Validity of the FACT-H&N among Oral Cancer Patients in Malaysia

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Background: To date, the assessment of the impact of oral cancer and its related treatment on patients using a cross-culturally adapted health-related quality of life instrument has yet to be undertaken in Malaysia.

Objectives: The aim of this study was to assess the cross-sectional construct validity of the Malay-translated and cross-culturally adapted FACT-H&N (v 4.0) questionnaire for Malaysian oral cancer patients.

Methods: A cross-sectional study of adults newly diagnosed with oral cancer. HRQOL data were collected using the Malay-translated FACT-H&N (v 4.0), a global question and a supplementary set of eight questions (maq) obtained earlier in pilot work (cross-cultural adaptation process).

Results: 76 patients (61.8% female; 23.7% younger than 50) participated. Most (96.1%) had squamous cell carcinoma. Two-thirds were seen in stages III or IV. Patients' mean FACT summary and subscale scores were towards the high end of the range at baseline. Equal proportions (36.8%) of participants rated their overall HRQOL as 'good' or 'average'; fewer than one-quarter as 'poor' and only 2 patients as 'very good'. FACT summary and subscale scores had moderate to good internal consistency. Subscale Cronbach alpha values were acceptable. Cross-sectional construct validity was noted between FACT summary scores, the head and neck subscale and the maq scores with 1) patients' self-ratings of HRQOL groups and 2) the extent of tumor. FACT summary scales correlated strongly with each other (r>0.75).

Conclusion: The Malay-translated and cross-culturally adapted FACT-H&N (v 4.0) demonstrated adequate cross-sectional construct validity and thus appear appropriate for further use among oral cancer patients in Malaysia.

Role of CNS Phospholipase A2 in Orofacial Pain.

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Introduction: Phospholipases A2 (PLA2) are enzymes that hydrolyze the sn-2 position of phospholipids to produce free fatty acids and lysophospholipids. Metabolites of arachidonic acid are not only inflammatory mediators but also messengers in the CNS.

Objective: To determine if CNS PLA2s play a role in central sensitization and chronic orofacial pain.

Materials and methods: PLA2 expression and enzyme activity in the CNS, and behavioral effects of inhibition were analyzed in untreated control animals and after hyperalgesia induced by facial carrageenan injection. A possible role of PLA2 on neurotransmitter release was also studied in vitro.

Results: High levels of expression of cytosolic PLA2 (cPLA2) and secretory PLA2 (sPLA2) are present in neurons of the rat spinal trigeminal nucleus and dorsal horn. Significant decrease in phosphatidylethanolamine but increase in lysophosphatidylethanolamine species, indicating increased PLA2 activity is detected in the cervical spinal cord by lipidomic analyses after facial carrageenan injection. Intracerebroventricular injection of the sPLA2 inhibitor SNF083716 produces 12-episcalaradial results in significant and prolonged reduction of carrageenan-induced nociceptive responses. sPLA2-IIA induces neurotransmitter release from neurons, and is itself released from neurons, via glutamatergic stimulation. The sPLA2-IIA-EGFP fusion protein is concentrated in secretory granules in stably transfected SH-SY5Y neuroblastoma cells, and exocytosis of the enzyme is induced by glutamate or its analogs in a PKC-dependent manner.

Conclusion: Together, the results suggest that CNS sPLA2 could play an important role in enhancing glutamatergic signaling in the brainstem and spinal cord during central sensitization and chronic pain.