

important cause for this finding. A recent study in California by Halpern and Coren [2] on handedness and life-span has shown that the mean age of death in left-handed people is 9 years earlier than in right handers. The reason for this 9-year reduction in life span is unknown, but may be related to the fact that left-handed (and left-footed) people live in a right-handed world, and are more prone to accidental death. Breast cancer is primarily a disease of older age groups. Perhaps fewer left-handed women live long enough to develop breast malignancy. Whether the numbers of patients involved are sufficient to account for Olssen and Ingvar's findings remains to be determined.

1. Olsson H, Ingvar C. Left handedness is uncommon in breast cancer patients. *Eur J Cancer* 1991, 27, 1694-1695.
2. Halpern DF, Coren S. Handedness and life span. *N Engl J Med* 1991, 324, 998.

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## Cisplatin-induced Sodium and Magnesium Wastage

Anne Ørbo and Ernst Simonsen

SELECTIVE RENAL wasting of magnesium combined with hypomagnesaemia is a frequent side-effect after treatment with cisplatin [1]. However, hyponatraemia is rare: persisting hyponatraemia has been reported in only 3 patients, all children [2, 3].

We report a case of severe, persisting hyponatraemia and hypomagnesaemia in a 53-year-old Lapp woman treated with cisplatin for adenocarcinoma of the endometrium. A simple hysterectomy and bilateral oophorectomy was initially performed. Histological examination revealed a low differentiated (grade III) tumour infiltrating deeply in the uterine wall, affecting the upper part of the cervix. The patient was admitted to the University Hospital to receive adjuvant therapy consisting of external pelvic radiation (total dose 44 Gy), followed by four single courses of cisplatin 50 mg/m<sup>2</sup> plus epirubicin 50 mg/m<sup>2</sup> every 4 weeks. The second course was given in the local hospital and the last course was cancelled. Serum creatinine and creatinine clearance were always normal. The concentrations of Na, K and Mg (in mmol/l) were: 137, 4.0 after course one (magnesium not determined); 112, 1.2 and 0.47 after course two; and 109, 2.5 and 0.3 after course three. Serum values 3 months after the last course remained low.

Many side-effects of cisplatin have been described [2]. Nephrotoxicity, which is dose-limiting, may be manifested as azotaemia, hypokalaemia, hypocalcaemia and hypomagnesaemia [1, 4-6]. Our case is unusual, with persistent hyponatraemia with hypokalaemia and hypomagnesaemia after three single low-dose courses of cisplatin, a cumulated dose of 140 mg.

Electrolyte wasting is thought to have its origin in tubular damage with destruction of the electrolyte regulating mechanisms in the nephrons [4-6]. The sites of cation reabsorption are

those that are most sensitive to the toxic effects of cisplatin [2]. Whereas renal regulation of calcium and magnesium excretion is similar to that of sodium in the proximal part of the duct system, the transport mechanisms in the distal part seem to be independent and different. Cisplatin-induced nephrotoxicity may be due to a proximal tubule impairment [1]. Thus, hyponatraemia should be as frequent as hypokalaemia and hypomagnesaemia. However, this is the first report of a persisting hyponatraemia in an adult after cisplatin. The fact that the patient was of a special ethnic origin may be important and a pharmacogenetic mechanism should be considered.

1. Daugaard G, Abildgaard U. Cisplatin nephrotoxicity. A review. *Cancer Chemother Pharmacol* 1989, 25, 1-9.
2. Lammers PJ, White L, Ettinger LJ. Cis-platinum induced renal sodium wasting. *Med Pediatr Oncol* 1984, 12, 343-346.
3. Vassal G, Rubie H, Kalifa C, Hartmann O, Lemerle J. Hyponatremia and renal sodium wasting in patients receiving cisplatin. *Pediatr Hematol Oncol* 1987, 4, 337-344.
4. Blachley JD, Hill JB. Renal and electrolyte disturbances associated with cisplatin. *Ann Intern Med* 1981, 95, 628-632.
5. Schilsky RL, Barlock A, Ozols RF. Persistent hypomagnesaemia following cisplatin chemotherapy for testicular cancer. *Cancer Treat Rep* 1982, 66, 1767-1769.
6. Lyman NW, Hemalatha C, Viscuso RL, Jacobs MG. Cisplatin-induced hypocalcemia and hypomagnesaemia. *Arch Intern Med*, 1980, 140, 1513-1514.

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## Lethal Toxic Epidermal Necrolysis During Suramin Treatment

G. Falkson and B.L. Rapoport

WE READ with interest May and Allolio's [1] report of fatal epidermal necrolysis during suramin therapy as we recently reported this in a patient being treated with suramin [2]. 10 of the first 17 patients we treated with suramin developed skin toxicity of varying severity. We treated a further 29 patients giving hydrocortisone sodium succinate 200 mg intravenously before suramin administration and saw only one mild skin reaction in these patients. It therefore seems appropriate to consider giving corticosteroids before suramin.

1. May E, Allolio B. Fatal toxic epidermal necrolysis during suramin therapy. *Eur J Cancer* 1991, 27, 1338.
2. Rapoport BL, Falkson G, Ansell SM, Lotz BP, de Wet M. A phase II clinical study of suramin in combination with mitomycin C in patients with non small cell lung cancer. *Lung Cancer* 1991, 7, 323-328.

Correspondence to A. Ørbo.  
The authors are at the Department of Gynecologic Oncology, University Hospital of Tromsø, P.O. Box 4, N-9038 Tromsø, Norway.

Correspondence to G. Falkson.  
The authors are at the Department of Medical Oncology, University of Pretoria, P.O. Box 667, Pretoria, Republic of South Africa.  
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