

Doctors and patients have not always recognised an identity of interests: a shared opposition to the government's reforms has thrown them together. The distance now separating the government from doctors and patients is in no one's interests—least of all the government's. The wider it gets the more difficult it will be to bridge, although bridge it the government must. Much depends on the Secretary of State for Health. It is too early to say whether the present incumbent—the fourth in 42 months—is suited to the job. (Nor, as we go to press, is it clear whether he will remain in the job.) In his favour are a natural caution and a belief, expressed in a newspaper article he wrote in 1986, that the government should ease up on institutions it had “shaken and uprooted.” “What is the point of unending guerilla warfare against these institutions?” he wrote. “To abolish is a policy; to reform is a policy; to support is a policy; to wound is not.”<sup>9</sup>

All sides have been wounded now, although none of the

wounds have proved fatal. Given time they could still heal. No irrevocable decisions have yet been taken; nor should they be. With a lull in the fighting people could do what they usually do in these circumstances: they sit down and talk. Fortunately, there is still time.

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## Vitamin A and measles in Third World children

### *Supplements could be part of routine primary care*

Each year measles causes the deaths of about 1.5 million children and accounts for half of the deaths in developing countries that could be prevented by vaccines.<sup>1</sup> Many more have the complications of measles—pneumonia,<sup>2</sup> diarrhoea and malnutrition,<sup>3</sup> and blindness.<sup>4</sup> The severity of measles seems to be related to nutritional state and intensity of exposure. Malnourished children have a higher mortality<sup>5</sup> and more severe complications,<sup>6</sup> as do those living in overcrowded accommodation.<sup>7</sup> Yet evidence has existed for some time that vitamin A supplements are a cheap and effective way of preventing death and complications in children with measles,<sup>8</sup> and a recent report has reinforced this message.<sup>9</sup>

That vitamins may protect against measles was first suggested by Ellison in 1932.<sup>8</sup> Among British children with measles the group who received vitamin A and D supplements had half the number of deaths as did the control group. Surprisingly, no further report on vitamins and measles was published until 1987, when Barclay *et al* observed that vitamin A reduced mortality from measles in a randomised clinical trial in Tanzania.<sup>5</sup> Although, again, children in the group receiving large doses of vitamin A had half the number of deaths (six of 88) as did the control group (12 of 92), the results were not significant. Vitamin A was, however, significantly protective in children aged under 2 and in those whose measles was complicated by croup or laryngotracheobronchitis.

Further evidence that vitamin A has a protective effect in children with severe measles has now come from South Africa.<sup>9</sup> Hussey and Klein conducted a randomised, double blind trial on 189 children with severe measles. They found that children given vitamin A (400 000 IU) recovered more rapidly from pneumonia and diarrhoea, had a lower incidence of croup, and spent fewer days in hospital than did the group receiving placebo. Of the 12 children who died, 10 had received placebo.

The benefits of vitamin A in measles in African children may be explained by the low serum concentrations of vitamin A (<0.7 µmol/l) found in over 90% of children in the Tanzanian and South African studies. Clinically apparent vitamin A deficiency—for example, xerophthalmia—was, however, rare in both studies. Children with severe

measles in Zaire have also been reported to have low serum vitamin A concentrations.<sup>10</sup> Hussey and Klein suggest that inadequate mobilisation of hepatic stores may explain the low concentrations.<sup>9</sup> In contrast, measles is an important factor in the development of vitamin A deficiency and xerophthalmia in Asia, especially Indonesia, where a high proportion of blindness due to corneal destruction is associated with measles.<sup>11,12</sup> Among children in whom they were measured, serum vitamin A concentrations were found to be extremely low in those with active corneal disease and measles.

The measles virus infects and damages epithelial tissues throughout the body. Serum vitamin A concentrations in well nourished children with measles have been reported to be lower than those in malnourished children without measles,<sup>13</sup> suggesting increased use of the vitamin during the infection.

Whatever the mechanism of vitamin A depletion in measles, there is now adequate evidence that vitamin A supplementation is beneficial, particularly in those at greatest risk of severe and life threatening complications—young children in developing countries. In 1987 the World Health Organisation recommended that high dose vitamin A supplementation should be provided for all children diagnosed as having measles in countries where the fatality rate is 1% or more.<sup>14</sup> Although this advice was based on inconclusive evidence, now may be the time for national studies into the efficacy of such supplements. On the basis of recent studies the dose of vitamin A should be 400 000 IU irrespective of age, rather than the lower doses recommended by the WHO. Supplementation in measles would help to prevent serious complications and death in children until adequate coverage with measles vaccination is achieved in Third World countries and it could be included as part of the routine of primary health care.

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## HIV infection in women

### *Needs early identification to limit complications*

This year's dedication of World AIDS Day to women infected with HIV is a time to remind ourselves that the reported number of such women in the United Kingdom now totals 1572 (Communicable Disease Surveillance Centre, September 1990), with the true number undoubtedly higher. Recent notifications indicate that women are contributing about one third of new cases in Scotland and one sixth in England, Wales, and Northern Ireland. The importance of the low but rising numbers of women infected by heterosexual contact is undetermined.<sup>1,2</sup> It may be premature to suggest that these figures reflect a shift of HIV into the low risk heterosexual population, but they underline the point that HIV infection and AIDS are no longer a problem contained within defined (male) risk groups. Indeed, if the pattern of spread mirrors that seen in the Third World the marker of risk behaviour in women may be unprotected vaginal intercourse, hardly an uncommon event and of little use in defining risk groups.

Women aged 15-44, encompassing four fifths of HIV seropositive women, cross the medical threshold commonly. Their needs for family planning, antenatal care, and the gynaecological problems of menstruation, fertility, and the menopause will therefore require general practitioners, obstetricians, and gynaecologists to see more apparently healthy women infected with HIV in the future. Their detection by screening becomes ever more important, especially as evidence accumulates of the successful use of zidovudine to delay the onset of AIDS in infected patients.<sup>3</sup> What are the particular problems of such women and what are the obstetric and gynaecological consequences of perhaps 10 years of infection?

Cervical abnormalities are common in women infected with HIV,<sup>4,6</sup> but whether HIV is therefore a causal factor in the development of genital tract neoplasia has awaited investigation by controlled trials. Recent reports suggest that HIV infection confers added risk through immunocompromise (M L Muggiasca *et al*, 5th international conference on AIDS, Montreal, 1989) in a similar fashion to long term immunosuppressive treatment,<sup>7</sup> but reports differ on the degree of immunosuppression required. The risk rises with clinical evidence of HIV disease and correlates with a falling CD4+ lymphocyte count (J R Smith *et al*, S H Vermund *et al*, A Schafer *et al*, N J Tarricone *et al*, 6th international conference on AIDS, San Francisco, 1990). Until we know at what level of immunosuppression complications arise there is a need for regular cervical screening in women infected with HIV.

Data on infections of the lower genital tract are difficult to find, and the concept that recurrent genital infection is a marker of high risk behaviour and an indication for HIV testing has not been as well appreciated in gynaecology as it has in genitourinary clinics.<sup>8</sup> The association of genital ulcerative disease and HIV infection observed in Africa has

been seen in the West; even after controlling for high risk behaviour ulceration seems to be more common among women infected with HIV (K Chirgwin *et al*, 5th international conference on AIDS, Montreal, 1989). A five year retrospective review of infected women has shown a high rate of previous sexually transmitted disease and a new infection rate of 23%, with genital herpes becoming progressively more common as the CD4+ lymphocyte count falls (J Anderson *et al*, 6th international conference on AIDS, San Francisco, 1990). With the spectre of tuberculosis and HIV infection appearing in the Third World,<sup>9</sup> gynaecologists can now expect to see cases of pelvic tuberculosis, a rare condition in the United Kingdom. There is no information about the implications for the other more common causes of chronic pelvic inflammatory disease and little information on HIV infection and ovarian malignancy (A Schafer and W Friedmann, 4th international conference on AIDS, Stockholm, 1988) or the common presenting gynaecological symptoms of menorrhagia, dysmenorrhoea, and dyspareunia.

At present the management of pregnancy in women infected with HIV differs little from that in uninfected women. Perinatal transmission of HIV occurs in 15-33% of pregnancies, so the criteria for termination are certainly met.<sup>10</sup> Some doctors will find it strange, therefore, that infection with HIV seems to take second place to socioeconomic considerations in determining termination requests, with little difference in the request rate between women who are and are not infected in high risk groups (M Barbacci *et al*, 5th international conference on AIDS, Montreal, 1989).<sup>11,12</sup> Infected women who elect to continue a pregnancy can be told that there is no evidence that babies born in the West are at increased risk of prematurity or growth retardation.<sup>13</sup> The question of whether pregnancy accelerates the course of HIV infection is unanswered, with conflicting findings from France and the United States (J F Delfraiese *et al*, 5th international conference on AIDS, Montreal, 1989; A Berebbi *et al*, K Bledsoe *et al*, 6th international conference on AIDS, San Francisco, 1990). Consequently, there is no consensus on how and when those wishing to conceive should be advised. Appreciable numbers of women seek pregnancy knowing that they are positive for antibodies to HIV and will fail to use effective contraception despite counselling (M H Kaplan *et al*, 5th international conference on AIDS, Montreal, 1989). Are gynaecologists prepared to support such women who are determined to proceed with a pregnancy and, more controversially, help those who request infertility advice? The question of pregnancy in the uninfected spouse of a man infected with HIV has not been addressed.

We have progressed from the negative attitudes towards HIV infection and AIDS seen five years ago. A recent commentary lamented the self fulfilling nihilism that labels