

**PD.28 The SWAL-QOL outcome after the surgical treatment of oral and oropharyngeal cancer**

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**Introduction:** The SWAL-QOL index is a 93-item quality of life outcomes tool for clinical research and practice. The aim of the present study was to evaluate the outcome after the surgery for oral and oropharyngeal cancer established by the patients themselves.

**Materials and Methods:** Retrospective review of 14 patients underwent surgical treatment as the main therapeutic modality for oral and oropharyngeal squamous cell carcinoma (SCC). Variable assessed for predictive value of SWAL-QOL score are 1) radiation therapy as adjuvant treatment after the surgery; 2) neck dissection indication for the cervical approach at the same time of the primary tumor resection; and 3) the tumor primary site (mouth or oropharynx). The patients underwent surgery from January, 1998 to December, 2003. Self-ratings were completed. Burden, eating duration, symptom frequency, food selection, communication, fear, mental health, social aspects, fatigue, and sleep were analysed.

**Results:** The mean postoperative global score were as following: patients undergone adjuvant radiation therapy: 56.5 and no irradiated: 75.95; patients undergone neck dissection: 77.54; and without neck dissection: 75.74; oral SCC patients: 90.54; and oropharyngeal SCC patients: 64.52.

**Conclusion:** Quality of life seemed to have an influence on non-expert scores. Poorer outcomes on swallowing were observed for patients undergone radiation therapy, and for those with oral SCC.

**PD.29 Measurement of the voice handicap index after the surgical treatment of oral and oropharyngeal cancer**

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**Introduction:** Voice Handicap Index (VHI) is a relatively new method to measure quality of life related to voice. The aim of the study was to evaluate the voice impact on the quality of life after surgical treatment of oral and oropharyngeal cancer.

**Materials and Methods:** 16 patients underwent surgical treatment and 7 underwent radiation therapy for oral and oropharyngeal squamous cell carcinoma (SCC) answered the questionnaire with a mean of the 6 months after oncology treatment. These only 5 patients were submitted to voice and speech rehabilitation. Retrospective study Variable assessed for predictive value of VHI score are 1) radiation therapy as adjuvant treatment after the surgery; 2) neck dissection indication for the cervical approach at the same time of the primary tumor resection; and 3) the tumor primary site (mouth or oropharynx). The patients underwent surgery from January, 1998 to December, 2003. Self-ratings were completed.

**Results:** The mean postoperative global score were as following: patients undergone adjuvant radiation therapy: 16.0 and no irradiated: 9.0; patients undergone neck dissection: 8.6; and without neck dissection: 9.83; oral SCC patients: 4.99; and oropharyngeal SCC patients: 13.12.

**Conclusion:** Poorer outcomes on voice were observed for patients undergone radiation therapy, and for those with oropharyngeal SCC.

**PD.30 Quality of life related to swallowing and voice disorders after surgical treatment of tongue cancer**

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**Introduction:** The surgical treatment of tongue cancer associated or not to postoperative radiotherapy, leads to different levels of voice, speech and deglutition disorders. Such alterations could have a great impact on the patient's daily life. The objective of this study was to describe the quality of life related to voice and swallowing in patients treated for tongue cancer.

**Materials and Methods:** A consecutive series of 29 patients submitted to surgical tongue cancer treatment were enrolled in this study. All patients had a minimum of one-year post treatment. Patients were interviewed using specific questionnaires to evaluate the quality of life related to voice (VHI) and swallowing (SWAL-QOL).

**Results:** There were 20 male patients with a mean age of 54 years. Most patients (20) were at early stages at presentation. 25 patients were submitted to a partial glossectomy. 20 patients were submitted to reconstruction and 12 to adjuvant radiotherapy. The VHI score had no great variability among all patients. However, in the stratified analyses by tumor stage, patients with advanced stages presented a significant worse score at the functional domain at the VHI questionnaire ( $p=0.021$ ). In the SWAL-QOL evaluations, all patients presented a general good score. But, in the stratified analyses, patients with advanced stage and submitted to radiotherapy, presented significant worse scores in different domains of the SWAL-QOL questionnaire.

**Conclusion:** Speech intelligibility was the main parameter that interfered in the quality of life of patients with advanced tumors evaluated by the functional domain of VHI questionnaire. The aspects related to how to deal with deglutition problems, time for meal, pleasure to eat, chewing problems, food sticking in throat and mouth, choking and the knowledge of feeding restrictions, evaluated by different domains of the SWAL-QOL questionnaire were the factors that contributed to a negative impact for patients with advanced stage tumors submitted to adjuvant radiotherapy.

**PD.31 Speech and swallowing studies of patients with total and subtotal glossectomy**

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**Introduction:** Functional reconstruction of speech and swallowing after ablation of large segments of the oral tissues for the treatment of head and neck tumors is impertinent to maintain an acceptable quality of life of these patients. The purpose of the present study was to retrospectively assess and analyze the functions of speech and swallowing in a cohort of patients operated for extensive intra-oral tumors and their surgical defects reconstructed with free tissue transfer.

**Materials and Methods:** Eighteen patients (14 male and 4 female) with ages ranging from 38–75 years and a mean age of 63 years were included in the study. The histology of the

tumors was squamous cell carcinoma of the oral mucosa in the majority of these cases. The commonest reconstructive technique used was the free radial forearm flap. The evaluation of swallowing was performed with three kinds of barium meals (liquid, semi-liquid and solid) according to the kind of food the patient could intake. Swallowing was assessed with videofluoroscopy. In all patients the ability for full closure of the lips, intraoral control of the bolus, remnants of food in the floor of the mouth and the oropharynx, movements of the tongue or its reconstructed part, penetration of the food into the larynx and its aspiration in the lungs were also recorded. Speech was assessed by competent logotherapist and members of the patient's family according to the degree of understanding of specific sentences, words, vowels and consonants, for the pronunciation of which different parts of the tongue are used.

**Results:** In 14 of the 18 patients complete closure of the lips with no food remnants in the floor of the mouth or the tonsillar and upper pharyngeal areas was noted. In these patients movement of the tongue was satisfactory. Two patients showed partial reflux with evidence of aspiration. Two patients with permanent gastrostomy showed complete inability for oral feeding. Speech was considered satisfactory in patients with partial or total glossectomy from the members of their families and partially understandable by the team of the examiners. In the remaining patients speech was found to be normal.

**Conclusion:** Use of free tissue transfer for the reconstruction of extensive combined oro-facial defects after ablative surgery renders the functions of speech and swallowing relatively normal in a high level of patients, thus improving both control of loco-regional disease and quality of life of the patients.

#### PD.32 Figuring function with figs and frogs – functional rehabilitation after oral cancer

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**Introduction:** Nowadays, Quality of Life questionnaires record patients' morbid symptoms after combined treatment of oral cancer. However, this subjective data provides no strategy to improve our patients' outcomes.

**Aims:** To serially assess recovery of speech and nutrition up to its 'plateau'. To develop a simple objective clinical assessment of function to quantify oral impairments.

**Materials and Methods:** One hundred-and-eighty disease-free survivors of oral carcinoma were studied prospectively, after excision and reconstruction +/- radiotherapy between 1999 and 2004. Each patient's recovery was monitored by body mass index (BMI), speech, chewing and swallowing on the Functional Intraoral Glasgow Scale (FIGS). On reaching a recovery plateau, clinically disease-free patients were invited to a "function clinic". BMI and FIGS scores were compared with the validated Therapy Outcome Measures (TOM) scores for dysphagia and dysarthria. Patients scored their symptoms using the University of Washington Quality of Life v4 questionnaire. Functional physiology of nine anatomical regions was objectively graded, using the Functional Rehabilitation Outcome Grades (FROG). (This assessment will be shown in a PowerPoint video clip.)

**Results:** The "two-minute" FIGS assessment sensitively monitors progress in rehabilitation. At recovery plateau, the "ten-minute" FROG assessment accurately grades physical impairment according to anatomical region. Strong correlations were

seen between degree of physical impairment assessed and severity of physical symptoms reported.

**Conclusion:** These clinical assessments are quick, inexpensive and acceptable to patients. FIGS in oral rehabilitation is as useful as the Glasgow Coma Score in head injury! It delivers an immediate result and sensitively detects change. FROG is a standardised critique of our surgical reconstructions and hence a framework to optimise them. It also allows objective function comparison after "organ-preserving" treatments such as chemoradiotherapy.

## Epidemiology 2

#### PD.33 Precancerous oral lesions in school children of rural India due to tobacco consumption

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**Introduction:** Guthka is a socially acceptable form of tobacco consumption in rural India. It is a mixture of areca, cathchu, beetle nut, tobacco, mint. It is falsely advertised as a harmless mouth freshener. We are witnessing ever-increasing numbers of young children becoming victims of misleading advertisements, wrong social practices and free tobacco availability. The mean age of presentation of oral cancers has decreased in the last decade.

**Materials and Methods:** A survey among 986 rural school children (age 10 to 15) was done in year 2001. This involved intra-oral examination, health education and counseling for tobacco consumers.

**Results:** 80% were aware that smoking or Khaini/Jarda (edible forms of raw tobacco) is bad for health, but none were aware of the harms of Guthka. Only 15% knew about the carcinogenic potentials of tobacco. None were aware of oral cancer or pre-malignant lesions. 60% started tobacco consumption because their family members were already taking it. 30% started it by seeing advertisements and 10% started for various reasons. Verrucous lesions were found in 4 children, leukoplakia in 32, erythroleukoplakia in 6, and submucous fibrosis (SMF) in 18. Various tobacco related dental problems existed in almost 60%. These statistics were found alarming and local administration banned the sale and advertisement of Guthka near the schools. Follow-up studies done six months after extensive cancer education and antitobacco counseling, showed that 46% had become addicted to Guthka and found it impossible to leave it altogether.

**Conclusion:** This small survey reveals the need of tobacco-awareness in school children before they get this habit. Tobacco control programs should focus on this age group for effective control. Health education, especially tobacco related, should become mandatory for school children.

#### PD.34 Reducing carcinogenic acetaldehyde in saliva by cysteine tablet after smoking

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**Introduction:** Cigarette smoking causes 30% of all cancer deaths in developed countries and in addition to alcohol it