

levels > 300 mg/dl despite treatment with human insulin > 200 U/day and glibenclamide [glyburide] 20 mg/day. Axillary, cervical and inguinal lymph nodes were enlarged, as was the parotid gland. Eosinophilia was present.

Binding of insulin to receptors was reduced in the presence of the patient's plasma and significant anti-insulin antibody-binding activity was detected. High titres of IgG, and detectable IgE and IgA antibodies to human, bovine and porcine insulin were found.

The patient's insulin resistance and allergy were overcome by concomitant administration of human insulin 65 U/day, prednisone 40 mg/day and antihistamines. After 4 weeks' treatment, antibody levels had declined, blood glucose was adequately controlled and skin reactions were diminished.

'... This case illustrates that a wide array of clinically significant immunologic responses to human insulin still may occur when it is used in the insulin-allergic patient.'

Ganz MA, Unterman T, Roberts M, Uy R, Sahgal S, et al. Resistance and allergy to recombinant human insulin. *Journal of Allergy and Clinical Immunology* 86: 45-52, Jul 1990 [42 references]

Interferon alpha

Water and electrolyte imbalance: clinical study

'We suggest that water and electrolyte balance should be carefully observed during high-dose IFN [interferon] treatment.'

Patients with amyotrophic lateral sclerosis randomly received an infusion of interferon alpha 100 × 10⁶ IU/day on days 1-2 and 200 × 10⁶ IU/day on days 3-5 (n = 5) or placebo (5). The mean dose of interferon which was tolerated was 414 × 10⁶ IU over 5 days.

On day 4, interferon recipients had significant decreases in serum calcium, serum osmolality and urinary excretion of magnesium. There was a trend towards a greater increase in urinary excretion of cortisol and a greater decrease in urine osmolality in interferon alpha recipients compared with placebo recipients.

Farkkila AM, Iivanainen MV, Farkkila MA. Disturbance of the water and electrolyte balance during high-dose interferon treatment. *Journal of Interferon Research* 10: 221-227, Apr 1990

Iodine poisoning

Hypothyroidism in infants following peritoneal dialysis: case reports

Case 1: A reduction in plasma T4 and an increase in plasma thyroid stimulating hormone occurred following continuous cyclic peritoneal dialysis in a 3-year-old boy with severe nephrotic syndrome, glomerular sclerosis and increasing renal failure. Previous hypothyroidism because of increased renal loss of T4 had resolved on development of anuria. Defective thyroid hormone synthesis was suggested by high plasma thyroglobulin levels. There seemed to be a defect in iodine organification as the radioiodide uptake was high and there was a 90% discharge of radioiodide following perchlorate administration.

Case 2: Following bilateral nephrectomy and continuous cyclic peritoneal dialysis, an 18-month-old girl who had bilateral Wilm's tumours, mesangial sclerosis, nephrotic syndrome and T4 wasting hypothyroidism had a rapid reduction in plasma T4 and an increase in plasma thyroid stimulating hormone. The serum thyroglobulin level was high, there was a high radioiodide uptake and a 90% discharge after perchlorate was administered.

'In both cases the iodine source was shown to be the sealing cap of the Tenckhoff catheter'

Vulsma T, Menzel D, Abbad FCB, Gons MH, De Vijlder JJM. Iodine-induced hypothyroidism in infants treated with continuous cyclic peritoneal dialysis. *Lancet* 336: 812, 29 Sep 1990

Itraconazole see Warfarin interaction

Lithium overdose

Polyneuropathy: 2 case reports

Vanhooren G, Dehaene I, Van Zandycke M, Piessens F, Vandenberghe V, et al. Polyneuropathy in lithium intoxication. *Muscle and Nerve* 13: 204-208, Mar 1990

Menotropins

Increased risk of consecutive spontaneous abortion: incidence study

It is clear that there is a greater risk of spontaneous abortion in

women who conceive while receiving menotropins than in the general population. After an initial pregnancy loss, patients usually repeat menotropins therapy. Data on the risk of spontaneous abortion with subsequent pregnancies would *'... allow us to better counsel patients after miscarriage in a menotropin-induced pregnancy'*.

From a total of 996 women who received menotropins therapy, the risk of spontaneous abortion of the first pregnancy was 24.2%; the risk of a second and third spontaneous abortion was 35 and 45%, respectively. The risk of spontaneous abortion with the second pregnancy in women who had had a previous successful pregnancy was 6.7%.

Thus, women who abort following induction of ovulation with menotropins have a considerably higher risk of further loss of pregnancy than women who have successful pregnancies with menotropins.

Corsan GH, Kemmann E. Risk of a second consecutive first-trimester spontaneous abortion in women who conceive with menotropins. *Fertility and Sterility* 53: 817-821, May 1990

Methotrexate

Transtentorial herniation secondary to increased intracranial pressure: case report

Bilateral radiation therapy was administered to a 9-month-old girl for the treatment of hereditary retinoblastoma. A recurrence at 5 years of age was treated with chemotherapy and enucleation of her right eye. At 17 years of age, she presented with severe bifrontal headaches, somnolence, dizziness and reduced vision. On examination, the patient's left pupil was irregular with reduced abduction, she was mildly disorientated, and her deep tendon reflexes were reduced.

Investigations showed a 6cm hypervascular calcified cystic mass which was consistent with postirradiation osteogenic sarcoma; there were no signs of necrosis. The patient received dexamethasone and, after 5 days, an infusion of methotrexate 7.8 g/m² over 6 hours was administered. The following day, the patient vomited, became obtunded, responded to deep pain only, twice experienced respiratory arrest, and died soon after; a CT scan