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Letter to the Editor

Etoposide (VP16-213) in the Treatment of Advanced Nasopharyngeal Carcinoma

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NASOPHARYNGEAL CARCINOMA (NPC) is currently the third commonest cancer death in the male population of Hong Kong [1]. Although radiotherapy is highly effective in the early stage of NPC, its impact on survival in the advanced stage or relapsed NPC is not satisfactory [2]. Etoposide (VP16–213) has been shown to have anti-tumour activity in many different cancers [3]. Our objective in this study is to assess its anticancer activity as well as its toxicity in Chinese patients with advanced NPC.

The eligibility criteria for entry into the study were: patients with histologically proven NPC; with disease evaluable on clinical or radiological grounds; and normal full blood counts and renal function. They were given etoposide 300 mg/m^2 in 500 ml N. saline by i.v. infusion over 2 h 3 weekly for a maximum of eight courses if there was no evidence of disease progression. The dose selected was based on other phase 2 data.

Bone scans with appropriate plain X-ray views were used to evaluate the tumour response in the skeleton. Chest X-ray and liver ultrasound were used to evaluate the tumour response in lung and liver respectively. Renal function and blood counts were checked prior to each course of chemotherapy and the treatment was delayed weekly until white blood counts were $>3000 \times 10^9$/l and platelet counts of $>100{,}000 \times 10^9$/l. The criteria adopted by the WHO were used to evaluate the tumour response and treatment toxicity [4]. The survival interval was defined as the interval from the time of treatment to the time of death.

Table 1. *Patient clinical characteristics and response to treatment*

Age	
Median	46.5
Range	31–71
Sex	
M:F	10:4
Prior chemotherapy	5/14
Prior RT	11/14
Site of evaluable disease	6/14 Bone
	6/14 Node
	1/14 Lung
	2/14 Liver
	1/14 Primary
Response	
Partial response	1/14
No change	9/14
Progressed	4/14
No. of courses	
Median	3
Range	1–8

Fifteen patients were entered into the study but only 14 patients were evaluable for response. Histology in all cases was poorly differentiated squamous cell carcinoma. Eleven out of 14 patients had relapsed disease after previous radiotherapy. Two out of 14 patients had stage 5 and one had stage 3 disease using Ho's classification [5]. Their clinical characteristics and response are shown in Table 1. A total of 49 courses of etoposide were administered. Only 1/14 (7%) patients showed evidence of partial response and the response was seen in the primary site and that patient had not received any previous chemotherapy or radiotherapy. Therefore the estimated true response rate is in

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the range of 7 ± 0.14% at 95% confidence level. The treatment was fairly well tolerated, only 1/14 (7%) patients developed grade 3, 1/14 (7%) grade 2 and 3/14 (21%) grade 1 haematological toxicity. There was no drug related death. At the time of writing, eight out of 14 patients have already died of the disease and their median survival is 110 days (range 45–288).

Our treatment results are clearly unsatisfactory and this probably relates to the following reasons. Most of the patients were heavily pretreated with radiotherapy and the major site of evaluable disease was in bone which is known to be more refractory to chemotherapy than soft tissue sites. We conclude that at the present dose and schedule, etoposide is ineffective in advanced NPC when bone is the predominant site of disease.

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