



ORAL PRESENTATION

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Measurement of epithelial thickness within the oral cavity using optical coherence tomography (OCT)

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Optical coherence tomography (OCT) is a promising method in the early diagnosis of oral cavity cancer. The objective of the present study is to determine normal values of epithelial thickness in the oral cavity, as no such data are to be found in the literature. In healthy test persons, epithelial thickness of the oral mucosa was determined with the help of OCT separately for each side at nine different locations. Special attention was directed to those sites having the highest incidence for the development of dysplasias and carcinomas. Depending on the location within the oral cavity, the epithelium demonstrated a varying thickness. The highest values were found in the region of the tongue and the cheek, whereas the floor of the mouth showed the thinnest epithelium. Our data serve as reference values for detecting oral malignancy and determining the approximate grade of dysplasia. In this circumstance, a differentiated view of the different regions is important due to the variation in thickness of the epithelium within the normal oral cavity.

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