decrease in the overall oxygenation of the tumors. The dramatic increase in very low oxygen measurements may reflect selective survival of radio- or chemoresistant hypoxic tumor cells.

653 PUBLICATION

Concurrent cisplatin and concomitant boost accelerated radiotherapy (CBAR) in advanced head and neck (H&N) cancer

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Purpose: To evaluate feasibility and efficacy of concurrent cisplatin and CBAR in advanced H&N cancer.

Methods: Forty one previously untreated patients with unresectable squamous cell H&N cancer were enrolled between 3/95–9/98, 36 (88%) of whom had IV stage disease. Primary and subclinical disease was irradiated to 54 Gy in 30 fractions for 5.5 weeks, with two daily fractions during the first two days. Gross tumour was boosted during the last 2.5 weeks to 72 Gy with a second daily fraction of 1.5 Gy. Continuous I.V. infusion of Cisplatin 20 mg/m^2/24 h was administered for 5 consecutive days in I and V week of the basic treatment. The median follow-up for the surviving patients was 19 months (range, 4–45). The median dose and treatment duration were 72 Gy (range, 67–74) and 41 days (range, 36–47). Ten patients (24%) did not have a second chemotherapy course.

Results: Grade 3 (RTOG) dysphagia (12%), weight loss (average 9%), grade 3–4 mucousitis (66%) and grade 3 myelosuppresion (5%) were the most important acute side effects. Two of the patients died during 2 months following the treatment. Soft tissue necrosis was observed in 3 patients (7%), 4–10 months after treatment. The tumour response was impressive: 85% (33/41) CR. The 2-year actuarial loco-regional control was 60% and the overall survival was 53%.

Conclusions: Although longer follow-up is needed for a definitive evaluation, we conclude that this schedule is feasible and appears to be effective.

654 PUBLICATION

The efficacy of Xialine in patients with xerostomia resulting from radiotherapy for head and neck cancer (a pilot study)

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Objectives: The aim of the study was to evaluate the changes in subjective sensations due to xerostomia, and quality of life (QoL) before and after use of Xialine, a xanthan gum-based saliva substitute, in patients with xerostomia as a result of radiation therapy in the head and neck area.

Methods: The effect of Xialine was evaluated by the EORTC questionnaires QLQ-C30 and the QLQ-H&N35 in a double-blinded, placebo-controlled, cross-over design in 30 patients with xerostomia. Seventy-five percent of the volume of the parotid glands received at least 50 Gy or more during previous radiation therapy. Patients received Xialine or placebo for one week, followed by a wash-out period of one week and another week placebo or Xialine. The composition of the placebo was similar to Xialine, but did not contain xanthan gum.

Results: After administration of Xialine a decrease of problems with speech and 'smell and taste' was noted (−7 and −6 respectively on a 0–100 scale), while a minimal decrease with regard to these endpoints was noted after placebo (−1 and −2). Global QoL increased with 4 on the same scale after Xialine, while a reduction of 3 was noted after placebo. Although not statistically significant in this small group, these changes were regarded as clinically relevant. Xerostomia in general decreased with Xialine as well as with placebo to approximately the same degree (−17 versus −16). No differences between Xialine and placebo were noted with regard to other domains.

Conclusion: problems with speech, 'taste and smell' and the global QoL in patients with xerostomia resulting from radiation therapy for head and neck cancer. A larger study will be initiated to confirm the trends observed in this pilot.

655 PUBLICATION

Prognostic impact of the steroid receptor level in head and neck cancer

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Purpose: The aim of our study was to investigate steroid receptor contents and expression of Bcl2 in head and neck cancer (HNSCC) and to compare them with known predictors of outcome as age, tumor size, differentiation and lymph node status.

Methods: Oestrogen and progesterone receptor contents of tissue samples of 61 HNSCC and the neighbouring healthy mucosa were determined by radio ligand assay as well as Bcl2 levels of 46 of the same tumors by Western blot analysis.

Results: We found that steroid receptor positivity was significantly more common in tumour tissues than in the healthy mucosa for both receptors ($p < 0.05$). The rate of tumour free survival was significantly higher in oestrogen receptor positive cases ($p < 0.05$). There was a positive correlation between Bcl2 and oestrogen receptor content and between Bcl2 and lymph node status. However, there was no relationship between tumor size, differentiation and survival.

Conclusions: Our results suggest that oestrogen receptor positivity might be of prognostic value in HNSCC as well, but we could not prove the independent prognostic impact of Bcl2 expression.

656 PUBLICATION

Supracricoid partial laryngectomy in advanced laryngeal cancers

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Purpose: Supracricoid partial laryngectomy (SCPL) has been shown satisfactory oncological outcome and postoperative functional results. In this study we evaluated the efficacy of this procedure as a primary surgical modality in advanced laryngeal cancers and the functional results according to the type of the surgery for the successful functional rehabilitation.

Mehtods: Thirty nine patients with laryngeal cancers were managed by this procedure between 1993 and 1999, and the tumors were glottic and supraglottic in origin in 32 and 7 patients, respectively. To evaluate the efficacy of this procedure in locally advanced cancer, sixteen patients monitered for at least more than one year and over than T2b stage were reviewed. For the functional evaluation, voice parameters were analyzed by CSL program and swallowing analysis was performed by modified barium swallow test.

Results: Local recurrence was found in 4 (25%) cases and all of them was pathologically T4. Among them 2 patients were successfully managed by salvage operation but 2 patients showed distant metastasis. Voice parameters were different from normal speaker, but the patients were allowed for the social interaction successfully. Normal deglutition was achieved in 38 patients, but one patients had total laryngectomy because of intractable aspiration. Aspiration was associated with faulty backward tilting and improper position of epiglottis and inadequate movement of base of tongue. Silent aspiration was observed more frequently in extended procedures and delayed decannulation cases.

Conclusion: The SCPL could be considered as a primary surgical modality in selected advanced laryngeal cancers with good oncologic and functional results.

657 PUBLICATION

Neoadjuvant cisplatin (P) 5-fluoracilo (5-FU) and radiation therapy (RT) for organ preservation in squamous cell carcinoma of the head and neck: A single institutional experience

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The use of neoadjuvant Cisplatin – 5-Fluoracil followed by radiation therapy is an effective method for organ preservation in squamous cell carcinoma of the head and neck. We developed a phase II study with P 100 mg/m^2 over 3 hours d1, 5FU 1000 mg/m^2 over 24 hours d1–5, followed by (XRT) 60–70 Gy, as preservation organ strategy. Tumor response assesment was done after the 2nd cycle and after the end of neoadjuvant treatment. Between february 92 and november 97, 56 patients (pts) were admitted to the trial.