原文題目(出處)：	Diagnostic aids for detection of oral precancerous conditions. Int J Oral Sci 2013;5: 59-65
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報告日期：	102/11/11

內文：

1. The incidence of oral cancer worldwide is around 500 000 new cases every year, accounting for approximately 3% of all malignancies, thus creating a significant worldwide health problem
2. The most common form of oral cancer is squamous cell carcinoma (SCC), which accounts for 96% of all cancers of the oral cavity.
3. The overall 5-year survival rates for oral cancer have remained low at approximately 50% for the past decades and have remained among the worst of all cancer death rates, considerably lower than that for colorectal, cervix and breast origin.
4. The most common risk factors in this group are tobacco and alcohol use.

COMMON ORAL PRECANCEROUS LESIONS

5. The risk of malignant transformation has been reported to be between 6.6% and 36.4%, although a recent meta-analysis indicated a rate of 12.1%.
6. Unfortunately, histological findings only indicate that a given lesion may have malignant potential (dysplasia), and cannot be used for the prediction of malignant changes.
7. Leukoplakia:
    A .A white lesion in the mucosa of the oral cavity, represents the most common precursor lesion of OSCC and its prevalence varies between 0.1% and 0.5%.
    B. the reported proportion of oral leukoplakia that develops into oral cancer varies depending on several factors including, the study population, the definition of leukoplakia used and the length of observation time, but an annual transformation rate of 1%–2% per year is a reasonable assumption
    C. Silverman and colleagues monitored 257 patients with oral leukoplakias, of which 22 had a diagnosis of epithelial dysplasia; eight of the 22 (36.4%) with dysplasia developed carcinoma. In their assessment, oral leukoplakia had an association with the lifetime development of oral cancer in affected individuals from 5% to 37% of the time.
    D. The time from initial diagnosis of dysplasia to carcinoma ranged from 6 months to 39 years. Surgical excision is the standard treatment of local lesions with epithelial dysplasia in the oral cavity; however, recurrence rates have been reported as high as 50%.
    E. Proliferative verrucous leukoplakia (PVL), considered to be either a clinical subtype of non-homogeneous oral leukoplakia or to be a distinct clinical entity, is not strongly associated with smoking
8. Erythroplakia
    A. Although erythroplakia is an infrequent oral condition, its risk of malignant progression is the highest among all oral precancerous lesions.
    B. These lesions are usually asymptomatic but sometimes patients complain of a Burning sensation and/or sore. Studies have shown that malignant transformation ranges from 20% to 68%.

C. Erythroplakia needs to be treated because of its high risk of malignant transformation. Surgery, either by cold knife or by laser excision, is the recommended treatment modality. Unfortunately, there are very few data from the literature about the recurrence rate after excision of erythroplakias

9. HPV

A. High risk subtypes: HPV-16, 18,31, 33 and 35→ precancerous and cancerous oral and oropharyngeal epithelial lesions, in particular HPV-16, are the most prevalent in oral leukoplakias

B. Low-risk subtypes: HPV-6, 11, 13 and 32.→ benign oral proliferative epithelial lesions, squamous cell papilloma, common wart (verrucous vulgaris), condyloma acuminatum and focal epithelial hyperplasia (Heck disease)

C. Successful screening measures used for cervical cancer screening such as a Papanicolaou test, HPV polymerase chain reaction testing, or both may be difficult to achieve, but there is meaningful hope that prevention efforts will reduce the burden of HPV-related oropharyngeal cancer.

10. Oral submucous fibrosis

A. The condition is well recognized for its malignant potential and is particularly associated with areca nut chewing, the main component of betel quid.

11. Oral lichen planus (OLP)

A. The potential malignant transformation of OLP has been a lasting controversial matter.Several retrospective studies have observed a higher incidence of oral cancer in patients with a specific subtype of OLP, mainly erosive OLP ranging from 2% to 8% which represents a greater risk of oral cancer than in the general population. In this regard, OLP should be considered a potentially malignant condition.

B. Critics contend that the association between OLP and OSCC is due to the misdiagnosis of dysplastic epithelial lesion as OLP, especially as it is often difficult to differentiate one from the other.

C. Lesions that are clinically indistinguishable from OLP but have a distinct etiology are known as oral lichenoid lesions (OLLs), these represent a common end point in response to extrinsic agents (drugs, allergens), altered self-antigens or superantigens. These lesions share common clinical and histopathological features with OLP and should be considered oral precancerous conditions when they do not resolve after the removal of the causative factor.

12. NON-INVASIVE TOOLS FOR EARLY DETECTION

A. Toluidine blue (TB)

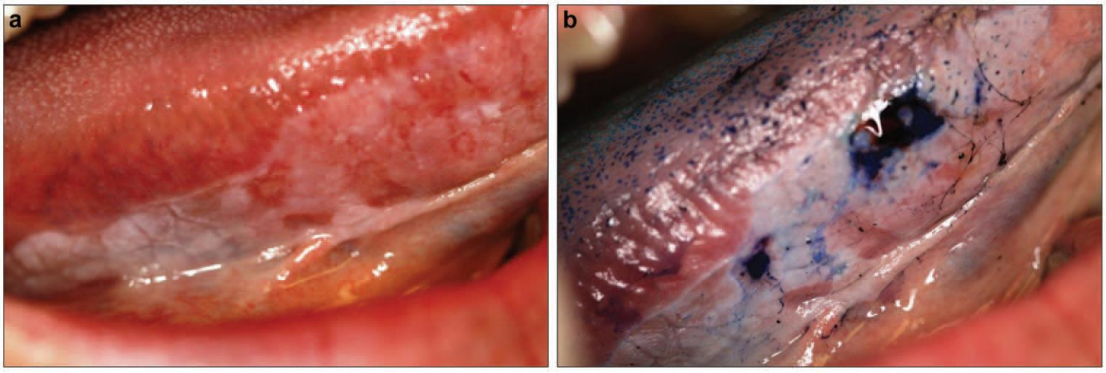
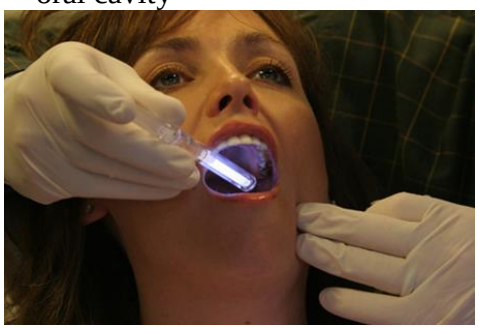


Figure 1 TB stain on a suspicious lesion at the right lateral border of the tongue. (a) An erythroplakia lesion on right lateral border of the tongue of a 52-year-old female. (b) Same lesion after application of the TB stain. TB was retained in some

areas and not others. A biopsy was taken from the dark stained blue area which showed a well differentiated squamous cell carcinoma lesion

B. ORAL CDx: Oral CDx brush biopsy uses the concept of exfoliative cytology to provide a cytological evaluation of a cellular dysplastic changes. A scalpel biopsy is still suggested if there is clinical suspicion of a lesion regardless of the Oral CDx result.

C. CHEMILUMINESCENCE: VIZILITE: The use of the light stick is intended to improve the visual distinction between normal mucosa and oral white lesions. Normal epithelium will absorb light and appear dark whereas hyperkeratinized or dysplastic lesions appear white. combination of both TB and ViziLite systems(ViziLite Plus with TBlue System; Zila, Batesville, AR, USA), received Food and Drug Administration clearance as an adjunct to visual examination of the oral cavity



D. VELSCOPE SYSTEM: The use of tissue autofluorescence in the screening and diagnosis of precancerous lesions in the lung, uterine cervix and skin has been well documented

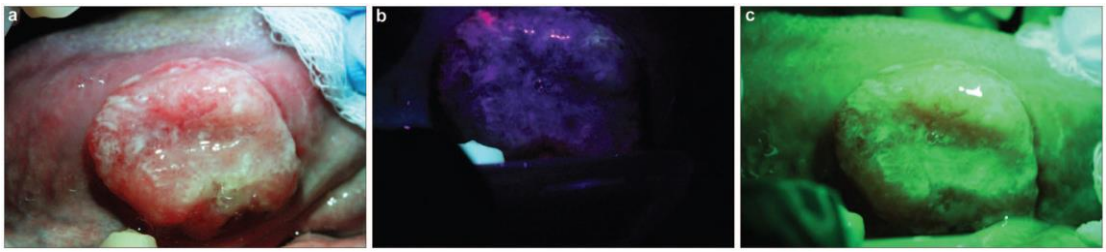
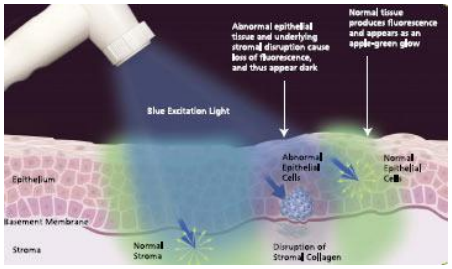


Figure 2 The use of Identafi optical system on a suspicious lesion showing loss of fluorescence and increase vascularity. (a) Picture of a non-healing ulcer on the right lateral border of the tongue of a 62-year-old male taken with the white reflectance (regular light) Identafi 3000 DentalEZ optical device. (b) Application of the Identafi DentalEZ device with violet fluorescent light shows dark area (loss of autoflurescence) in suspicious areas. (c) Application of the Identafi DentalEZ with the green amber reflectance light show increase vascularity in the suspicious areas. A biopsy taken from this area showed a moderately differentiated squamous cell carcinoma.



E. IDENTAFI 3000: The advantage of this device over the Velscope is its small size and easy accessibility to all tissues in the oral cavity. Besides detection of autoflurescence similar to the Velscope system (Figure 2b), this device also

examines tissue reflectance which is based on the premise of detecting changes in angiogenesis with green-amber light (540- to 575-nm wavelength) illumination .

F. SALIVA: So far, saliva has been used to detect caries risk, periodontitis, oral cancer, breast cancer, salivary gland diseases and systemic disorders such as human immunodefficiency virus and hepatitis C virus. However, due to lack of knowledge of disease markers and an overall low concentration of these markers in saliva when compared to serum, the diagnostic value of saliva has not been fully realized.

題號	題目 以下關於口腔鱗狀細胞癌(squamous cell carcinoma,SCC)的敘述何者錯誤?
1	(A) 好發在年齡在 65 歲以上男性 (B) 近年來,發生在 lip 的 SCC 有越來越增加的趨勢 (C) 口腔癌的致病因子是多元化的,而非由單一因素造成 (D) Iron deficiency 以及 Vitamin A deficiency 也會造成 SCC
答案(B)	出處：Neville /Damm/Allen/Bouqout Oral amd maxillofacial pathology Third edition Page 409
題號	題目 以下關於口腔癌前兆(oral precancerous conditions)以及特徵的敘述何者正確?
2	(A) 在口腔癌前期，病人常因感覺到病灶部疼痛，而前往尋求專業治療 (B) 常見的口腔癌前病灶有 leukoplakia,erythroplakia, 而其中 leukoplakia 的惡性轉變率較 erythroplakia 為高 (C) 近年來發現人類乳突病毒(HPV)也有可能造成口腔癌 (D) Candida 以及 Syphilis 的感染不會造成口腔癌
答案(c)	出處：Neville /Damm/Allen/Bouqout Oral amd maxillofacial pathology Third edition Page 411,412,413