

The Effects of Dysphagia on Quality of Life in Post-irradiated Nasopharyngeal Cancer Patients

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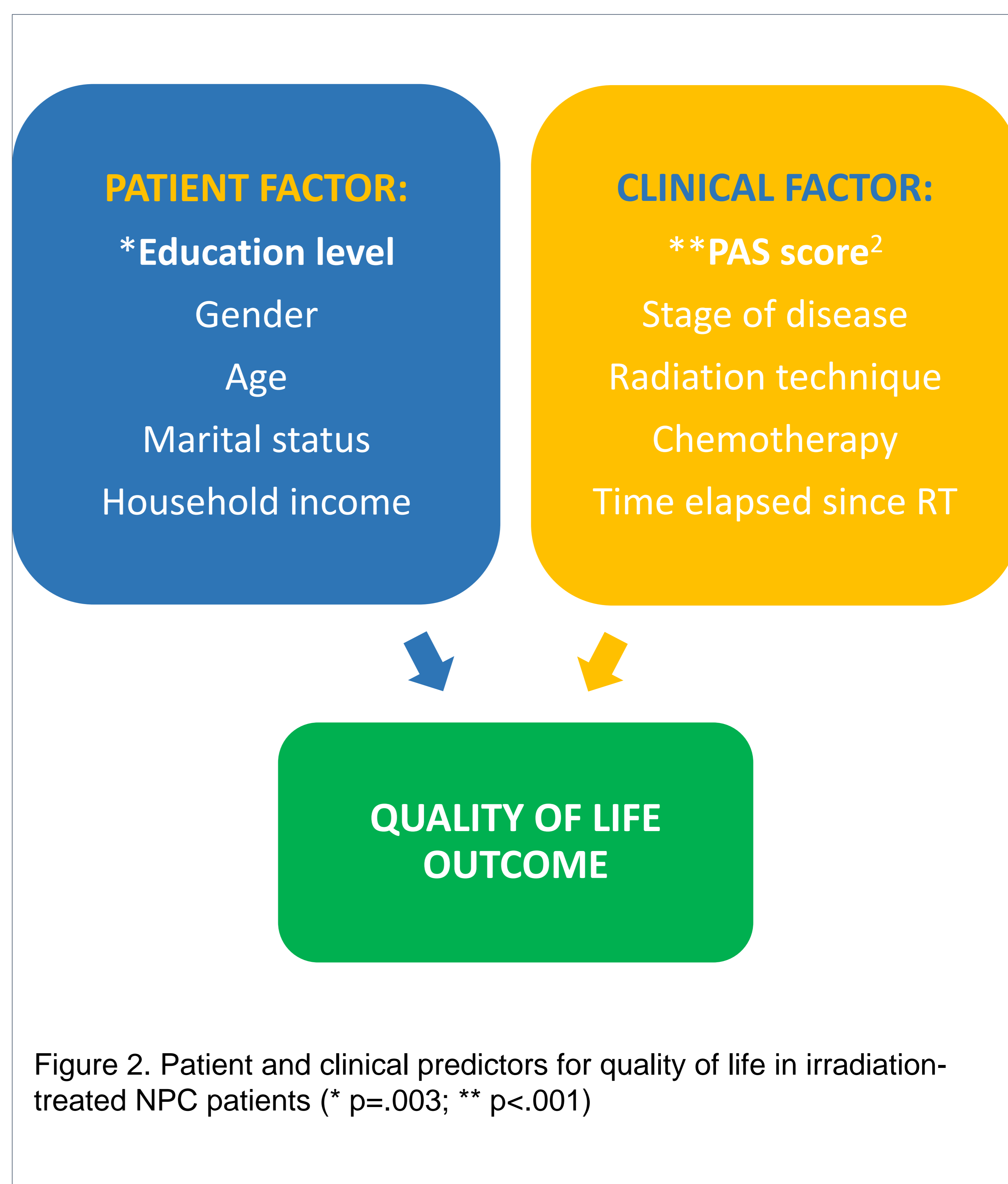
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Introduction: Irradiation-treated nasopharyngeal cancer (NPC) survivors with dysphagia have significant deterioration in their quality of life (QoL). Intensity-modulated radiotherapy (IMRT) is controversial in its effectiveness in reducing the prevalence of dysphagia in these patients. Previous QoL studies obtained swallowing data from self-reported severity ratings¹ rather than objective physiological measurement. We aimed to investigate the severity of dysphagia through physiological assessment, and to identify the factors affecting the QoL of IMRT-treated long-term NPC survivors in Hong Kong, China.

Methods: This was a cross-sectional study of 163 irradiation-treated NPC patients recruited from Prince of Wales Hospital, Hong Kong SAR. All participants underwent fiberoptic endoscopic evaluation of swallowing (FEES). Swallowing performance was scored using the penetration-aspiration scale (PAS)². Quality-of-life profile was collected using the Functional Assessment of Cancer Therapy - Nasopharyngeal (FACT-NP)³ (Figure 1). Linear regression analysis was performed to identify significant factors that predicted QoL.

Results: Forty nine (30%) patients demonstrated deep penetration or aspiration (i.e. PAS score >3) on at least one food consistency during FEES. Both PAS score ($p<.001$) and education level ($p=.003$) were identified as significant predictors for QoL in treated NPC patients (Figure 2). A higher PAS score resulted in a lower QoL, whilst a higher education level predicted a higher QoL. Gender, age, stage of disease, radiation technique, time elapsed since irradiation had no significant effect on QoL.

Conclusion: Despite the advancement in radiation technique for the treatment of NPC over the past decade, dysphagia remains a major clinical problem for NPC survivors, and adversely affects their quality of life. More effort is needed to prevent or delay the occurrence of dysphagia and its related complications.



Functional Assessment of Cancer Therapy - Nasopharyngeal cancer subscale (FACT-NP)³



Figure 1. A self-administered 5-domain quality-of-life assessment tool for nasopharyngeal cancer patients

References

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Financial Resource:
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