

# Association between patient-reported outcome of dysphagia and penetration-aspiration scale among post radiotherapy nasopharyngeal carcinoma patients

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## ABSTRACT

**Objective:** Dysphagia is well recognized as late sequelae for radiotherapy which is the mainstay treatment in nasopharyngeal carcinoma (NPC). The purpose of this study was to evaluate the association between patient-reported outcome (PRO) of dysphagia and the penetration-aspiration scale among post radiotherapy nasopharyngeal carcinoma patients. This study also investigates the PRO of dysphagia and the effects of dysphagia and aspiration in the quality of life (QOL) in post-irradiated NPC patients. **Methods:** A cross-sectional study was conducted and a total of sixty post-irradiated NPC patients were recruited from a single tertiary centre. PRO of dysphagia were assessed using MDADI questionnaire and simpler version of DESdC (acronym for Drinking, Eating, Swallowing difficulties, and Coughing when eating/drinking) score. The patient underwent FEES examination and aspiration or penetration were measured using Penetration-aspiration scale (PAS). Descriptive statistics, association and correlation between subjective and objective assessment of dysphagia were evaluated. **Results:** There was statistically significant association between both MDADI composite score and PAS ( $p < 0.001$ ). It demonstrated that significant association between DESdC score and PAS ( $p < 0.001$ ). Among the DESdC score, the specific question of 'cough during eating or drinking' is significantly associated with PAS ( $p < 0.046$ ). Among the MDADI subscales, subjects expressed that the swallowing difficulties affect their QOL physically (MDADI-P) the most with mean score of 60 but do not hinder their social function nor emotion with mean score of 78.0 for MDADI-F and 74.4 for MDADI-E. **Conclusion:** PRO can be used as a potential generalized screening for dysphagia however must be further evaluated with clinical assessment. Patients' awareness of their own swallowing impairment represents an important aspect of functional recovery, but may not reflect the actual laryngeal function. Dysphagia or swallowing difficulty is a concern to post-irradiated patients but do not cause significant impact on the quality of life.

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# Prevalence of laryngopharyngeal reflux and its associated factors among staff of Faculty of Medicine and Health Sciences of Universiti Putra Malaysia

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## ABSTRACT

**Introduction:** Laryngopharyngeal reflux (LPR) refers to the contents of the stomach moving back into the laryngopharynx. Belafsky et al. developed the Reflux Symptom Index (RSI) questionnaire for the assessment of symptoms found in individuals with reflux diseases. The purpose of this research is to study the prevalence of laryngopharyngeal reflux and its associated factors among staff of Faculty of Medicine and Health Sciences (FMHS) of Universiti Putra Malaysia (UPM). **Methods:** A cross-sectional study design was conducted among the staff of FMHS, UPM, who fulfilled the inclusion and exclusion criterias. Simple random sampling was used. The data was collected using self-administered questionnaires including the RSI questionnaire. **Results:** The prevalence of LPR among the staff of the FMHS, UPM was 20.3%. There is a statistically significant association between gender and LPR, and smoking and LPR. Meanwhile, there is no statistically significant association of age and caffeine consumption with LPR. No respondent consumed alcohol thus, association of LPR with this factor cannot be done. **Conclusion:** The prevalence of LPR among the respondents was 20.3%. Smoking and gender contribute to LPR, while age and caffeine consumption do not. RSI serves as an important tool to create awareness and identify potential undiagnosed cases of LPR.