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Extrapyramidal Reaction Associated with Ondansetron

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 and P. Ferrer**

ONDANSETRON, a serotonin antagonist antiemetic, has not been linked to extrapyramidal side-effects in clinical trials [1]. We observed 1 case of extrapyramidal reaction in a patient following direct intravenous ondansetron administration.

A 65-year-old woman with locally advanced undifferentiated nasopharyngeal carcinoma had been treated with radical radiotherapy. 10 months later, she developed a local recurrence, with left cavernous sinus syndrome. Chemotherapy with cisplatin 100 mg/m² on day 1 and fluorouracil 1 g/m²/day as a continuous infusion of 4 days was started. As an antiemetic, she received intravenous ondansetron 8 mg (0.15 mg/kg) and intravenous dexamethasone 20 mg, prior to cisplatin and ondansetron 8 mg orally at 8 h intervals afterwards for 4 days. In subsequent cycles, fluorouracil was reduced to 750 mg/m²/day because of stomatitis. No change was made in antiemetic therapy. After the second cycle, analgesics were withdrawn and she received no subsequent concurrent medication. In the third cycle, ondansetron was given intravenously. On the third day of the cycle, the seventh dosage of ondansetron was slowly injected intravenously. Immediately after the administration, the patient experienced dystonia of the jaw, stiffness of the limbs, inability to speak, anxiety, and a burning sensation in her face and hands. The episode lasted 1–2 min and resolved spontaneously. The ampoule of the administered drug was checked and positively identified as ondansetron. The fluorouracil infusion was not stopped. The subsequent doses of ondansetron, for the rest of the third cycle and for the fourth cycle were administered diluted over a 15-min intravenous infusion, and no side-effects were noticed. A computed tomography scan showed partial tumour response.

There was a clear relation between the direct intravenous administration of ondansetron and the episode. The fact that the reaction disappeared spontaneously in a few minutes, and did not recur with the short intravenous infusion, may be due to a relation between the extrapyramidal reaction and high plasma levels. Other factors such as old age and female sex may have played a role, increasing susceptibility or modifying the drug's pharmacokinetics [2].

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Ondansetron has shown an absence of extrapyramidal side-effects, and superior activity for cisplatin-induced acute emesis compared with metoclopramide, in comparative trials [3]. Recently there have been two other reports of extrapyramidal side-effects attributed to ondansetron. In 1 case [4], the prior use of droperidol precluded a definitive association [5]. The second case occurred after ondansetron was administered by short intravenous infusion [6].

1. Smith RN. Safety of ondansetron. *Eur J Cancer Clin Oncol* 1989, 25 (Suppl. 1), 47–50.
2. Pritchard JF, Bryson JC, Kernodle AE, Benedetti TL, Powell JR. Age and gender effects on ondansetron pharmacokinetics: evaluation of healthy aged volunteers. *Clin Pharmacol Ther* 1992, 51, 51–55.
3. Marty M, Pouillart P, Scholl S, *et al.* Comparison of the 5-hydroxytryptamine (serotonin) antagonist ondansetron (GR 38032F) with high-dose metoclopramide in the control of cisplatin-induced emesis. *N Engl J Med* 1990, 332, 816–821.
4. Dobrow RB, Coppock MA, Hosenpud JR. Extrapyramidal reaction caused by ondansetron. *J Clin Oncol* 1991, 9, 1921.
5. Kanarek BB, Curnow R, Palmer J, Cook SF. Ondansetron: confusing documentation surrounding an extrapyramidal reaction. *J Clin Oncol* 1992, 10, 507.
6. Halperin JR, Murphy B. Extrapyramidal reaction to ondansetron. *Cancer* 1992, 69, 1275.

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Phase II and Pharmacokinetic Study of Fotemustine in Inoperable Colorectal Cancer

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TO FIND new active agents for colorectal adenocarcinoma, we selected fotemustine for a phase II trial because of preclinical

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