Cancer Chemotherapy and Pharmacology

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Letter to the Editor

Vindesine Neurotoxicity

Dear Sir,

Obrist et al. report on vindesine neurotoxicity in your recent issue and comment that neurological side effects are minimal [9], which is reiterated in Dyke's review [3]. We note that their patients received minimal treatment, the median dose being 4.5 mg (range 0.8–13.5 mg). In the same issue other authors report a high incidence of neurotoxicity [4], while others record this as a dose-limiting effect [1, 2, 10, 11]. Previously Mathé et al. had recorded that neurological manifestations were rare [6].

In our experience of 30 adult patients with a variety of solid tumours treated with vindesine 3–4 mg/m² IV weekly, we have observed six patients with treatment-limiting neurotoxicity. All had breast cancer and had received prior combination chemotherapy, which included vincristine in two patients. They experienced paraesthesiae and motor neuropathy leading to impairment of walking. Three of them also had dizziness due to postural hypotension, and in one of these an autonomic neuropathy was confirmed as the cause on physiological testing. None of these six patients showed an objective regression [5] with vindesine, although one showed improvement in skin infiltration. The median age of these patients was 61 years (range 47–75) and the median total dose of vindesine was 18 mg (range 12–82 mg).

Overall, we observed only one objective regression in 14 patients with breast cancer. This result confirms another [4], but compares unfavourably with that of Smith et al. [11], whose series of 23 patients included 11 with a measurable response. Six of these eleven patients had not received prior chemotherapy. In a variety of other solid tumours not treated by prior chemotherapy (including melanoma, non-small-cell lung cancer, and squamous-cell head and neck carcinoma) no regressions occurred. We observed thrombocytosis (platelets $> 400 \times 10^3/\mu l$) in 11 of 27 patients (cf. [3]), and in six this accompanied leucopenia (white cell count $< 4.0 \times 10^3/\mu l$).

In addition, one of us (RF) undertook subjective assessments of these patients while on vindesine, using self-rating questionnaires and semi-structured interviews [7, 8; T. Morris, unpublished report]. These results indicate that, overall, vindesine was well tolerated subjectively. Only three patients were subjectively most distressed at the time of maximal side effects and of these two had treatment-limiting neurotoxicity.

The conclusion from our small series indicates low activity for vindesine in previously treated breast cancer and significant neurotoxicity.

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