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Letter to the Editor

Topical Administration of Cisplatin in Far-advanced Squamous Cell Carcinoma of the Head and Neck*

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A NUMBER of patients with squamous cell carcinoma of the head and neck cannot be treated with systemic chemotherapy because of age, poor performance status or concomitant non-oncologic disease. So a large number of patients could gain an advantage from using a different therapeutic modality, bypassing the problems of the drug-related toxicity.

Cisplatin has been locally injected in eight patients with far-advanced squamous cell carcinoma of the head and neck, not eligible for systemic treatment because of age (three patients >80 yr), performance status (one patient with P.S. = 4, ECOG scale), concomitant non-oncologic disease (one patient with renal insufficiency) or resistant to conventional chemo-radiotherapy (three patients). Patients characteristics are reported in Table 1.

Treatment consisted of cisplatin, ten vials, diluted in 4 ml of 1% HCl–procaine solution, administered with multiple injections by insulin syringe on the border and in the middle of the tumoral lesion. Almost 0.8 mg of drug were administered with each injection. Larger lesions received 10 mg weekly, the remainder 5 mg twice a week.

All the patients were monitored by serum creatinine, blood cell count and physical examination.

Blood samples were collected just before CDDP administration, at the end of injections and at various times following the end of CDDP administration. Blood was centrifuged immediately and plasma separated. Similarly, fragments were obtained before CDDP administration, and after 15 min and 1, 2 and 24 hr. A Varian AA–775 atomic absorption spectrophotometer equipped with a CRA–90 graphite furnace was used to quantify CDDP levels, using a deuterium background corrector [1]. Cisplatin was detectable in plasma and tumor samples for up to a week following a previous intratumoral drug injection.

The lesion was photographed, when possible, before every drug administration. Neither severe side-effects nor local necrosis have been detected in

Table 1. *Characteristics of patients*

Patient No.	Age	Sex	P.S.*	Tumor site	Courses	Doses (mg)	Prior therapy
1	59	M	4	floor of mouth	3	10	RT + CT
2	35	M	1	maxill. sinus	2	5	S + RT + CT
3	91	M	1	floor of mouth	9	5	none
4	73	M	1	oral tongue	4	10	S + RT + CT
5	74	M	1	neck soft tissue (prior laryngectomy)	2	5	S + RT
6	50	M	1	nasopharynx	4	10	RT + CT
7	85	F	1	nose	4	5	S + RT + CT
8	93	F	2	gums	3	5	S + RT + CT

M = male; F = female; CT = chemotherapy; RT = radiotherapy; S = surgery.
*Performance status according to WHO criteria.

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32 drug administrations; on the contrary, a fast re-epithelialization of the lesion was observed in most cases.

Even if no antiemetics or steroids were usually administered during the treatment, nausea and vomiting was observed only in 1/32 courses. Four patients had acute pain during the injections notwithstanding the procaine. A partial relief of this adverse effect was achieved by the contemporary administration of buprenorfine (0.3 mg in 250 ml of saline, i.v.).

Antitumoral activity was observed in 5/8 patients and relief of symptoms in four patients.

Our data show that it is possible to inject cisplatin locally without producing unpleasant consequences.

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