Prevalence of Dysphagia and Factors Affecting Quality of Life in Irradiated Nasopharyngeal Cancer Patients

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Introduction
Nasopharyngeal cancer (NPC) was the sixth most common cancer for males and 13th for females in Hong Kong SAR in 2014. Intensity-modulated radiotherapy (IMRT) has become the treatment of choice for the disease over the past decade, but is controversial in its effectiveness in reducing the prevalence of post-treatment dysphagia. Irradiated NPC survivors with dysphagia experience significant deterioration in their quality of life (QoL). Previous QoL studies obtained information of patients’ swallowing functions from self-reported severity ratings which may have been different from their actual pathophysiology.

Objectives
1) To investigate the prevalence of post-radiotherapy dysphagia in NPC patients by means of objective physiological assessment; 2) To identify risk factors affecting the long-term QoL of irradiated NPC patients in Hong Kong SAR

Methodology
This was a cross-sectional study of 163 irradiation-treated NPC patients recruited from ENT Out-Patient Clinic of Prince of Wales Hospital, Hong Kong SAR. All participants underwent fiberoptic endoscopic evaluation of swallowing (FEES), with their swallowing performance rated using the penetration-aspiration scale (PAS). Quality-of-life profile was collected using the Functional Assessment of Cancer Therapy - Nasopharyngeal (FACT-NP). Regression analysis was performed to identify
significant patient and treatment factors that predicted QoL.

Result
One hundred (61%) of all participants received conventional radiotherapy whilst 63 (39%) received IMRT. Forty nine patients (30%) demonstrated penetration (i.e. PAS score of 2-5) and 29 patients (18%) aspirated (i.e. PAS score of >6) on at least one food consistency during FEES. Both PAS score ($t = -4.46, p$