Genital herpes: hype or hope?

Genital herpes has received enormous attention by the media during the past year, and many of the articles have been sensational, inaccurate, and of little help to patients. "It sneaks into the body and makes its way along the nervous system to the spinal cord. And that's where it stays for ever—causing pain, sorrow and mental trauma." This first, headlined sentence of a newspaper article illustrates that nothing that has been written is totally untrue but that the inaccuracies and, in particular, the emphasis of articles create unnecessary anxiety. The media has tended to concentrate on four features: the increasing size of the problem, the incurable and recurrent nature of the disease, neonatal infection, and the association with carcinoma of the cervix.

Half a million cases covering a wide range of diseases are seen in clinics for sexually transmitted diseases in Britain every year. Genital herpes accounts for 12,000 of these cases, only 2% of all diagnoses. There has been an increase of 60% over the past five years but it is difficult to estimate what proportion is due to old patients with recurrences as opposed to new patients with a first attack. Conceivably the introduction of the specific antiherpuses drug acyclovir and the earlier interest by the media in America have encouraged more of the old patients to return in the expectation of a cure by this new agent and to seek reassurance that not everything they read in the media is true.

Unfortunately, the truth is that genital herpes is a recurrent disease and that, by definition, no cure has been discovered. Over the years numerous types of treatment have been used, which have ranged from topical steroids to potent parenteral antiviral drugs.2 Now acyclovir has been added to the list. Intravenous, oral, and topical acyclovir all appear to reduce the duration of viral shedding, the time to healing, and the duration of symptoms in patients with primary herpes.5 6 7 The drug has a similar effect in treating recurrences. Unfortunately, it does not appear to stop further recurrences.9 10 This all sounds dismally, but a drug that can shorten attacks is of some help and points the way to further studies of prolonged treatment of the first attack or continuous treatment for several months in those with established disease in an attempt to alter the recurrence rate. This approach will require careful monitoring of possible drug resistant strains.8 Acyclovir offers some hope and is only the first of what is a new generation of antiviral agents.

These therapeutic advances are too often ignored by those writing on herpes for the lay public, who have instead given false hope to sufferers by suggesting that herpes vaccines are effective. None of these vaccines has been tested in double blind placebo controlled randomised studies, and the results of such studies are awaited with interest. There is little scientific evidence that such vaccines have any appreciable effect on the clinical course or incidence of the disease. Herpes vaccines appear to work on the princeiple that induced antibody to herpes simplex virus will protect against subsequent infection; nevertheless, naturally acquired antibody to herpes simplex virus does not protect against the subsequent development of genital herpes, though it may modify the course of the illness.9 Thus these vaccines will probably not prevent genital herpes, but they may alter its clinical course.

Probably the most emotive aspect of herpes relates to neonatal infection. The data on the risk to the newborn are poor, confusing, and controversial. It is often stated that if the mother has herpes at the time of delivery the risk of the neonate being infected is 60%. Nevertheless, the figure is derived from work carried out in Atlanta, Georgia, on only 22 patients.10 The results of that study indicated that the risk to the neonate was far greater from primary than from recurrent episodes in the mother. Two recent studies from America have shown that with good obstetric management (including viral cultures from the vulva and cervix in women with suspected herpes in late pregnancy, and caesarean section if herpes simplex virus is cultured near the time of delivery) the risk of neonatal infection can be avoided.11 12

Unfortunately, this is not the whole story. Up to 70% of babies with neonatal herpes simplex virus are born to mothers with no symptoms or signs of the disease at the time of delivery.13 These women may be shedding virus asymptomatically,14 or the infant may acquire the infection after delivery from maternal labial herpes or herpes infection in one of the medical or nursing staff.15 Clearly studies are required to elucidate further the clinical course and pathogenesis of neonatal herpes simplex virus infections. In particular, we need to know how common the virus is in the lower genital tract at term and whether babies are infected by its presence—and if so what proportion and with what outcome. Until such data are available the reasonable approach is to monitor all pregnant women who give a past history of herpes or who develop it during pregnancy. From 36 weeks onwards weekly cultures should be performed regardless of whether lesions are present or not, and a caesarean section should be offered if active lesions, be they recurrent or primary, or viral shedding is found at 39-40 weeks. Probably this approach eventually will be shown to be too conservative,
resulting in a number of unnecessary caesarean sections, but in the light of current knowledge it would be unethical to do otherwise.

The possibility of an association between herpes simplex virus 2 and cervical neoplasia has been the subject of controversy for nearly two decades. Evidence for the association comes from several sources. Firstly, several members of the herpes virus group are potentially oncogenic; the best example being the association of the Epstein-Barr virus with Burkitt's lymphoma and nasopharyngeal carcinoma. Secondly, several studies have shown a correlation between the presence of antibodies to herpes simplex virus 2 and carcinoma of the cervix; nevertheless, such antibodies may just be an indicator of greater promiscuity among such women. Finally, a growing body of in vitro evidence suggests the potential oncogenic nature of herpes simplex virus 2.

The exact role of this virus in carcinoma of the cervix, however, remains to be verified, and the relation is not fully established or proved. While doubt exists, caution is advocated and patients who have suffered genital herpes should have cytological examinations performed initially and then at yearly intervals. Once again the media has failed to make it clear that the link between infection with herpes simplex virus 2 and cervical neoplasia is not fully established, that other, equally important aetiological factors such as age at first intercourse are implicated in this type of cancer, and that the problem can be detected early if the strategy for cytological testing outlined above is followed.

A disease that is usually sexually acquired and recurrent is bound to create feelings of guilt and anxiety among some sufferers—an aspect of the infection too often neglected by the medical profession. This problems can be dealt with and should not be the death knell of an individual's sex life. The Herpes Association was recently founded in an attempt to help patients come to terms with their disease, and to put it in perspective, and to realise that they can "survive" herpes.

The media has a responsibility towards its readers when dealing with health matters and must be adjudged irresponsible if it creates unnecessary anxiety, fails to give a balanced picture of a disease, and, in particular, does not outline the advances that are being made in prevention, treatment, and self help for the support of patients. All of these advances now mean that the future for sufferers from herpes seems more hopeful.

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Deaths in the first 10 minutes

Despite the British Medical Association's success in persuading Parliament to introduce the compulsory wearing of seat belts and the benefits in reducing both the number and the severity of injuries that this will bring, road traffic accidents continued to be of great concern. Thus the debate will continue on the role of medical "flying squads," of paramedics, and of bystanders at the scene of the accident. In such discussions statistics are of paramount importance, and a recent survey from Middlesbrough by Eugene Hoffman has shown that of 344 deaths no fewer than 172 occurred at the scene of the accident, 168 of them within the first 10 minutes before the emergency services arrived.1 Comparable studies by Spelman et al and by Gögler have shown similar figures for the United States and West Germany, respectively.2,3

The two main types of effort to improve the management of casualties at the site of the accident have been the development of doctor based immediate care schemes pioneered by Dr Kenneth Easton in Cleveland and training paramedics in the ambulance service and elsewhere, developed by Dr Peter Baskett in Bristol.4,5 We now know that mobile teams dealing with only one type of emergency, whether trauma or myocardial infarction, are uneconomic. Such schemes should be geared to caring for all patients who are seriously injured or taken suddenly ill. Thus the team in the Bristol scheme receives a 10 to 12 calls a week, finding them evenly distributed between accidents and medical or surgical emergencies. A reasonable conclusion would be that such resuscitation teams based on district general hospitals should be available at very short notice at the request of the emergency services.