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Travel Health Information Sheets

Japanese Encephalitis Vaccine Information

Indications for use of vaccine

Japanese encephalitis (JE) vaccine should be considered for:

- Travellers spending a month or longer in rural epidemic or endemic areas during the transmission season
- Travellers spending less than a month in epidemic or endemic areas whose planned activities place them at particularly high risk

Availability

Two inactivated vaccines are available in the UK, although neither vaccine is licensed in this country at the present time. The Biken vaccine (JE Vax) is manufactured in Japan and is the most widely used. Most published research refers to this vaccine. JE Vax was granted a licence in the USA in December 1992 [1].

The Green Cross vaccine is not widely available in Europe, but is manufactured in Korea and is licensed in several south-east Asian countries.
The use of both vaccines in the UK is on a named patient basis. Details of available vaccines and manufacturers can be found in the summary table below.

Vaccine Schedules

Vaccine schedules (Will open in new window)

The vaccine schedule for both vaccines should be completed at least 10 days prior to departure to observe for delayed allergic reactions (see below), and ideally a month before travel to allow immunity to develop.

Contraindications

- Serious illness or acute febrile illness
- Hypersensitivity to components of the vaccine, including thiomersal and neural or rodent protein
- Serious reaction to a previous dose of vaccine
- Unstable neurological conditions, particularly convulsions in the previous year
- The vaccine should be used with caution in persons with a past history of urticaria following envenomation, drugs, or

other cause

Adverse Reactions

Japanese encephalitis vaccine is associated with a moderate frequency of local and mild systemic side effects. They occur in 10-20% of vaccinees.
Serious systemic reactions may include urticaria, angioedema and cardiovascular collapse, and occur in about 0.6% of vaccine recipients. These reported reactions may have an onset as long as 2 weeks after vaccination, but most will occur within the first few minutes to one week following vaccination.
Rare neurological events including encephalitis have also been reported in Japan between 1965 and 1973 and occurred at a rate of 1-2.3 per million vaccinees [3].
Detailed studies of adverse events associated with JE vaccine have concluded that severe adverse events are rare, and although milder events are more common, they remain within acceptable rates compared with other vaccines.
Nevertheless, all vaccinees should be observed for 30 minutes, and be advised of possible delayed side effects. Full resuscitation facilities should be present.

References

1. Centres of Disease Control and Prevention. Approval of Japanese Encephalitis Vaccine. MMWR 1992; 41:962
www.cdc.gov/mmwr/preview/mmwrhtml/00018184.htm
2. Biken Product Information Sheet for Japanese encephalitis. Feb 1997 Osaka, Japan
3. Centres for Disease Control and Prevention. Health Information for International Travel 2003-2004
4. Centres for Disease Control and Prevention. Inactivated Japanese encephalitis virus vaccine: recommendations of the advisory committee on immunization practices (ACIP). MMWR 1993;42(RR-1):6

Reading List

1. Shlim D, Solomon T. Japanese encephalitis vaccine for travellers: Exploring the limits of risk. Clinical Infectious Diseases 2002;35:183-8
2. Tsai T. Inactivated Japanese encephalitis virus vaccine recommendations of the Advisory Committee on Immunization Practices. MMWR 1993;42:RR-01
www.cdc.gov/mmwr/preview/mmwrhtml/00020599.htm