VHN 14**RADIATION THERAPY AND TREATMENT RESULTS OF MALIGNANT TUMORS OF THE LOWER JAW**

H.D. Böttcher, W. Wagner, L. Schertel

We report about a retrospective study of a patient collective from the files of the Radiological Clinic of Münster University between 1.1.1960 and 30.6.1983. There were 79 cases of primary malignant tumors of the lower jaw in 50 male and 29 female patients. More than 60 % of these patients were 60 years and older when treatment started. 63 of the tumors were histologically classified as carcinomas, and 16 as sarcomas.

Of 60 patients treated with combined surgical and radiotherapy, 56 received postoperative, 2 pre- and postoperative, and 2 pre-operative irradiation. 19 patients were subjected to radiotherapy alone, mostly for palliative purposes.

Recurrences developed in 14 of our 79 patients, 6 of them after surgical therapy alone.

The 3-year-survival among our 79 patients was 48.8 %, the 5-year-survival 44.6 %.

The tumors were treated with parallel opposed fields in split course technique, with a focal dose of 50 Gy. A side effect of radiotherapy was radiation mucositis in two cases, there was no evidence of osteoradionecrosis.

Of our 79 patients, 15 received additional chemotherapy for palliative, 3 for curative purposes.

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VHN 15**RADIATION THERAPY AND TREATMENT RESULTS IN MALIGNANT TUMORS OF THE TONGUE**

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We report about a retrospective study covering patient material recorded in the Radiological Clinic of Münster University between 1.1.1960 and 31.12.1983. During that period there were 164 tumors of the tongue in 114 male and 50 female patients with a mean age of 61 years.

Most of the tumors were histologically classified as squamous epithelial carcinomas (92 %). The patients received the following therapies: 59 cases palliative radiotherapy alone, 19 cases radiotherapy with additional surgical and/or chemotherapy, 86 cases combined surgical and radiotherapy.

Recurrences developed in 27 % of all patients, the mean survival was 2.1 years.

Tumors of the tongue were treated with parallel opposing fields in split course techniques with a focal dose of 50 Gy. The side effects of irradiation were osteoradionecrosis in two cases (receiving total focal doses up to 92 Gy for recurrences) and mucositis in 9 cases.

The five-year-survival rate among these 164 patients was 22 % with a slight difference between tumors of the glottal body (20 %) and those of the glottal fundus (25 %). The overall prognosis of glottal tumors is stage-dependent.

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VHN 16**RADIATION THERAPY AND TREATMENT RESULTS OF MALIGNANT TUMORS OF THE NASAL CAVE**

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We report on retrospectively analysed records of 43 patients (25 male and 18 female, aged 37 - 81 years, mean 56) with malignant tumors of the nasal cave, treated at the Radiologic Department of the University of Münster from 1961 until 1985.

The lateral nasal wall was primary site of the tumor in 29 % of the patients, the septum nasi in 11 %.

In 46 % of the patients the primary site was not exactly defined. 11 % of the tumors were carcinomas

and 23 % were sarcomas.

Treatment: 11 patients received radiationtherapy only (with palliative aim), 26 had combined treatment with surgery and radiotherapy and 6 patients received additional chemotherapy in combination with surgery and radiotherapy. Radiation therapy was done under supervoltage conditions with 2- or 3- field techniques. The reference dose due to the target volume was 50 Gy. If lymphatic nodes were involved the target volume was extended to the area of the primary tumor site and the lymph node areas of the neck. 30 % of all patients developed a recurrence, most of them during the first year after treatment. The 5-year survival rates of the 43 patients were: $T_1-T_4 = 44\%$, $T_1+T_2 = 100\%$, $T_3+T_4 = 11\%$, carcinomas = 39 %, sarcomas = 60 %.

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VHN 17**LEVELS OF CARCINOEMBRYONIC ANTIGEN (CEA) DURING DEVELOPMENT AND THERAPY OF SQUAMOUS CELL CARCINOMAS IN THE HEAD AND NECK**

M. Schröder and T. Meyer

The serum CEA levels of 134 patients with squamous cell carcinoma (scc) in the head and neck were studied at the time of diagnosis, after termination of primary therapy and every three months during the follow-up period. Since such patients are mostly nicotine and alcohol addicts, only CEA concentrations above 5 ng/ml were regarded as pathological values.

At the time of diagnosis 30% of the patients had clearly pathological CEA values, with a predominance of oropharyngeal and hypopharyngeal over oral cavity laryngeal carcinomas. With increasing tumor extension the incidence of pathological CEA concentrations also increased, to a greater extent in well-differentiated than in undifferentiated squamous cell carcinomas. After termination of the primary therapy we found no correlation between success of treatment and serum CEA concentration. Studies of the course of CEA values in tumor-free patients revealed both rising and falling serum values during the period of observation. It was not possible to make an early diagnosis of tumor recurrences with the aid of increasing CEA concentrations. CEA exhibits only moderate sensitivity towards squamous cell carcinomas of the head and neck. As correlations between the course of the disease and CEA concentrations in serum could only rarely be observed, the usefulness of this tumor marker for controlling the course of head and neck squamous cell carcinomas must be regarded as rather low.

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