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Lesson of the Week

Vitamin and energy injections in the Indian subcontinent

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Though it is now common for general practitioners to request immunoglobulin for protection against hepatitis A for travellers visiting the Indian subcontinent, probably more should be done to protect patients against possible exposure to hepatitis B. This is a particular problem with Asian patients who go abroad for extended periods and are therefore more likely to require medical attention while there. Twice during the past year we have diagnosed acute hepatitis B in young women who had received injections while in Pakistan.

Patients should be warned about the infectious risks of "traditional medicines" given by injection while abroad

Case histories

Case 1—A 26 year old Asian woman normally resident in Britain visited Pakistan for six weeks and returned five weeks before admission. While in Pakistan she was reported to have had an "energy injection." Her two children were in hospital in Birmingham being treated for typhoid when she was taken ill with abdominal pain and fever and admitted with suspected typhoid. She was 16 weeks pregnant. Liver function tests yielded a serum aspartate transaminase activity of 4300 IU/l with a bilirubin concentration of 46 μmol/l, and hepatitis B surface antigen was present to a titre of >1/8000 by reverse passive haemagglutination (Hepatest, Wellcome Laboratories). Four days after admission to this hospital she was transferred to King's College Hospital, London, with a diagnosis of fulminant hepatic failure due to infection with hepatitis B virus, and she died four days later.

Case 2—A 20 year old Asian woman normally resident in Britain until her marriage in Pakistan in 1984 returned from a visit lasting 12 months in December 1986. During her stay she had suffered persistent diarrhoea which had resulted in weight loss for which she had had several "vitamin" injections from local doctors. She was admitted less than a month after her return with diarrhoea, vomiting, anorexia, and jaundice. On admission her serum aspartate transaminase activity was 1545 IU/l and bilirubin concentration 152 μmol/l. Hepatitis B surface antigen was present to a titre of 1/32 (Hepatest, Wellcome). She recovered well and was discharged two weeks later for outpatient follow up.

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Discussion

Both patients had IgM class antibody to hepatitis B core antigen, indicating a diagnosis of acute hepatitis B acquired within the previous two to six months. The most likely source of infection in both patients was the injections that they had received. Energy and vitamin injections are presumably not essential to life. Though the local population and family of the visitors may speak highly of such injections, these people have the advantage of probably being naturally immune to hepatitis B through previous exposure. The risk is probably not in the vitamin preparation itself but in the use of inadequately sterilised equipment, especially needles.

Hepatitis is not uncommon in Asians returning from the Indian subcontinent. In a study from East Birmingham Hospital of 50 consecutive cases of acute hepatitis, 16 were in Asians returning from the Indian subcontinent.[1] Three of these were diagnosed as hepatitis B, five were hepatitis A, and eight were non-A non-B.

Cases of hepatitis B such as those described here are avoidable. General practitioners should be especially vigilant in warning their patients of the dangers of accepting traditional medicines given by injection while they are abroad. The risks of infection with the human immunodeficiency virus by the same route may serve to emphasise this message more strongly.

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