

Oncologists Congress 2020: Oral brush biopsy/cytology using liquid-based preparation for early detection of oral cancer by Japanese dentists - Masaru Sasaki, Yuwakai Med. Corp. Dental Clinic, Japan

Masaru Sasaki

Yuwakai Med. Corp. Dental Clinic, Japan

Background: Because of the recent increase of oral cancer in Japan, oral brush biopsy/cytology (OBBC) for early detection has been used in Japanese dentists and a new guideline of OBBC of Japanese society of clinical cytology (JSCC) has been issued in 2015. However, in conventional method, 80% of the collected cells volume is discarded. Therefore, the diagnosis of atypical or malignant cells from lesions may be difficult due to the small amount of collected cells.

Objective: To introduce our experiences of the cases in which OBBC using liquid-based preparation (LBP) was useful for the early detection of oral cancer, especially erosive or ulcerative mucosal lesions.

Methods: OBBC using LBP performed on oral mucosal lesions suspected malignant on inspection. Orcellex® brush (Rovers Medical Devices, Netherlands) or interdental brushes were used for cells collection. LBCPrep™ (Muto Pure Chemicals, Japan) , BD CytoRich™ (Becton Dickinson, Japan) and ThinPrep® (Hologic Inc, Japan) were used in OBBC using LBP.

Results: In our general dental clinic between 2013 and present (88 cases), two cases diagnosed by OBBC to be oral squamous cell carcinoma (OSCC) were diagnosed to be OSCC histologically. A case diagnosed by OBBC to be low grade squamous intraepithelial lesion (LSIL) was diagnosed to be OSCC histologically. There were two inadequate specimens due to insufficient cell collection.

Conclusion: OBBC using LBP has following features, 1) samples can be obtained from total wide range lesions. 2) oral cavity is easy to approach. 3) minimal invasion for the patients 4) prompt result 5) low possibility of false-positive 6) the exams can be repeated as required. And OBBC using LBP is a technique that utilizes the total amount of collected cells and standardizes specimen preparation, and it improves accuracy. OBBC using LBP is useful for the early detection of oral cancer, especially erosive or ulcerative oral mucosal lesions.