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## Etoposide and mesothelioma

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## CORRESPONDENCE

### *Etoposide and Mesothelioma*

#### *To the Editor:*

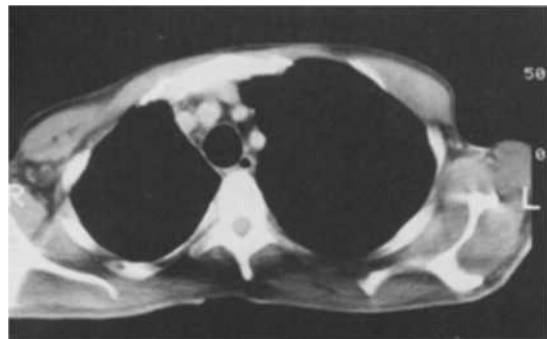
Mesothelioma is notoriously difficult to treat. Surgery with curative intent is indicated only in patients with stage I disease according to Butchart et al.<sup>1</sup> However, the majority of patients suffering from this rare disease entity present with more advanced disease and are not considered candidates for surgery. Results of radiotherapy and chemotherapy are inconsistent and unsatisfying. As far as radiotherapy is concerned, some studies have reported relief of pain using moderate doses, while others have found improved survival using higher doses, but the latter with more toxicity.<sup>2</sup>

Systemic chemotherapy trials have yielded conflicting results. Various antineoplastic agents have been tested. From these, doxorubicin, as a single agent, seems to be the most promising, with a response rate of about 18%.<sup>3</sup> The activity of single-agent etoposide, given as an intravenous bolus infusion 150 mg/m<sup>2</sup> days 1, 3, and 5 every 3 weeks, was recently evaluated by the European Organization for Research and Treatment of Cancer Lung Cancer Cooperative Group. Only two partial responses in 42 patients entered were observed (F.J.M. van Breukelen, personal communication). Etoposide is an agent found to have profound schedule dependency in preclinical and clinical trials.<sup>4</sup> This is explained by its inhibitory effect on topo-isomerase II. Hainsworth et al<sup>5</sup> extended these observations using daily oral etoposide for 21 days. In their phase I trial, a remarkably high response rate was seen. Notably, they saw responses in tumor types in which other schedules of etoposide failed to show a high level of activity.

As an example of an effective response, we report on a 49-year-old patient who was referred to our hospital because of pain over the right hemithorax. Conventional chest roentgenograms showed an abnormal right paracardiac mass and a shadow on the ventral side of the right hemithorax, confirmed by a computed tomographic (CT) scan (Fig 1). A histologic diagnosis of mesothelioma was obtained. Subsequently, the patient was treated with daily oral etoposide, 50 mg twice



**Fig 1.** CT scan of abnormal right paracardiac mass and a shadow on the ventral side of the right hemithorax, histologically diagnosed as mesothelioma.



**Fig 2.** CT scan of same patient as in Fig 1, showing partial remission after etoposide treatment.

daily, for 21 days on a 5-week schedule. During the first cycle of chemotherapy, clinical improvement was evident, and the patient was able to reduce his intake of oral morphine. After the second course, a partial response was reached, measured by CT scan (Fig 2). Apart from partial alopecia and mild myelosuppression, no major toxicity was observed. Four months after start of chemotherapy, the patient is in good clinical condition and his tumor is still in regression.

This case report shows the activity of daily oral etoposide in a tumor believed to be almost unresponsive to any type of chemotherapy. Further exploration of the activity of daily oral etoposide in this malignancy is warranted.

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