Commentary:
Oral squamous cell carcinoma (OSCC) accounts for nearly 90% of all oral cavity cancers\textsuperscript{1,2}. Oral cancer is usually first diagnosed when it becomes symptomatic, by which time, the disease would have progressed to an advanced stage leading to poor prognosis\textsuperscript{3,4}. Early diagnosis could aid in treating the disease at a relatively incipient stage which in turn could aid in improving the overall prognosis\textsuperscript{2,4}. But, diagnosis of an oral potentially malignant lesion cannot be based solely on clinical findings. Histopathological examination is also necessary\textsuperscript{1,4,5}. Accurate diagnosis depends on the biopsy site selection and thus must be a true representation of the pathological tissue\textsuperscript{1,3,5}. A non-invasive technique capable of accurately identifying the most representative biopsy site is the need of the hour. Colposcopy is a relatively simple chair-side procedure. Its non-invasive nature ensures patient compliance. Its aids in identifying the sites with subtle features which are not apparent in a routine clinical oral examination\textsuperscript{2,4,6}.

The term ‘colposcopy’ was derived from kolpos, an Ancient Greek word. Kolpos represents "hollow, womb, and vagina". The meaning of skopos is "look at". German physician Hans Hinselmann in the year 1925 developed the procedure of colposcopy. He attached a light source to the Leitz binocular dissecting microscope specifically for the purpose of detecting early cervical cancer\textsuperscript{3,5-8}. However, only in the year 2000, colscope was first used for examining the oral cavity for mucosal lesions\textsuperscript{6}.

The colposcope looks like a pair of binoculars and is mounted on a pedestal with a light source attached to it\textsuperscript{2,3,5,7}. Illumination is provided by a halogen lamp which in turn is connected to a lens system through a fiber-optic cable. Tissue magnification of 4 to 40-fold is achievable. The tissue surfaces can be viewed as a three-dimensional image. The colposcope can be attached to portable video cameras, allowing it to be viewed on television monitor. A digital colposcope also enables the computerized manipulation of stored images\textsuperscript{2,3,7}.

The primary application of colposcopy is to identify oral potentially malignant lesions and malignant tissues based on their vascular patterns\textsuperscript{6-8}. Several factors including the pattern of vascularity, inter-capillary distance, pattern of the surface, opacity, color tone, and clarity of demarcation of oral mucosal lesions\textsuperscript{2,4,5,7}. Colposcopic examination has shown a relatively high accuracy (70% and 98%) for detection of changes in the mucosa\textsuperscript{1,3}. The sensitivity of colposcopy is dependent on a number of factors including the skills of the colposcopist, number of biopsies taken, and skills of the reading pathologist\textsuperscript{8}. The poster presents a current review on colposcopy procedure, assessment, and interpretation of the findings while advocating it as an adjunct tool for the early diagnosis of oral potentially malignant and malignant lesions.
References


Keywords: Colposcopy; Oral Squamous Cell Carcinoma; Oral Cancer; Lesions

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