

Vinorelbine chemotherapy-induced blistering

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Dear Editor,

We read with interest the paper by Heijmen *et al.*¹ in which the authors describe a case of blistering after administration of vinorelbine, a second-generation semi-synthetic vinca alkaloid antitumour drug employed in advanced lung and breast cancers and generally well tolerated. We wish to report a further case of skin blisters after the infusion of vinorelbine to provide a further contribution to the knowledge on the various clinical aspects.

In August 2011, a 74-year-old Caucasian woman was referred to the Dermatology Department for blisters on the hand. She was diagnosed with breast cancer in 2007 and treated with a mastectomy, right axillary dissection (pT1aN3M0) and adjuvant chemotherapy (fluorouracil, epirubicin, and cyclophosphamide followed by docetaxel). In 2010, lymph node recurrence was treated with radiotherapy. In July 2011, she developed bone metastases: vinorelbine therapy was suggested. During the chemotherapeutic infusion, no apparent extravasations were detected and she did not complain of pain. After three days, big blisters appeared. The clinical examination revealed a large erythematous area with tense fluid-filled blistering associated with mild oedema on the dorsal side of the wrist and hand (*figure 1*). We suggested washing with saline, applying topical antibiotic and impregnated gauze. The patient recovered well within a week, with dyschromia appearing at the site of the lesion.

Vinca-alkaloids are classified as irritants or vesicants. Tissue injury may arise immediately or appear after several days, as mild erythema, itching or swelling, pain or local burning at the infusion site. Symptoms may later increase and skin indurations, desquamation or blistering develop, as happened in our patient. The direct toxic effect of the agent and amount and concentration of the extravasated fluid might influence the severity of tissue injury. In our case, a skin reaction and vessel irritation appeared, despite the correct administration.² Dilution of the drugs with saline or hyaluronidase (150 to 1500 U subcutaneously

Figure 1. Vinorelbine-induced blistering of the dorsal side of the hand



in surrounding tissues) in combination with hot packs might limit skin damage. Oral or topical antibiotics may prevent eventual superinfection. On the contrary, cold packs increase toxicity and calcium leucovorin, diphenhydramine, hydrocortisone, isoproterenol, sodium bicarbonate, and vitamin A cream seem to be ineffective.^{3,4} In our opinion, these two cases are interesting because they show that erythema, mild swelling, pain or blistering can appear days after the vinorelbine infusion. We think that this presentation highlights the importance of being aware of early symptoms and signs of this possible complication.

REFERENCES

1. Heijmen L, Vehof, Van Laarhoven HWM. Blistering of the hand in a breast cancer patient. *Neth J Med.* 2011;69:82-5.
2. Schrijvers DL. Extravasation: a dreaded complication of chemotherapy. *Ann Oncol.* 2003;14(Suppl 3):iii26-30.
3. Dorr T. Antidotes to vesicant chemotherapy extravasation. *Blood Rev.* 1990;4:41-60.
4. Pattison J. Managing cytotoxic extravasation. *Nurs Times.* 2002;98:32-34.