ferentiated malignant cells were negative whereas the basal undifferentiated cells located at the periphery of the carcinomatous clusters were positive.

Conclusion: Concomitant p21-p73 nuclear stainings strongly suggest that p73 expression i) is restricted to proliferafive compartment of the malpigian epithelium, ii) could be involved in HNSCC carcinogenesis.

630 POSTER

Microvascular free tissue transfer in craniofacial reconstruction after tumour resection

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Purpose: Microvascular free tissue transfer (FTT) is an invaluable adjunct for head and neck oncologic surgery. Together with advanced imaging techniques, better approaches to skull base tumors, and advances in craniofacial surgery, it allows resection of locally advanced tumors that were thought unresectable. In this study, different free flaps will be used for reconstruction of a variety of major cranial-facial defects that resulted from ablative surgery of deeply invasive tumors.

Methods: This study involves a total of 28 patients who had T3 or T4 head and neck cancers including the scalp, skull base, midface, oral cavity, and the mandible. These patients underwent extensive resection that resulted in large defects that were reconstructed using FTT from October 94 to January 1999. Sixteen patients at MD Anderson Cancer Center, Houston, Texas (from July 96 to July 97), and twelve patients at The National Cancer Institute, Cairo, Egypt. The success rate, recipient vessels used, complications were examined. The ultimate functional and aesthetic outcome of the free flaps were compared and discussed in relation to the site of reconstruction.

Results: Free flaps were used to reconstruct a variety of extensive craniofacial defects. These defects consisted of skull base (8), scalp (5), midface (5), oral cavity (5), and mandibular defects (5). Immediate reconstruction was performed in 25 patients, while 3 patients underwent delayed reconstruction. Free flaps used included rectus abdominis (10), latissimus dorsi (5), radial forearm (6), fibula (5), lateral thigh (1), and omentum (1). Eleven patients received preoperative radiation therapy. The most commonly used recipient artery was the external carotid artery (20), whereas the most commonly used recipient vein was the internal jugular vein (17). The free flaps were successful for 27 patients. One patient who underwent free omentum for scalp reconstruction developed partial flap necrosis. Salvage surgery was successful for one flap. There was no perioperative death. Two patients developed CSF leakage, which stopped spontaneously, a patient has cerebrovascular stroke, and 3 patients have minor wound complications.

Conclusion: Free tissue transfer is a realistic option for reconstruction of major craniofacial defects. After resection of cranial base tumors the rectus abdominis is an ideal flap for cranial base reconstruction. For composite scalp and calvarial defects free muscle flap covered with split thickness skin graft is ideal. In midface composite defects myocutaneous free flaps provide plenty tissues required for such three dimensional defects. The radial forearm flap is ideal for oral cavity reconstruction, whereas the free fibula is our preferred method for mandible reconstruction

631 POSTER

Chemotherapy and accelerated radiotherapy in head and neck carcinoma: The experience from four swiss centres

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Purpose: To give a critical appraisal of the experience with combined radiotherapy (RT) and chemotherapy (CT) from four single-institutional non-randomized studies.

Methods: Individual patient data were collected from 4 Swiss centers (BS, ZH, GE, VD) treating advanced head and neck cancers with RT (217 pts.) or RT + CT (182 pts.).

Results: Early toxicity was significantly increased after CT + RT compared with RT alone. Local tumour control was only improved in one center. However, there was a confounding effect of patient selection in all studies. Late complications were not registered systematically, and no definitive conclusions can be drawn for these.

Conclusion: Non-randomized studies are difficult to interpret in terms of tumour outcome because of the, often deliberate, selection of cases for RT + CT. Toxicity data are less subject to this selection bias. Nonrandomized studies may produce valuable insights. Still, a definitive evaluation of therapeutic efficacy requires a randomized-controlled trial.

632 POSTER

Prognostic significance of angiogenesis in squamous cell carcinoma of the larynx

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Purpose: A retrospective immunohistological study of biopsies of SCC H&N (T2/T3 NO larynx) from 26 patients that underwent curative radiotherapy (R/T) between 1990–1994 (55 Gy in 15 f over 3–4 weeks) was undertaken to investigate the role, and prognostic significance, of factors involved in regulating tumour angiogenesis.

Methods: The role of the novel cytokine EMAP II in the radiation response was investigated together with factors that play a direct role in the angiogenic process (VEGF and Flk-1). Mean vessel density (MVD) was assessed in tumour tissue, and accompanying stroma, using a mAb against PECAM-1 (CD31) to reveal endothelial-lined vessels.

Results: Correlates with patient's response to R/T indicate that a high MVD may be indicative of a high risk of tumour recurrence in that 87.5% of those patients with recurrences had MVD's $\geq$11.0 as opposed to 33% for those that did not have recurrences. There was no correlation between levels of VEGF, EMAP-II or Flk-1 expression and clinical outcome.

633 POSTER

Docetaxel (DTX) + cisplatin (CDDP) in locally advanced or metastatic head and neck cancer (HN). A phase II study

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Purpose: DTX is among the most promising new drugs in HN, while CDDP is acknowledged as probably the most active single agent. Since the combination of the two drugs has shown clinical activity in HN, we started a phase II study in patients (pts) with locally advanced and metastatic HN.

Patients and Methods: Eligible pts, never pretreated with chemo- (CT) or radiotherapy (RT), received a combination of DTX 75 mg/m^2 and CDDP 100 mg/m^2 every 3 weeks. After 3 cycles, pts were re-evaluated; responding pts with locally advanced HN underwent RT, while metastatic responding pts received further CT.

Results: 46 pts (median age 59; M/F = 39/7) were accrued. 45 pts had locally advanced disease, while 1 pt had lung metastases. 44 pts are evaluable for response. 4 complete responses (CR) and 16 partial responses (PR) have been observed, for an overall response rate of 45%, according to intention-to-treat analysis. In 2 pts with PR and 1 pt with SD after CT, a CR was achieved after subsequent RT. Neutropenia (grade 3–4 in 25 pts) and diarrhea (grade 3–4 in 5 pts) were the main side effects. 10 pts died before completion of 3 courses of treatment; in 6 cases (grade 4 diarrhea in 4, and neutropenic sepsis in 2) this was considered probably CT-related.

Conclusion: DTX + CDDP is an active, but toxic regimen in HN. Careful selection of pts is needed for further trials.

634 POSTER

Oral enzymes preventing side effects of radiation therapy in patients with head and neck cancers

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Based on in vitro data and on clinical evidence of a protective action against acute side effects of radiotherapy, a prospective randomised study was undertaken to determine the safety and efficacy of an oral enzyme combination in patients with head and neck cancer receiving conventional fractionated radiotherapy (Wobe-Mugos® E, MUCOS Pharma, Geretsried, Germany) (OE).