

# EPILEPSY

## adventure travel pre-trip preparation

For the use of medical practitioners only (Dr Jim Duff, 11/07/2011)

These notes are to aid a doctor in the assessment and preparation of a patient with epilepsy who is intending to undertake an adventure holiday in a wilderness setting. They will help to:

- Assess their suitability for wilderness/adventure travel
- Reduce the chances of a fit (seizure) in a remote area or in dangerous situation
- Ensure their companion/leader has the basic skills and means to give the necessary treatment if a fit occurs

This advice assumes the person is otherwise well physically, mentally and emotionally, and has no coexisting chronic conditions such as asthma, diabetes or cardiovascular disease (if they do, each condition needs individual assessment). You should warn them that there are some risks to travelling with epilepsy, but by following medical advice the risks can be minimized.

If you have any doubts about their suitability for a particular trip, a neurologist's advice should be sought.

### PRE-DEPARTURE ASSESSMENT AND PREPARATION

The best indication of how your patient will respond to wilderness/adventure travel is their past history in similar situations. The proposed itinerary and activities should be reviewed in the light of this and the following information.

#### 1) Concerns

Advise your patient to avoid wilderness adventure-type trips if they had a first fit in the last twelve months.

They are at greater risk if:

- There was no obvious precipitating cause of the fit in the first instance (such as illness or a head injury)
- The fits are unpredictable
- They have temporal lobe epilepsy
- There have been past episodes of status epilepticus
- If a fit occurs in a dangerous situation e.g. in or on water, above a drop, on open vehicles (in any of these situations, a trained guide or experienced companion should be with them at all times).

#### 2) History and examination

A thorough medical and neurological examination should be carried out, preferably by a neurologist:

- Work out the predictability of the fits
- Try to identify the cause
- Review their medications and aim to get the best control of fits
- Measure therapeutic blood levels of anti-convulsants.

### 3) Review medications

Note the following drug interactions and situations:

- Ciproflaxacin and norfloxacin (antibiotics commonly used for diarrhoea) lower the seizure threshold
- Chloroquine and mefloquine (antimalarial drugs) lower the seizure threshold
- Erythromycin and omeprazole can affect anticonvulsant levels and should be avoided
- Doxycycline should not be used as an antimalarial if these drugs (carbamazepine, phenytoin or barbiturates) are being taken as they reduce the blood level of doxycycline reducing its effectiveness as an anti-malarial
- If travelling through a malarial zone, seek alternatives to mefloquine, doxycycline and chloroquine. If in doubt seek expert advice.

### 4) May they go?

They may undertake a trip if the above points are taken into account, and:

- Their epilepsy is well controlled and predictable, and medication is taken regularly
- They are aware of their triggers (alcohol, fatigue, strobing lights, TV, etc)
- They have a well-trained companion or guide who is prepared to manage a fit at any moment
- They strictly follow the appropriate rules of dangerous activities such as mountaineering, horse riding, swimming, rafting, surfing, skiing, rock climbing, riding on the back of open vehicles etc and full safety precautions are in place

### 5) Pre-departure check list

Items to be carried by people with epilepsy:

- A written medical history with current medication, plus phone numbers of their doctor(s)
- Diazepam rectal tubes 10 mg x 3
- Written instructions on dealing with a fit

## APPENDIX

### Dealing with a fit

Written instructions to be carried by the patient or to be given to the leader or their companion:

- Only move the patient during a fit if they are in danger (in the water, on the edge of a drop, etc)
- Loosen tight clothing and protect their face from being scraped on the ground
- Do not put anything in their mouth
- Do not attempt to stop their movements
- If the fit lasts more than 5 minutes (status epilepticus), administer diazepam as a rectal tube (companion/leader needs prior explanation of how and when to use it)
- After a fit the person is usually confused and sleepy for a while, has a degree of amnesia, is exhausted and temporarily weak. They will need to be watched, rested, and sheltered from the elements for several hours afterwards.