age of the patient.¹⁴ A study by Kyle and Hazleman of 74 patients found side effects in one third increasing to three quarters if sustained weight gain was included; 80% of these patients were treated initially with 30 mg or more of prednisolone daily.¹⁸ Reducing the dose of steroids may be difficult and is often associated with increasing non-specific symptoms, which do not necessarily imply a relapse.

The lack of reliable laboratory indices complicates withdrawal of steroids. The erythrocyte sedimentation rate is the most frequently used marker of disease activity, although the C reactive protein concentration may be a better index.¹⁹ In most cases symptoms and the laboratory markers of inflammatory response correlate closely. What should be done when they do not? In patients whose symptoms persist without raised erythrocyte sedimentation rate or C reactive protein concentration, alternative or concurrent explanations should be sought, such as cervical spondylosis or problems with the shoulders or teeth. Every attempt should be made to minimise the dose of corticosteroids.

In contrast, some patients will be encountered whose symptoms respond but whose erythrocyte sedimentation rate or C reactive protein concentration remains raised. There are two common alternative explanations for this. The corticosteroid treatment may be suppressing the inflammatory symptoms but not the abnormal blood test result associated with another diagnosis such as multiple myeloma or other malignancy or rheumatoid arthritis. Alternatively the corticosteroids may be only partially suppressing the activity of the giant cell arteritis. Despite the possibility of incomplete suppression of disease activity the steroid dose should be cautiously reduced in such patients, who should be warned to report urgently any recrudescence of symptoms.

Careful and frequent monitoring of patients' symptoms remain the best guide to management. Once symptomatic control has been achieved the steroid dose should be slowly reduced to a maintenance dose of 10 mg prednisolone a day and thereafter by 1 mg a month. There is a fine line between too rapidly reducing the dose of steroids, which leads to

relapse, and too slowly reducing the dose, which leads to side effects such as hypertension, osteoporosis, skin fragility, and diabetes mellitus. Withdrawing steroids often proves difficult, and judicious use of simple analgesia and non-steroidal anti-inflammatory drugs may be helpful. Despite this many patients require prolonged maintenance with a few milligrams of prednisolone daily.

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Polio eradication as 2000 approaches

Nowhere to run to, nowhere to hide?

Since 1985 an average of three cases of paralytic poliomyelitis are reported each year in England and Wales, and this number is falling (p 79).¹ Will Britain have eradicated polio by 2000 in line with the World Health Assembly's resolution?

The resolution, committing the World Health Organisation to eradicate poliomyelitis from the world by 2000, grew out of efforts of the Americas to eradicate polio by 1990. In this they have been largely successful: the number of confirmed cases of poliomyelitis fell from 800 in 1985 (the year the initiative began) to nine last year.

The global strategy for eradication depends on achieving high coverage with oral polio vaccine in all regions. In addition, three key elements were adopted from the Americas.² Firstly, the use of "immunisation days" or mass campaigns, which aim to immunise the whole child population with one dose over a very short time, ideally one day, and then to repeat this two months later. (In addition to reaching unimmunised children and boosting immunity this is thought to leave the wild virus nowhere to go—as all the susceptible children's guts should be full of vaccine virus.) Secondly,

"mopping up" operations, which consist of identifying parts of the country or continent with a continuing high incidence of disease and targeting them for intensive vaccination. For example, in the Americas 95% of cases were found in only 5% of districts.

The third element is high quality surveillance. Clearly necessary for mopping up, it also allows investigation of cases and measures to control outbreaks. For this purpose case definitions, investigative procedures,³ and laboratory support⁴ have needed developing. An example of this is the genetic fingerprinting of wild virus isolates to assist in the tracing of the source of outbreaks.⁵ Acute flaccid paralysis has been chosen as the characteristic for reporting, and all such cases are then investigated to determine if they are genuine poliomyelitis. These strategies have led to the intensive training in surveillance and control of outbreaks for health workers in many countries, which should bring important benefits to other programmes to control disease.

So how has this eradication programme progressed? Certain regions have adopted it whole heartedly. The Western

Pacific's goal is eradication by 1995. It has six countries with endemic polio and has developed national eradication programmes and instituted training. Other regions are not so far advanced.⁶ Essentially two barriers need overcoming. These are technical and politico-financial. Technical difficulties relate to producing heat stable vaccine in large enough quantities and getting it into the field. Once there, the problem is achieving good seroconversion among tropical populations after oral polio vaccine.⁷ This has been highlighted by outbreaks of disease in some well vaccinated populations, which seem due to vaccinated children not being immunised and the build up of a susceptible population to the level at which an epidemic occurs.^{8,9} The research component of the eradication programme is addressing these problems, through examining different formulations of oral polio vaccine and changing the regimens (even combining injectable and oral vaccines).

More intractable are the political and financial problems. It has proved more difficult than it was with smallpox to obtain high priority for funding polio's eradication. Some donors are unconvinced that this is an appropriate target for the expanded programme on immunisation. Others doubt whether the strategies are transferrable from the relatively sophisticated, highly urbanised Americas to less developed rural countries. A major review of the strategy is now underway. Being carefully considered is the use of injectable vaccine to overcome the problems of poor seroconversion to oral vaccine, which occurs especially to types 1 and 3 in tropical countries.

For Europe the problem is different. Bulgaria, Romania, Turkey, and the states of the former Soviet Union still have an appreciable incidence of poliomyelitis. Although not the case for the rest of Europe, there clearly needs to be some mechanism in place for containing the inevitable importations, which will continue until the virus is eradicated.

Countries' main concern, however, is to prove that they have already eradicated indigenous transmission. Surveillance of the type described by Joce and colleagues¹ is

necessary to identify vaccine associated and imported cases. In addition, efforts must be made to show that no wild polio virus is circulating, which is a daunting task. The high levels of vaccination ensure that sewage is replete with polio viruses, which should be analysed to distinguish whether they are wild or vaccine strains. The mutation of vaccine strains adds to this difficulty. What does a negative sample tell you statistically in terms of number of potential excretors in the sewer's catchment? These are some of the problems which scientists are now grappling with.

The clock is ticking. WHO need to persuade politicians and those in charge of health services nationally that the eradication of polio is a sensible and realistic target for them in the face of many competing demands. They must persuade the donor agencies of the same. Finally, WHO must solve various technical difficulties to ensure success in places such as sub-Saharan Africa. The science will be the least of these challenges.

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Promoting sexual health

The best way to tackle HIV

The struggle against HIV needs reinvigorating. A vaccine and a cure are as far away as ever, and the main thrust of a strategy on HIV must be to encourage people to behave in a way that will reduce or eliminate their chances of becoming infected. Unfortunately, it is difficult to sustain such a campaign. Consequently homosexual men are beginning to be less careful about practising safe sex, and heterosexuals have simply not adopted safe sex in large enough numbers to prevent HIV spreading through the heterosexual population.

It was these anxieties that led to a group being assembled at Leeds Castle in Kent last week to discuss how to revitalise the campaign against HIV infection. Members of the group came from the health and education services, health promotion, the mass media, and advertising, and the results of the meeting are being transmitted to ministers. One conclusion was that sexual health should be included as one of the priorities in the government's health strategy, and, as I write, it seems that this will be the case. The meeting was thus given energy not only by the urgency, seriousness, and scale of the problem but also by the probability that the government would commit itself to action.

The meeting began by hearing research papers on the difficulties of changing people's behaviour. A large body of research shows that it can be done but offers no universal model on how. Knowledge and attitudes are more easily changed than behaviour, but changing knowledge and attitudes is neither a sufficient nor even a necessary condition for changing behaviour. The difficulty of changing behaviour is related to the clarity and specificity of the health message being delivered, the ease with which change can be made, and the degree of perceived threat. "Go for breast screening" is clear and more easily acted on than "Be more responsible for your own health." The problem with changing people's behaviour to reduce their chance of being infected with HIV is that the message is unclear (to those issuing and receiving it), the change required is large, and the threat is perceived by heterosexuals as small. Furthermore, most people do not think of sexual behaviour in health terms. Another profound problem with transmitting messages on sexual behaviour is that most people in Britain have great difficulty in talking about sexuality; a corollary is that the language used is often seen as either too technical or too explicit. These are some of