In February 1974 she stopped taking an oral contraceptive because of irregular bleeding. She soon became pregnant, although she did not realise the implications of the amenorrhoea and went ahead with a yellow fever vaccination preparatory to a visit abroad. Eventually, at 18 weeks, she booked in for hospital confinement. The pregnancy was uneventful until 37 weeks, when she was admitted for rest because of a blood pressure of 150/100 mm Hg. She was prescribed diazepam 10 mg three times a day and amylorbarbitone 200 mg at night. Eight days after admission she spontaneously went into labour. Two hours after its onset she was found deeply unconscious, responding only to deep pain. Her locker was found to contain a hoard of 13 diazepam and 2 amylorbarbitone tablets. Her plasma barbiturate level was 0.1 mmol/l (2.2 mg/100 ml). The labour progressed normally and the fetal heart was monitored. Five hours after the onset of labour she began to recover consciousness and after eight hours was delivered of a live boy weighing 2325 g. In the puerperium she confessed that she had been told by a neighbour that the yellow fever injection would cause a malformed baby. This fear had evidently haunted her throughout the pregnancy and she took her carefully hoarded tablets when she recognised the onset of labour. Thereafter she made good progress. She was followed up in psychiatric outpatients, but had no overt evidence of depression.

The baby cried at birth and required only routine resuscitation. His cord blood barbiturate level was 0.07 mmol/l (1.3 mg/100 ml), but he remained cold, hypotonic, and areflexic. His breathing was shallow and irregular and he had to be fed by tube because his sucking reflex was absent. After 48 hours he improved and bottle-feeding was gradually introduced.

Comment

In attempted suicide in labour two individuals rather than one are poisoned. Barbiturates pass freely from mother to fetus across the placenta and the blood levels equilibrate within minutes after an intravenous injection. Some fetal depression is to be expected if oral amylorbarbitone is given between 30 minutes and 6 hours before delivery.³ Cord blood barbiturate levels, however, do not correlate well with the degree of neonatal depression.⁴ Since in the present case the mother took the tablets about seven to eight hours before delivery the prolonged neonatal depression in the baby was presumably due to the diazepam. This accords with the findings of McCarthy *et al.*,⁵ who found rising fetal blood levels of diazepam over the first 30-48 hours after large doses by mouth to the mother in labour because of massive storage of the drug initially in the fetal tissues. Diazepam is commonly given in current obstetric practice, and nursing staff should ensure that the drugs issued are actually taken by any patient who might possibly take an overdose.

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Myxoedema and hydrocele

Serous effusions have been recognised as an uncommon complication of hypothyroidism for many years,^{1,2} pleural and pericardial effusions and ascites being most commonly described. Only one previous report has appeared in which hypothyroidism was associated with hydroceles, which resolved on treatment with thyroxine.³ We describe here a similar patient seen recently.

Case report

A 66-year-old retired hospital porter had been unwell for a year. During the six months before admission he had suffered from dryness of the skin; intolerance to cold; constipation; shortness of breath; hoarseness; and

slowing of his movements, speech, and thought processes. He felt dizzy and had had frequent falls. In addition he had had a large swelling of the right testicle. Recently he had spent most of the day asleep. Admission was precipitated by an upper respiratory tract infection. On examination he had classical gross myxoedema. His temperature was 34.4°C, his blood pressure 220/120 mm Hg, and there was evidence of airways obstruction and mild cardiac failure. There was a right scrotal swelling about 10 cm by 8 cm, which felt hard and smooth and was not easy to transilluminate (fig 1a).

(a) Appearance before treatment (urinary catheter in situ). (b) Appearance after four months' treatment.

Investigations showed a serum thyroxine of <10 nmol/l (normal range 58-128) and an effective thyroxine ratio of 0.78 (normal range 0.86-1.05). Thyroglobulin antibodies were positive at a dilution of 1/5000, and thyroid microsomal antibodies at 1/6 500 000. The chest x-ray film showed bilateral pleural effusions and cardiomegaly, and the results of echocardiography was consistent with a small pericardial effusion.

Treatment was started with ampicillin, physiotherapy, and L-thyroxine, 0.05 mg daily. Despite treatment his general condition deteriorated and four days later he was unrousable and in respiratory failure, and was transferred to the intensive therapy unit for assisted ventilation. He gradually improved and was finally discharged six weeks after admission on L-thyroxine, 0.2 mg daily. The scrotal swelling was treated conservatively and slowly decreased in size. Four weeks after discharge it was much smaller and easily transilluminable.

After four months' treatment, he was much improved, normotensive, and clinically euthyroid. His chest x-ray film was clear. A small hydrocele persisted on the right side, and in addition a second small hydrocele could be palpated on the other side (fig 1b). These caused the patient no problem and no other form of treatment was required.

Discussion

Pleural, pericardial, peritoneal, synovial, middle ear, and uveal effusions have been recorded in hypothyroidism. The subject has recently been reviewed and the first documented case of hypothyroidism associated with bilateral hydroceles recorded.³ This patient was a 51-year-old man, who, as in our case, had severe autoimmune hypothyroidism, and whose hydroceles resolved after three weeks treatment with thyroxine. This initial report made us suspect that our patient's large hard scrotal swelling was in fact a tense hydrocele, and that expectant treatment was justified. The fact that resolution on treatment was incomplete suggests that our patient may have had small bilateral hydroceles initially, one of which became grossly enlarged in association with the development of hypothyroidism. The occurrence of these two cases within a short period may indicate that the association is not rare and that previous cases have been overlooked. Both reports suggest that aspiration of hydroceles in hypothyroidism is unnecessary, and treatment of the underlying disease with thyroxine should cause adequate resolution.

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