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Fatal Toxic Epidermal Necrolysis during Suramin Therapy

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SURAMIN IS under investigation as a treatment of advanced malignancy, such as metastatic prostate cancer, relapsed nodular lymphoma and adrenocortical carcinoma [1–4].

Armand [5] stated that "although the activity of suramin is shortlived and mainly biochemical, it is encouraging evidence of the development of a new approach to cancer therapy". However, a limiting factor in treatment is toxicity, a narrow therapeutic window and a highly variable individual response.

We report the case of a 53-year-old woman who developed toxic epidermal necrolysis shortly after introduction of suramin therapy. The patient was referred to our hospital with metastatic adrenocortical carcinoma. At diagnosis 3 months earlier, the primary tumour had a diameter of 12 cm, and there were metastatic lesions in the liver and enlarged para-aortic lymph nodes. Testosterone and cortisol were elevated and not suppressible by dexamethasone. Primary treatment consisted of resection of the tumour mass together with the involved lymph nodes. Radiotherapy was not used. The patient received aminoglutethemide for 1 month, then mitotane. However, the disease progressed.

On referral, the patient was in good condition. A suramin loading-dose of 9.6 g was given over the next 16 days. A transient erythematous rash and a mild sterile phlebitis at the injection site on the left arm were observed. Laboratory results were normal and the patient was discharged. As an outpatient she received weekly maintenance therapy with 700 mg/m^2 suramin as intravenous infusion. Suramin concentrations were between 179 and 246 μg/ml. During the third week of maintenance therapy, she developed an extensive rash and was re-admitted to our hospital. The onset was sudden, with eruption of urticarial plaques and erythema of the neck. Clear bullae appeared and became confluent with extreme congestive erythema and purpura. The epidermis came off in large sheets. The day after admission, the patient developed acute respiratory distress due to a mucous plug in the upper airways and cardiopulmonary resuscitation was necessary. Orotracheal intubation was difficult because of extremely oedematous mucous membranes. The patient died the same day in cardiac arrest. The drug implicated as a causative agent was most probably suramin, since the permanent medication consisting of nifedipine, clonidine and captopril had not been changed for years.

Low-grade fever, keratopathy, leukocytopenia and lymphocytopenia, thrombocytopenia, severe neurotoxicity, kidney toxicity, liver dysfunction, adrenal insufficiency and coagulation problems have been described after suramin administration. A transient erythematous rash is commonly observed. Non-fatal exfoliative dermatitis has been described in 3 patients treated for trypanosomiasis [6]. Measurement of plasma suramin levels during treatment, aiming at concentrations between 200 and 300 μg/ml, have been recommended to limit toxic effects [7].

Our case highlights the toxic potential of suramin, since even therapeutic plasma levels did not prevent the fatal outcome. Suramin should only be used within well documented, prospective trials. Patient eligibiltiy must be restricted to cases of advanced malignancy after conventional treatment has failed.

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Terminal Stages of Breast Cancer: Changes in Clinical Practice

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PREVIOUSLY we reported the extent of diagnostic examinations and treatment of all breast cancer patients who were residents of the Tampere University Central Hospital District and who were near death [1]. The frequency remained the same for examination, but increased for treatment of terminal patients compared to patients with recurrent disease, but not, however, in actual terminal stages. We concluded that the patient's quality of life would improve and resources would be conserved with less frequent examinations and treatment, without shortening the patient's life. Here we report on the change in clinical practice after the results of the previous study were published [2] in the central hospital oncology clinic where most of the resident patients were followed up.

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