

Serious delayed hypersensitivity reaction to oxaliplatin

With great interest we read the articles of Siu et al. [1] and Maindrault-Goebel et al. [2]. Both report on immediate type hypersensitivity reactions to oxaliplatin, occurring in about 10–15% of patients, mostly after several courses of therapy. We recently observed a quite different presentation of hypersensitivity to oxaliplatin, consisting of severe respiratory symptoms about 24 h after the first and the second infusion of oxaliplatin.

The patient is an 81-year-old Caucasian female with mesenterial lymph node metastases of colorectal carcinoma who was treated earlier with six cycles of capecitabine as first-line palliative chemotherapy. She had no known allergies. Her medication consisted of insulin for diabetes mellitus and chlortalidone for hypertension. Due to progressive intra-abdominal disease second-line palliative chemotherapy was started, consisting of oxaliplatin 130 mg/m² i.v. 2-hour infusion on day 1 and capecitabine 1000 mg/m² orally b.i.d. on day 1–14 (cycles q 3 weeks). Twenty hours after the first infusion of oxaliplatin, while still on the clinical ward, the patient acutely developed serious dyspnoea with an inspiratory stridor and peripheral cyanosis. She was not taking food or fluids when the stridor started. Pulse oximetry demonstrated an oxygen saturation of 58%. Blood pressure was 180/80 mmHg and pulse rate was 120 b.p.m. There were no skin symptoms. Immediate treatment was given with dexamethason, clemastine, oxygen administration and broncho-dilator therapy. She completely recovered within 15 min. The subsequent dose of capecitabine later that day was uneventful. Under strict clinical conditions, and with consent of the patient, three weeks later a second cycle of oxaliplatin was administered. After pre-medication with dexamethason and anti-histamines, infusion of oxaliplatin was started slowly, and completed in 6 h, without adverse reactions. However, about 20 h later exactly the same reaction with dyspnoea and stridor occurred. Further treatment with oxaliplatin was discontinued, although the patient appeared to have a clear response of the tumour.

A rising incidence of hypersensitivity reactions associated with oxaliplatin has been noted. Previous reports described predominantly type I allergic reactions, occurring after a median of seven to nine cycles [1–3] and mostly within minutes following infusion initiation [2]. Our patient, however, developed severe symptoms nearly 24 h after the first infusion. This delay in appearance of these symptoms is a new observation and has not been described earlier. Although we considered acute laryngo-pharyngeal dysesthesia as an explanation for her symptoms, the stridor and cyanosis indicated true laryngospasm. Since re-challenge induced an identical clinical reaction, a clear relation appears to be established. In our view, there is no other explanation for the acute respiratory complication in our patient than an oxaliplatin-related reaction.

Physicians treating patients with oxaliplatin should be aware of this delayed respiratory complication. Prompt symptomatic treatment leads to reversal of symptoms. Given the extreme rareness of this delayed side-effect, clinical monitoring for 24 h of all patients treated with oxaliplatin is not strictly mandatory.

R. S. de Vries^{1*}, E. J. Mattijssen¹ & A. A. van Sorge²

Departments of ¹Internal Medicine and ²Pharmacy, Rijnstate Hospital, Arnhem, The Netherlands

(*E-mail: rolanddevries@alysis.nl)

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