

P16-positive oropharyngeal squamous cell carcinoma: Multi-institutional observation study based on head and neck cancer registry in Japan

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ABSTRACT

Introduction: Involvement of human papillomavirus (HPV) as a carcinogenic factor for oropharyngeal squamous cell carcinoma (OPSCC) has become widely known. **Methods:** With the aim of developing optimal treatment strategies, we have conducted a nationwide retrospective cohort study based on the Head and Neck Cancer Registry operated by the Japan Society for Head and Neck Cancer. In this study, 688 patients newly diagnosed as having p16-positive OPSCC from 2011 to 2014, who had clinical information and follow-up data after curative-intent therapy, were enrolled from 35 institutions. **Results:** Regarding the initial treatment modalities, chemoradiation (CCRT), induction chemotherapy, and surgery groups showed similar relapse free survival (RFS) and overall survival (OS). Of note, 8th TNM classification along with 7th TNM accurately predicted RFS and OS. In T1N0 (n=23) and T2N0 (n=56) patients, 3-year OS and RFS rates of CCRT and RT groups were 100%, 3-year OS rates of the surgery group were 94.4% (Stage I) and 92.9% (Stage II), respectively. In the patients with 8th stage I-II treated by CCRT, 5-year RFS and OS rates of the patients treated with CDDP $\geq 160\text{mg/m}^2$ (n=114) were 91.4% and 92%, whereas those treated CDDP $< 160\text{mg/m}^2$ (n=17) were 74.3% and 69.5%, respectively. The 5-year RFS and OS rates were significantly different between these two groups. **Conclusions:** These results suggest that at least 160mg/m^2 of CDDP should be administered during CCRT for the treatment of p16-positive stage I-II OPSCC (8th TNM classification).

Evaluation of laryngopharyngeal reflux using reflux finding score

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ABSTRACT

Introduction: Laryngopharyngeal reflux (LPR) is a condition where there is regurgitation of gastric contents into the laryngopharynx and it is often associated with many laryngeal disorders. The signs and symptoms of LPR are nonspecific, making diagnosis of LPR difficult. Reflux finding score (RFS) comprises assessment of laryngeal findings (presence of subglottic edema, ventricle obliteration, vocal fold edema, posterior commissure hypertrophy, diffuse laryngeal edema, laryngeal erythema, thick endolaryngeal mucus and granulation tissue) was developed in order to standardize the evaluation of laryngeal findings of LPR. However the assessment of the laryngeal findings using RFS is limited by the nature of subjective evaluation that also dependent on the clarity of images captured by endoscopy systems. Therefore, the aim of the study is to investigate the reliability of RFS assessment using a high definition endoscopy system. **Methods:** 46 participants of LPR group and 20 participants of healthy group were recruited. The LPR group was recruited when the reflux symptom index (RSI) was more than 13 with absence of obvious nasal symptoms. Examination of the larynx was performed using a video laryngostroboscopy (Pentax Medical) utilizing white light. The videos were saved in the system's digital capture module which were then anonymized and the audio was muted. Two raters comprise a laryngologist (R1) and a non-laryngologist ORL surgeon (R2) evaluated the video laryngeal findings using RFS independently. The assessment was repeated two weeks after the first evaluation. The inter- and intra-rater reliability of raters in evaluating RFS was assessed using intraclass correlation. **Results:** Of 66 participants, there were 42 females and 24 males with mean age of 38.32 (13.05) years old. The inter-rater reliability of R1 and R2 for the first and second evaluation was strong with ICC of 0.86 and 0.83, respectively. For the intra-rater reliability, the ICC was 0.97 for R1 and 0.91 for R2. **Conclusion:** This study showed that excellent agreement can be achieved in evaluating RFS in possible LPR and healthy participants when a high definition endoscopy system is used. Further study on the use of enhanced laryngeal imaging in assessing laryngeal findings of LPR and the correlation with results of reflux tests is recommended.