Drug points

Successful breast feeding while mother was taking cyclosporin

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Women taking cyclosporin are not advised to breast feed because cyclosporin is excreted in milk at concentrations similar to those in blood.[1] Every case report[2] and the manufacturer[3] advises women not to breast feed. We report the case of a woman taking cyclosporin who successfully breast fed her baby.

A woman who had received a renal transplant was keen to breast feed her baby but was advised not to because she was taking cyclosporin. None the less, she breast fed initially. At 5 weeks her daughter was well, with normal renal function and a blood cyclosporin concentration of no more than 3 µg/l; the mother's simultaneous trough concentration was 260 µg/l while receiving a dose of 3 mg/kg twice daily. Milk cyclosporin concentrations varied with time after the dose, averaging 596 µg/l. A baby taking 150 ml of milk per kilogram weight every day would receive <0.1 mg/kg of cyclosporin—under a 60th of his or her mother's dose, weight for weight. This woman breast fed her daughter fully until weaning and then partially until she was 14 months old. Her kidney transplant function remained stable, and her daughter was healthy at 2 years old. The patient then breast fed her son.

A mother receiving drug treatment who has been counselled against breast feeding will reasonably assume that the hazards of a drug have been balanced against the disadvantages of formula feeding. This is not so for cyclosporin.

Babies are thought to receive a large dose of cyclosporin because blood and milk concentrations are similar,[2 3] but this is not so and is just one of many pharmacological factors. Although fetuses may be exposed to blood cyclosporin concentrations that are about one third of maternal amounts,[2] no adverse effects have been described; risks from the much lower quantities during breast feeding are likely to be minimal.

Breast feeding appreciably reduces the risk of infant infections and admission to hospital,[4] and being breast fed is associated with significantly better intellectual development,[5] but published work does not mention the losses to the baby of being fed on formula milk.[2 3] Human milk confers major benefits; advice on breast feeding should balance the measured risk from maternal drugs with the undoubted disadvantages of formula feeding.

We thank Dr David Holt, Cardiological Sciences Analytical Unit, St George's Hospital Medical School, London, for measuring the baby's blood cyclosporin concentration.

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Generalised pruritus associated with amlodipine

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Amlodipine is a calcium antagonist of the dihydropyridine class. In common with other agents in this class it can cause flushing and peripheral oedema.[1 2] Erythema multiforme has been reported after amlodipine was substituted for nifedipine.[3] We report two cases of generalised pruritus secondary to amlodipine treatment in patients without objective evidence of skin disease.

A 59 year old woman was diagnosed as being hypertensive in 1994; she started treatment with bendrofluazide 2.5 mg. Suboptimal control of blood pressure led to the addition of atenolol 50 mg daily. Subsequently, amlodipine was added as third line treatment. Within 24 hours she complained of generalised itching. Examination of her skin showed nothing abnormal, and a full haematological and biochemical profile including thyroid function tests and measurement of random blood glucose concentration gave results within normal limits. The possibility of an adverse drug reaction was raised; amlodipine treatment was discontinued, and her pruritus resolved in 24 hours.

A 69 year old man who had non-insulin dependent diabetes mellitus and peripheral vascular disease and was not receiving drug treatment was noted to be persistently hypertensive. Treatment with amlodipine 5 mg daily was therefore started. Within 24 hours he developed severe generalised pruritus. A full haematological and biochemical profile including thyroid function tests and measurement of random blood glucose concentration gave results within normal limits, and examination of his skin showed nothing abnormal. Amlodipine treatment was discontinued, and within 24 hours his itching had subsided.

Generalised pruritus is a common symptom that may be associated with both cutaneous and systemic diseases.[4] Itching may also occur as an adverse drug reaction. To our knowledge, generalised pruritus caused by amlodipine has been reported only once, but it was associated with a maculopapular rash and the patient had developed a similar reaction to diltiazem.[5] By June 1996, however, the Committee on Safety of Medicines had received 48 reports of generalised pruritus with this drug (personal communication), and we believe that this shows the need to consider drug treatment as a possible cause of this potentially disabling symptom.

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