with the conventional visual examination.

The detection of tissue autofluorescence of the oral mucosa is carried out by dentists with portable devices that allow the illumination of the mucosa with short-wave or UV blue light, between 380 and 480 nm. Healthy oral tissues emit a characteristic green fluorescence after illumination of excitation and premalignant injury zones. Dysplasia or malignant (carcinoma) are highlighted as dark areas for the loss of autofluorescence linked to tissue phenomena and metabolic in the areas of injury.

Fig.1: Clinical examination, oval erythematous lesion zone of about 0,5 cm of greater diameter, with finely surface papillary

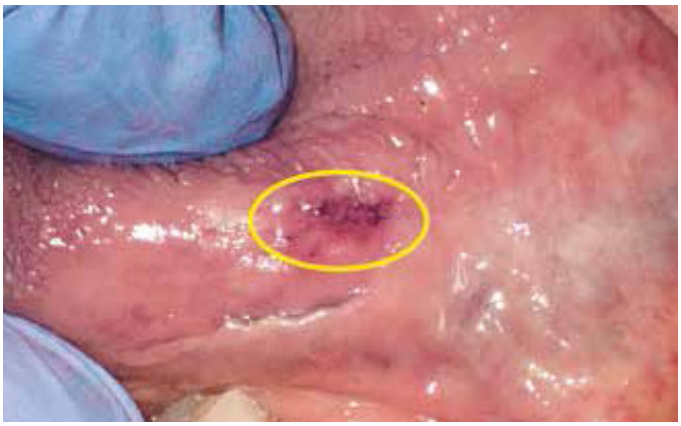

Fig.2: Coloring with toluidine blue according to Mashberg

Fig.3: Visual clinical examination with Goccles glasses for autofluorescence (Pierrel), after illumination with curing light.

Clinical case

The case of G. S., sex Female, non-smoker, 70s.

The patient was sent for observation by the oral physician for the presence of an area of a gradient colour located on the left edge of tongue. The area was asymptomatic, noted by several years, but recently a small area of reddish complexion and modest burning was noted.
The attending dentist had initially considered this an injury of a traumatic local nature.

The rounding of the dental cusps which was considered traumatic, had not brought resolution to the small injury within three weeks.

At the clinical examination it was noted that at the zone of injury there was an oval erythematous approximately greater than 0.5 cm in diameter greater, with finely papillary surface. The previous III of the left edge of the tongue had not increased consistency and was not annoying when palpated (Fig. 1).

The vital colouration was carried out with toluidina according to Mashberg, who highlighted taking of the dye at the small lesion (fig. 2). Visual clinical examination was also carried out with Goccles glasses for autofluorescence (Pierrel), after illumination with a curing light. The examination with autofluorescence highlighted a dark complexion in the lesion area (Fig. 3).

It was then carried out with local plessica anesthesia the escissional biopsy of the small injury. The histological examination of the excisional biopsy of the small injury showed the presence of squamous cell carcinoma G1, surrounded by medium epithelial dysplasia, with peripheral and deep sampling margins free from cancer.

In this clinical case autofluorescence tissue allowed the oral physician to highlight with adequate sensitivity the presence and boundaries. In this clinical case autofluorescence tissue enabled the oral physician to highlight, with adequate sensitivity, the presence and confinements of a neoplastic lesion area of the mucosa. Similarly, to the result of the application of vital staining.

Histopathological examination remains the essential technique to provide a precise diagnosis of the injury.

Bibliography

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