tion, would facilitate the swallowing of air into the stomach. This may have been further exacerbated by the use of both a tight-fitting oxygen mask in the ambulance and a nebuliser on arrival at hospital.

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Accidental administration of ergometrine to newborn infant

We describe a neonate who was accidentally given an adult dose of ergometrine after birth. The infant soon became ill with respiratory failure, convulsions, acute renal failure, and temporary lactose intolerance.

Case report

A baby born normally at full term weighing 2670 g and with good Apgar scores was accidentally given 0·5 mg ergometrine by intramuscular injection immediately after birth instead of vitamin K. One hour later she had a cyanotic episode, from which she recovered quickly. By the age of 2 hours she needed 40% inspired oxygen to maintain a transcutaneous partial pressure of oxygen of 6-7 kPa (45-53 mm Hg). Her oxygen requirement increased gradually, and by the age of 16 hours she needed inspired oxygen of 70%. Progressive respiratory failure was treated with continuous positive airway pressure and subsequently with intermittent positive-pressure ventilation.

Brief apnoeic attacks at 2 hours were followed by generalised convulsions that persisted until 48 hours and were treated with paraldehyde, phenobarbitone, and diazepam.

Only 7 ml of urine had been voided by 36 hours. When she was 10 hours old serum electrolyte concentrations were normal. At 36 hours potassium concentration was greater than 8 mmol/l (mEq), urea concentration was 8·5 mmol/l (51 mg/100 ml), and serum creatinine concentration was 317 mmol/l (3·6 mg/100 ml). At this stage she was transferred to the Birmingham Children's Hospital. Peritoneal dialysis was started at the age of 47 hours and continued until the age of 65 hours, by which time she was passing small amounts of bloodstained urine spontaneously. She was weaned off the ventilator by the 5th day.

At the age of 5 days breast-feeding was started but she developed watery diarrhoea with sugar-containing stools. She was therefore fed Pregestimil. At the age of 6 weeks she was reintroduced to an artificial feed based on cows' milk and tolerated this.

An electroencephalogram on day 3 showed "abnormal brain function," but subsequent electroencephalograms on days 8 and 24 were normal.

Subsequent follow-up to 1 year showed a developmentally normal infant.

Comment

Three cases of accidental administration of Syntometrine (oxytocin plus ergometrine) have been described.[1-3] In all three 1 ml Syntometrine containing five units oxytocin and 0·5 mg ergometrine maleate was given accidentally. The three infants had similar symptoms with respiratory problems and convulsions to those described here, but our infant is the only one reported who was given ergometrine alone and differed from the three others by also developing acute renal failure.

Ergometrine is widely used to reduce the incidence and extent of postpartum haemorrhage. It causes smooth-muscle spasm of various organs. Respiratory problems are due to pulmonary vasoconstriction and depression of the respiratory centre. Convulsions are probably due to depression of inhibitory influences from the reticular system and to a decrease in cerebral blood flow. Acute renal failure and transient lactose intolerance probably result from ischaemia of the kidneys and small intestine.

There is no antidote to ergometrine, and the treatment of acute ergometrine poisoning is supportive. Babies should receive intensive care: they are likely to need ventilatory support, and there may be a case for using a pulmonary vasodilator—for example, tolazoline—or a directly acting general vasodilator like sodium nitroprusside. Urinary output and serum electrolyte and creatinine concentrations should be monitored, and dialysis may be needed if acute renal failure occurs.

The toxic effects of ergometrine appear to be temporary and reversible, and in the reported cases, where supportive treatment was successful, the children appear to have recovered completely.

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Lupus-like syndrome induced by methyldopa

Methyldopa has been shown to be clearly associated with the development of antinuclear antibodies. Few cases of isolated lupus erythematosus cell phenomena induced by methyldopa have been reported, and none of the patients showed clinical features of systemic lupus. We report on a patient who developed a lupus-like syndrome while taking methyldopa.

Case report

A 48-year-old woman was admitted with a history of malaise, generalised weakness, arthralgia, morning stiffness, and Raynaud's phenomenon of 12 months' duration. She had been taking methyldopa 250 mg three times daily for two years for arterial hypertension. On admission blood pressure was 180/100 mm Hg. Further physical examination showed no abnormalities. No rash or signs of joint inflammation were observed. Fundoscopy, electrocardiography and a chest *x*-ray film were normal.

Blood glucose, plasma creatinine and urate, and electrolyte concentrations were normal, as were results of liver function tests and protein electrophoresis. Erythrocyte sedimentation rate was 24 mm in the first hour. Haemoglobin concentration was 11·4 g/dl. Red-cell morphology, platelet count, and white cell count were normal. Microscopy of the urinary deposit yielded normal results. There was no glucosuria or proteinuria. Isotopic study of separate renal function and intravenous pyelography with rapid-sequence films were normal.

A direct Coombs' test and a test for lupus erythematosus cells gave positive results. Rheumatoid factor was absent. Antinuclear and antithyroid microsome antibodies (the latter with a titre of 1/6400) were present. Anti-smooth muscle, anti-parietal cell, antimitochondrial, and antithyroglobulin antibodies were absent. Anti-double-stranded DNA was absent but anti-single-stranded DNA present. Cold agglutinins and cryoglobulins were absent. Complement was normal. IgA and IgG concentrations were within normal limits, but the IgM concentration was raised at 367 mg/100 ml (normal 50-150).

Methyldopa was stopped and within two weeks the Raynaud's phenomenon, arthralgia, and other symptons had disappeared completely. Three months later a Coombs' test was negative and titres of antinuclear and antithyroid microsome antibodies had declined. A test for lupus erythematosus cells, however, was still positive. Erythrocyte sedimentation rate was 17 mm in the first hour. Blood pressure was controlled with atenolol 100 mg a day.