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METACHRONOUS TUMORS IN PATIENTS WITH OROPHARYNGEAL CARCINOMA: ITS INCIDENCE AND INFLUENCE ON SURVIVAL

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We analyzed a series of 245 patients with oropharyngeal carcinoma with no prior or coincident history of other malignant tumor.

The probability of developing a second malignant tumor (SMT), the probability of dying of oropharyngeal cancer, and the probability of dying of second tumor were calculated by the Kaplan-Meier method.

A total of 28 SMTs occurred in 245 patients. Of these tumors, 9 developed in head and neck (3 in the larynx, 4 in the oral cavity, and 2 in distant oropharyngeal subsites), 5 in the oesophagus, 8 in the lung, two in the bladder, and five in other sites.

The actuarial probability of developing a SMT within five years from treatment was 15%, and the probability of developing a second tumor within ten years from treatment was 36%.

The actuarial probability of dying of oropharyngeal cancer within three years from treatment was 54%.

The probability of dying of SMT within three years from treatment was 8%. Three-year survivors had a 20% probability of dying of second cancer within the following seven years.

These results suggest that three-year survivors should be considered eligible for chemoprevention trials.

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CERVICAL NODE METASTASES OF AN UNKNOWN PRIMARY SITE. "IN SITU HYBRIDIZATION" FOR EPSTEIN-BARR VIRUS RNA IN DIAGNOSING OCCULT NASOPHARYNGEAL CARCINOMAS

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After time-consuming and costly investigations, patients with neck metastases from an occult primary often receive unnecessarily large radiation volumes to treat possible origin in the nasopharynx.

A colorimetric antisense EBER1 oligonucleotide probe specific for Epstein-Barr virus was hybridized in situ (ISH) to metastatic tissue from 18 nasopharyngeal (NPC), 54 oral and pharyngeal, and 12 occult carcinomas. All 16 nonkeratinizing NPC were positive for EBER1. Both cases of keratinizing NPC and all 54 other metastases were negative. A single positive case of nonkeratinizing occult carcinoma indicated its origin from NPC.

We conclude that, in our population, NPC appears to be a less common origin of occult carcinoma than previously considered. EBER1-ISH in the proper clinicopathologic context allows exclusion of NPC with a high degree of accuracy and nasopharynx can consequently be excluded from the radiation volume. Conversely, a positive ISH in occult carcinoma metastatic to upper and mid-cervical nodes, allows omission of a further extensive diagnostic work-up.

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RADIATION THERAPY OF HEAD AND NECK LYMPHOEPITHELIOMA AND TRANSITIONAL CELL CARCINOMA

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Standard radiation treatment strategy for head and neck patients with lymphoepithelioma (LE) and transitional cell carcinoma (TCC) is not established probably because of the aggressive nature and better radiosensitivity compared to the squamous cell cancer (SCC). Between 1980-92, 152 patients with LE or TCC of the nasopharynx and tonsil were irradiated alone. In retrospective study, using multivariate analysis, following factors were investigated as a prognostic: sex, age, tumor and nodal stage, hemoglobin level, radiation fields size, total dose, dose per fraction and overall treatment time. The influence of secondary treatment for loco-regional relapse or distant metastases on survival was also evaluated. Tumor stage and total dose have only had a detrimental influence on outcome. Chemotherapy as a secondary treatment for relapse has prolonged overall survival significantly compared to the group of patients with no treatment. Prognostic factors in radiotherapy of LE and TCC are similar like for SCC, however an unimportance of the overall treatment time in the irradiation of LE and TCC should be discussed.

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OUTCOME OF PATIENTS WITH LARYNGEAL CANCER—A RETROSPECTIVE STUDY

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Over a period of 17 years (1978-1995) 197 patients with laryngeal cancer were treated with external radiotherapy at our department. All tumor localizations (glottis: n = 102, supraglottis: n = 55, NOS: n = 40) and tumor stagings were included in this analysis. The mean follow-up time was 3.4 years (range: 1 month-14.5 years).

The purpose of this study was to evaluate the overall survival and disease free survival and to compare them with the data found in the literature. This study also served as a quality control program for the treatment of head and neck tumors.

The data obtained showed a global survival rate at respectively 5 and 10 years for the whole patient group of 49% and 35%. The disease free survival for the same period was 73% and 69%.

The subgroup analysis at respectively 5 and 10 years showed following distribution: glottis 98% and 85%, supraglottis 60% and 48%, NOS 51% twice.

Most of these data were comparable with the results found in the literature, except for the local control rate of the T1 glottic carcinomas. This group contained 54 patients.

The 5 years local control after radiotherapy (76%) was worse than most data found in the literature ($\pm 90\%$). Survival after salvage surgery (96.3%) was again comparable with other data.

Until now, no explanation was found for this discrepancy in our results for T1 glottis carcinomas and the results found in the literature. Further investigations will be performed.

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COMBINED SURGERY AND IRRADIATION IN THE MANAGEMENT OF LOCALLY ADVANCED PARANASAL SINUS CARCINOMA

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Purpose: To compare the effectiveness (in terms of the local failure rate and cancer-specific mortality) of radiotherapy alone and combined modality treatment of paranasal sinus carcinomas.

Methods and Materials: A retrospective study of 96 patients treated over the period, 1970 to 1991 adjusting for imbalance of known prognostic factors.

Results: Local failure rates of patients treated by combined modality treatment were significantly lower than those of patients treated by radiotherapy alone (5-year actuarial local failure rates, 34% (SE = 7%) and 75% (SE = 9%), respectively; $P < 0.001$). Although the former patients were prognostically far superior (fewer sites of involvement, better performance status, younger, lower grade) they still had significantly lower failure rates after adjusting for this prognostic imbalance ($P = 0.002$).

Conclusions: Combination of radiotherapy and surgery may be the preferred treatment of patients with paranasal sinus carcinomas.

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DISCORDANCE BETWEEN P53 PROTEIN EXPRESSION AND SUPPRESSOR GENE MUTATION IN H&N SQUAMOUS CELL CARCINOMA

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Mutation of the p53 suppressor gene and/or overexpression of the p53 protein is a common event in carcinogenesis. The objective of this study was to compare immunohistochemical (IHC) detection of p53 with PCR-SSCP analysis of gene mutations.

Materials and Methods: Paraffin embedded archival material from biopsies from previously untreated squamous cell carcinoma of the oral cavity was used. Nuclear overexpression of the p53 protein was detected using a monoclonal antibody which recognizes both wild-type and mutant protein. DNA for PCR-SSCP analysis was extracted from 8 μ sections by heating to 60° and incubation with Proteinase-K in 55°

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