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Magnetic Resonance Signal Alterations of the Brain in Asymptomatic Patients Treated With High-dose Cisplatin for Ovarian Carcinoma

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THE FEATURES of high-dose cisplatin-induced neurotoxicity have been described as transient acute cerebral dysfunction and chronic leucoencephalopathies [1,2].

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We incidentally observed the presence of high-signal intensity lesions on T2 weighted images located in periventricular white matter in a patient under cisplatin chemotherapy treatment for ovarian carcinoma. The patient was neurologically asymptomatic.

This finding induced us to perform brain magnetic resonance (MR) on another 19 patients who were also under cisplatin treatment for ovarian carcinoma. All the patients were symptom-free and cisplatin dose was 120 mg/m² as a 4-h infusion in each cycle, administered over 3–5 days.

MR examinations were performed on the fifth day of treatment with a 0.2 T unit (Hitachi). Axial and sagittal T1 (500/30), PD and axial T2 weighted (1900/30–90) sequences were obtained. Intravenous GdTPA was administered in the axial T1 sequence.

Of the 20 patients, 10 showed abnormalities of white cerebral matter, presenting as high signal intensity focal lesions on T2 weighted images. The lesions were well defined, with irregular margins, and were located preferentially in periventricular white matter. Intravenous GdTPA showed no signal changes. There was no ventricular dilatation or other cerebral abnormality in any case.

These lesions may be related to multiple foci of non-inflammatory leucoencephalopathy secondary to cisplatin administration, microclots or necrotising embolisms of tumoral tissues [3,4], although we were not able to obtain histological correlation.

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The Use of Carboplatin in Malignant Germ Cell Tumours

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CARBOPLATIN HAS been used in trials for patients with good risk germ cell tumours in order to avoid cisplatin-associated treatment toxicity [1]. In a phase II trial recently published in

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