Advising travellers who have special risks

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The aim of any pre-travel health consultation is to tailor advice to individual travellers. This is particularly important when a traveller has special risks.

Nurses practising travel health must ensure they are confident in making a risk assessment to identify any special risks and understand how these affect advice or interventions recommended. Special risks also include pregnancy, breastfeeding, babies and children, older travellers and medications.

A special risk may mean that a planned itinerary is considered unsuitable, may place travellers at higher risk of illness or serious complications, or be a contraindication to a particular vaccine or malaria prevention tablet.

One aim of the travel health consultation and risk assessment is to identify any such risks and tailor advice accordingly. Although it does not give an exhaustive list, Table 1 outlines a number of medical conditions/medicine and issues to consider.

**Medical preparation before travel**

Ideally, travellers with special risks should discuss how advisable their plans are before booking an overseas trip. However, this does not always happen, so it may be necessary to discuss the suitability of planned travel during the pre-travel consultation.

It is important that travellers understand the risks they face; sometimes a minor change to the itinerary is enough to reduce these and cancellation can be avoided. It is advisable to involve the medical professional responsible for supervising the special risk (such as an obstetrician, paediatrician or GP) in making decisions about a traveller’s fitness to travel and any specific medical advice for the trip.

Travellers should be fit to fly if travelling by aeroplane and a medical information form (MEDIF) may be required by airlines for those with certain medical conditions. The Civil Aviation Authority produces a form that can be completed by a doctor or other medical professional who can assess a passenger’s fitness to fly.
guidelines for health professionals assessing travellers’ fitness to fly (Box 1).

Individual airlines have different guidelines on transporting pregnant women, who should contact the airline to discuss these well in advance of departure. Generally, most airlines allow travel up to 36 weeks’ gestation for single pregnancies, and 32 weeks’ for multiple pregnancies. After 28 weeks’ gestation, pregnant women should carry a letter from their midwife or obstetrician confirming the due date and that the pregnancy is uncomplicated.

Risk factors for deep vein thrombosis (DVT) associated with long-haul travel include pregnancy, active cancer, hormone therapy (including oral contraceptive pills and hormone replacement therapy), a previous history of DVT and blood clotting disorders such as factor V Leiden (Watson and Baglin, 2011). Travellers should be advised to wear properly fitted flight socks in addition to regularly flexing and extending their ankles during the flight. Those with a history of DVT or pulmonary embolus and those with clotting disorders should be referred to a haematologist to discuss the advisability of low-molecular weight heparin administration before long-haul travel.

Comprehensive travel insurance is essential for all travellers, particularly for those with special risks; they should declare their medical history to insurers and ensure that provisions for repatriation are included in their policy. Travellers should consider their access to medical facilities, which may be difficult, particularly if they are travelling to remote areas.

Emergency identification, such as that provided by MedicAlert, is designed to provide wearers’ medical history and a contact telephone number for situations where they cannot provide this information themselves. Such identification should be considered particularly by those with conditions such as epilepsy, severe allergies or diabetes.

A letter detailing the medical condition and a list of medications being taken should be carried; pregnant women should carry a copy of their antenatal records and scans in case they need medical treatment. Adequate supplies of medication should be taken and carried in hand luggage.

Some countries may have restrictions on the import of certain medications, particularly controlled drugs – advice should be sought from the embassy of the country to be visited (NHS Choices, 2011). A personal licence may be needed if carrying controlled medication; further guidance is available from the Home Office (Box 1).

**Vaccinations**

It is important to have a good working knowledge of vaccines used in travel health including general contraindications and precautions and minimum age of administration. The summary of product characteristics and text by Salisbury et al (2006a) should be consulted for guidance on vaccine use in those with special risks.

Travel health consultations are an ideal opportunity to ensure that travellers’ routine immunisations are up to date, including any vaccines recommended by the Department of Health for those in certain clinical risk groups.

There is an increased risk of seasonal influenza associated with cruise travel, which is often undertaken by older travellers. Those aged 65 years or older should, therefore, be up to date with seasonal influenza vaccine (Salisbury et al, 2006b).

Live viral vaccines such as yellow fever and measles, mumps and rubella (MMR) are contraindicated in immune-suppressed people. Immunosuppression can occur as a result of an underlying medical condition, or a medication or treatment such as chemotherapy or generalised radiotherapy. Inactivated vaccines are generally suitable for immune-suppressed people. However, because there is a theoretical risk that immune suppression may affect vaccine efficacy, careful attention to other avoidance measures is important.

There is an increased risk of serious adverse events associated with yellow fever vaccine in those aged over 60 years. A careful risk assessment, taking into account the risk of yellow fever at the destination, should be made, referring to specialist sources of information as appropriate (National Travel Health Network and Centre, 2012).

There is a lack of data on vaccinating breastfeeding or pregnant women. On theoretical grounds, live vaccines should be avoided in pregnancy, especially in the first trimester. There are occasions when the risk of disease at the destination warrants consideration of a live vaccine; specialist advice should be sought. Yellow fever vaccine should ideally be avoided by women breastfeeding babies who are too young to receive vaccine themselves because there is a risk that the vaccine virus may be excreted in breast milk. Again, vaccine may be justified in certain situations and specialist advice should be sought.

Inactivated vaccines can safely be given to breastfeeding mothers (Atkinson et al, 2008), and there is no evidence of harm from inactivated vaccines given in pregnancy (Centers for Disease Control and Prevention, 2007). However, careful consideration of the risk of disease at the destination should be made and balanced against the benefits of vaccination.

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**TABLE 1: MEDICAL HISTORY AND MEDICATION**

<table>
<thead>
<tr>
<th>Special health risk (examples)</th>
<th>Issues to consider (not exhaustive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergies</td>
<td>To medication, previous vaccine</td>
</tr>
<tr>
<td>Cancer</td>
<td>Particularly recent diagnosis and treatment</td>
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<tr>
<td>Cardiovascular disease</td>
<td>Arrhythmias, recent myocardial infarction, medication, heart failure</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Susceptibility to infection, insulin adjustment</td>
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<tr>
<td>Gastrointestinal conditions</td>
<td>Recent gastrointestinal bleed, history of gastrectomy</td>
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<tr>
<td>Haematological conditions</td>
<td>Sickle cell disease/trait, anaemia, history of deep vein thrombosis</td>
</tr>
<tr>
<td>Immunocompromised</td>
<td>By medical condition, treatment or both</td>
</tr>
<tr>
<td>Medications</td>
<td>Potential interaction with malaria drugs</td>
</tr>
<tr>
<td>Mental health</td>
<td>Acute psychoses, history of depression</td>
</tr>
<tr>
<td>Neurological conditions</td>
<td>Epilepsy, recent cerebrovascular accident</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Number of weeks of gestation, complications of pregnancy</td>
</tr>
<tr>
<td>Recent surgery</td>
<td>Brain, chest, middle ear, orthopaedic with plaster cast, retinal detachment and repair</td>
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<tr>
<td>Renal conditions</td>
<td>Renal failure, dialysis</td>
</tr>
<tr>
<td>Respiratory conditions</td>
<td>Chronic obstructive pulmonary disease, recent pneumothorax</td>
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**References**

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Malaria and other mosquito-borne diseases

Pregnant women, babies, immune-suppressed people and those without a spleen are at increased risk of contracting malaria or a more serious illness with malaria (Chiodini et al, 2007). Such travellers should be counselled about the suitability of their destination.

All health professionals who offer travel health advice need a sound working knowledge of malaria. The guidelines for malaria prevention for travellers from the UK from the Health Protection Agency are an essential resource (Chiodini et al, 2007). A drug cross-check should always be made before recommending or prescribing any malaria prevention tablets to prevent interactions with medication that travellers may already be taking.

Pregnant and breastfeeding women can and should take malaria prophylaxis if travelling to risk areas. However, some malaria tablets, such as doxycycline, are contraindicated, and others should be used with caution after assessing the traveller’s risk carefully; specialist advice should be sought. Breastfed babies always need their own tablets as they will not be protected by the amount of medication excreted in breast milk. Dosages of malaria prevention tablets should be calculated according to the infant’s weight which is more accurate than age (Chiodini et al, 2007).

Travellers with significant renal impairment may need specialist advice as some malaria tablets, such as proguanil, are metabolised through the kidneys. The dosage may need to be adjusted.

No malaria prophylaxis is ever totally effective; all travellers should be aware of the importance of taking measure to avoid insect repellents, appropriate clothing and insecticide-impregnated bed nets in malarial areas. Care should be taken when applying insect repellent to babies and children to ensure they do not ingest it, and bed and cot nets should be well out of their reach.

Health professionals should be alert to the possibility of infectious disease in unwell returning travellers, to ensure that prompt referral and management is arranged. Suspected malaria is a medical emergency, especially in travellers with special risks who may be at risk of rapid and fatal illness. An algorithm for assessing and managing malaria in adults is available from the British Infection Society (2007). For more information on UK-licensed medicines: tinyurl.com/Home-licence

References


British Infection Society (2007) Malaria – Algorithm for Initial Assessment and Management in Adults. tinyurl.com/BIS-malaria


National Travel Health Network and Centre (2012) Hivellow Fever Vaccination in Persons Aged 60 Years and Older tinyurl.com/Nathnac-yellow


Travel health planning may require input from the traveller’s specialist medical team and nurses should recognise when further guidance is needed and seek advice from other resources as appropriate. NT

Part 3 of this series on travel health, to be published in next week’s issues, discusses malaria.

References


British Infection Society (2007) Malaria – Algorithm for Initial Assessment and Management in Adults. tinyurl.com/BIS-malaria


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