S36 Monday 22 September 2003 Poster Session

BT induced ulcers healed spontaneously in 88%. Only 6 recurrences were observed in the 149 electively treated CL necks with no relapses in 29 non-treated CL NO necks. Given the morbidity of xerostomia and the low recurrence rates in the CL necks, we will optimize our organ preservation protocol by refraining from treatment of the CL NO neck if the GTV of the tumor does not surpass the midline of the SP. Also, with CT-based neck level standardization, IMRT techniques are implemented to further reduce the dose to salivary glands and oral mucosa.

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Comparative study between intravenous and subcutaneous amifostine administered for the prevention of radiation induced toxicities in patients with head and neck cancer

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Purpose: The purpose of this prospective randomized study was to evaluate the efficacy and tolerance of the intravenous (IV) and subcutaneous (SC) amifostine administered for the prevention of xerostomia and mucositis in patients (pts) with Head and Neck (H&N) cancer receiving radiotherapy (RT) with curative intent.

Material and Methods: A total of 96 patients with H&N cancer received conventional RT (1.8-2.0 Gy qd, 5days/week, for 6-7 weeks). Tumours of the larynx (supraglottic) and oral cavity were most frequent and stage III was predominant. Patients were randomized to receive amifostine at 500 mg flat dose prior to each radiotherapy fraction, either IV (n=44) or SC (n=52). Antiemetic premedication was given prior to amifostine in both groups. Acute RT-induced toxicities were evaluated according to the RTOG toxicity scoring system.

Results: The two groups were evenly balanced concerning demographic data. The median total RT dose administered was 60Gy in both groups. The incidence of Grade 3 acute xerostomia, oral mucositis and pharyngitis was not significantly different between the two groups during RT and remained low in all cases (see table). Only 3/96 pts (1 IV and 2 SC) discontinued RT due to treatment-related toxicity. Recorded delays due to RT-induced toxicities were similar: 3/44 pts (6.8%) in the IV group and 2/52 pts (3.8%) in the SC group. Mean RT duration was 42.7±5.2 days (IV group) and 44.8±7.9 days (SC group) (p=0.143).

Administration of amifostine was well tolerated in both arms, since only 4 pts discontinued the drug: 2 in the SC (1 for emesis and asthenia, 1 for skin rash with fever) and 2 in the IV group (1 for hypotension, 1 for skin reaction).

Seventy-two patients (37 IV, 35 SC) were evaluated for response to RT, which was not significantly different between the two groups: CR in 20/37 IV pts (54.1%) and 21/35 SC pts (60%).

Table: Incidence of Grade 3 acute toxicity, by treatment weeks 5-6

	SC Amifostine	IV Amifostine	P value
Salivary glands	6/52	3/44	0,501
Mucosa	7/52	2/44	0,173
Pharynx	5/52	4/44	0,999

Conclusion: Amifostine is an effective and well tolerated radioprotective agent in patients receiving RT for H&N cancer, independently of the route of administration (IV or SC).

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## Oral cavity verrucous carcinoma

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**Background:** To evaluate the outcome of patients with oral cavity verrucous carcinoma under primary surgery treatment, and to assess the risk of lymph node metastasis.

Material & Methods: From March 1993 to July 2001, 112 patients with oral cavity verrucous carcinoma received surgery as primary treatment. One hundred and seven (96%) patients were male and the median age was 52 (ranging from 33 to 51). Only 6 patients had no consumption habits of betel nut, cigarette and/or alcohol. Most common tumor site within oral cavity is buccal mucosa (51.8%). The distributions of tumor stage were T1: 31, T2: 38, T3: 27 and T4:16. Only 2 patients had palpable cervical adenopathy

at initial examination, one in T3 and the other in T4. Wide excision with 1 cm margins was the standard procedure of surgery. Mandibulectomy and/or maxillectomy were done to get the adequate margins. Selective neck dissections were done in 38 patients. Sixty eight patients received free flap for reconstruction. Postoperative radiotherapy was delivered in 8 patients for close margins.

**Result:** No neck node metastasis in the pathology examination after neck dissection. The local and regional tumor controls were 100%. Seven patients had secondary squamous cell carcinoma and 2 of them died of secondary cancer. The 3-year overall survival was 94.8% and 5-year survival was 82.8%.

**Conclusion:** Surgical excision alone is an effective treatment modality for verrucous carcinoma. Selective neck dissection is not necessary even in advanced stage. Echo guided biopsy should be a treatment choice for clinical suspicious neck node before neck dissection.

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## Glottic cancer and the impact of the duration of symptoms

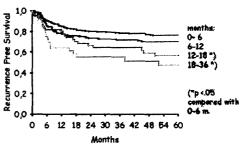
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Studies of the impact a delay before start of radiotherapy (RT) have resulted in conflicting reports.

Patients with glottic cancer (GC) constitutes a homogenous group of patients with hoarseness being an absolutely dominating symptom with an onset that is simple to record. A study of the relationship between duration of symptoms (DoS) before start of treatment and the recurrence free survival (RFS) therefore seem to be relevant.

Material and methods: From 1965-1999 693 patients with GC were treated with radical RT. Data from the patients were registered prospectively in a medical database. In 1991 the data was moved from the original computer platform to PC databases (MEDLOG). All patients were retrospectively restaged according to UICC 1997. Among the data recorded prospectively were the symptoms and the date of onset of symptoms.

Results: The most frequent initial symptom was hoarseness (97.4% of the cases) followed by throat irritation (3.8%), otalgia (1.7%), cough (1.7%), dyspnoe(1.6%), dysphagia (0.9%), weight loss (0.7%), tumour (0.3%), and other (1.7%). The median DoS (mDoS) was 4.8 months (m). 34 cases (5%) that reported the duration of symptoms 36m or more, and 17 cases (2%) with missing information on DoS were excluded leaving 642 cases for analysis. No differences were observed between men and women: mDoS females 4.9m, males 4.5m (p= ns). The mDoS increased with stage: st.1 4.3m (no.=295), st.II 4.3m (no.=231), st.III 5.1m (no.=86), st.IV 8.3m (no.=22, p<0.05 compared with stage I and with stage II). The mDoS depended on the period of treatment: 1965±79 4.1m (no.=188), 1980±89 4.2m (no.=202), and  $1990\pm995.1m$  (no.=265). The RFS decreased when mDoS increased. COX analysis showed DoS, stage and dose to be significant factors (each p<0.0001), while Gy per day, gender, year of treatment, and age were not significant (p=0.46-0.71). The relative risk for DoS was 1.05 (1.03; 1.08).



Events= recurrences, Censored at death

Glottic Cancer. Recurrence free survival vs duration of symptoms.

**Conclusion:** The DoS was statistically significant related to a decrease in RFS. 1 month in delay from onset of symptoms to start of RT was equivalent to a 5% decrease in RFS.