missed a great opportunity for permanent change.

There is some good in the new contract, but the rate of change is too fast and there are too many general practitioners performing tasks and going through a process which has more to do with the generation of income than with the improvement of outcome. During the transformation of the NHS plc there is a good chance that for many individuals, energy will be dissipated, goodwill and motivation will be destroyed, to the detriment of the most important person of all — the patient.

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Ecchymosis hominis circulare

Sir,

I was interested to see the case reports by

Hutchinson and Williams (December *Journal*, p.516), although the photographs might have been clearer. It is about 30 years since I became aware of this condition, which I thought of as autoiatrogenic.

I am not sure that I accept subnormal intelligence as being a risk factor, except in recurrent cases. That the suction pads were removed by the infants also surprised me—the rubber foot was so adherent to the forehand in my case that it took two adults to remove it, whence the circular area of capillary extravasation. I can assure the authors that the embarassment of having a transient blot like an outsize caste mark in the centre of one's forehead is as nothing compared with enforced retention of the gaudy baby's rattle that caused it.

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Sir.

I enjoyed the piece about ecchymosis hominis circulare (December *Journal*, p.516).

Many years ago a regular visitor to my surgery was a robust young boy who would never let me attend to him unless he was allowed first to 'shoot' at me with a bow and arrow. Despite the fact that the arrow was suction-tipped, I always insisted that he should shoot at my reflection in a full-length mirror. Fortunately, this satisfied the young man.

After all these years I now realize that my firmness may have saved me from serious injury. Having read this paper, I recommend all practitioners to buy a full-length mirror. I am confident it would be tax-deductible.

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INFECTIOUS DISEASES UPDATE

Human parvovirus (B19) infection

Human parvovirus (B19) was discovered only relatively recently, but it is the cause of an infection recognized over 100 years ago — fifth disease, also called *erythema* infectiosum or slapped cheek syndrome.

Erythema infectiosum is a common, rubella-like childhood illness in which the young patient is not usually systemically un-well, but exhibits a florid rash, typically with bright red cheeks and a reticulate pattern on the limbs and trunk. The rash tends to come and go especially with exercise or hot baths and can last several weeks. Erythema infectiosum occurs all year round every year, but it is particularly frequent in spring and 'epidemic' years also occur. It can co-circulate with rubella in the same community and, confusingly, the rash can sometimes be rubelliform or morbilliform - so an outbreak of 'rubella-like' rash illness in a well vaccinated community may not be due to vaccine failure, but to B19 infection.

Like rubella, erythema infectiosum is usually mild and self limiting and there is no indication for school exclusion if the child is feeling well, because by the time the rash has appeared, the infectious stage is over. However, erythema infectiosum can be serious in some circumstances: acquired by adults it can cause an arthropathy which is often prolonged and painful; acquired by subjects with haematological disorders involving a shortened red cell life span (for example congenital spherocytosis or sickle cell

disease) it may cause aplastic crises; persistence of the virus has been described in immunodeficient patients in whom it causes a prolonged anaemia; finally, when acquired during pregnancy, it may cross the placenta and cause hydrops fetalis and fetal death.

This last complication is clearly of particular concern, but it must be stressed that it is a rare event because among women of childbearing age, approximately half are naturally immune; even if the virus is acquired it may not infect the fetus and even if it does, fetal death is not inevitable. A recent study showed that the overall risk to a pregnant woman of having a fetal death due to the virus when exposed to B19 in, say, a classroom setting, is only just over 1%.1

The diagnosis of B19 infection can be confirmed by testing the patient's blood for the presence of the specific immunoglobulin (Ig) antibody. If the patient is pregnant, the risk to the fetus will have to be faced, but the emphasis should be on the rarity of an adverse outcome and the lack of an association with deformities (unlike rubella, B19 does not appear to be teratogenic). The only intervention available is controversial; it involves frequent ultrasound examinations to screen for development of fetal hydrops, which is then treated by intrauterine transfusion.² While this procedure has brought infected fetuses safely to term it can be hazardous and there is a theoretical concern that such severely affected fetuses may present stigmata of intrauterine infection not yet documented in the small

number so far described.

The final practical point for general practitioners is the need to resolve both lay and professional confusion between the human parvovirus and the canine variety. A recent letter in the Veterinary Record reported that veterinary surgeons were receiving requests for the family pet to be destroyed because clients' doctors had told them that the animal was the source of their or their children's infection.3 In fact the two viruses are unrelated and canine parvovirus which apparently arose de novo in 1978 as a result of mutation of a feline parvovirus, is not infectious for man. It was clear from the veterinary surgeons' experience that some dog owners had suffered considerable emotional distress because they believed, quite unnecessarily, that they were faced with a decision between their family's health and the destruction of a much loved pet.

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References

- Public Health Laboratory Service Working Party on Fifth Disease. Prospective study of human parvovirus (B19) infection in pregnancy. Br Med J 1990; 300: 1166-1170.
 Peters MT, Nicolaides KH.
- Peters MT, Nicolaides KH.
 Cordocentesis for the diagnosis and treatment of human fetal parvovirus infection. Obstet Gynaecol 1990; 75: 501-504.
- 3. McCandlish IAP, Thompson H. Human parvovirus infections. *Veterinary Record* 1990; 13 Oct: 385.