



Motion Sickness

Motion sickness may be produced by all kinds of motion, including travelling in cars, trains, airplanes and boats. It develops when the brain is confused by various messages coming from the organ of balance, the eyes and the body. These confused messages stimulate the vomiting centre. Anyone may develop motion sickness but children are particularly prone.

There is no drug which effectively prevents motion sickness that does not produce harmful effects in some people.

Once motion sickness has started, taking drugs by mouth may have no effect at all because the drug may be vomited straight up and/or the exit from the stomach to the intestine may be closed as a result of the vomiting. This closure of the exit from the stomach holds the drug back from entering the intestine from where it is normally absorbed into the bloodstream to produce its beneficial effects. In these circumstances (i.e. when someone is vomiting repeatedly) an anti-vomiting drug should be given by injection or by suppository into the rectum. Some preparations may be sucked and the drug absorbed directly into the bloodstream from the lining of the mouth (e.g. cinnarizine). Hyoscine (see later) is available in the form of a patch to be applied to the skin.

The aim of drug treatment should be to try to *prevent* an attack of motion sickness developing. A short-acting drug (e.g. Hyoscine) should be taken for a short journey and a long-acting one (e.g. an antihistamine) for a long journey.

Available drugs

Hyoscine

Hyoscine (an anticholinergic drug) is the drug of choice. It acts principally on the organ of balance and the vomiting centre. It is very

effective for treating motion sickness but is short-acting and therefore useful only for short journeys. It should be taken by mouth half an hour before a journey. In high dosage and on repeated use it may produce drowsiness, blurred vision, dry mouth, constipation, difficulty in passing urine and rapid beating of the heart. It increases the effects of alcohol and interferes with the ability to drive or operate moving machinery.

A preparation of hyoscine that can be applied to the skin is available (Scopoderm). The hyoscine is absorbed directly into the bloodstream and therefore a small dose can be used which results in less severe harmful effects. It also has a prolonged effect – up to 36 hours.

Antihistamines

Antihistamines are useful for treating motion sickness because they act on the organ of balance in addition to acting on the vomiting centre in the brain.

In using antihistamines to prevent motion sickness the greatest problem is drowsiness. It is the most common harmful effect and it may affect the ability to drive and operate moving machinery. If you wish to take an antihistamine for a journey, it is worth trying a dose a few weeks before, just to see how it affects you; then you will know what to expect. Paradoxically, in infants and young children antihistamines may produce stimulation rather than drowsiness. This may cause them to become restless and unable to sleep.

The antihistamines that are used to prevent motion sickness are less

effective than hyoscine but produce less dry mouth and constipation. However, most of them produce drowsiness. There is no evidence that one antihistamine is better than all the others at relieving motion sickness. Some produce less drowsiness than others and some produce less dry mouth and constipation than others. However, over all it is a matter of trial and error because different people react differently to antihistamines. The newer antihistamines that do not produce drowsiness do not enter the brain and are therefore of little use in relieving motion sickness.

If sleep is needed (e.g. an overnight journey by boat) it is better to use an antihistamine that is known to produce drowsiness (e.g. promethazine or dimenhydrinate). In the day-time it is better to try cyclizine or cinnarizine because they produce less drowsiness than the others. The first dose of an antihistamine should be taken about half an hour before the journey (2 hours before for cinnarizine).

DANGERS OF ANTIHISTAMINES WITH ALCOHOL AND OTHER DRUGS: It is important always to remember that antihistamines increase the effect of alcohol and other drugs that depress the consciousness of the brain; for example, sleeping drugs, anti-anxiety drugs (tranquillizers) and anti-depressant drugs. They may also interfere with your ability to drive.

Other treatments

Other treatments for motion sickness include sucking ginger, although there is no convincing evidence of its effectiveness, and acupressure on the wrist by wearing a special strap (Acu Pulse Band). This is claimed to prevent nausea by applying pressure at certain acupressure points on the wrist.

There is no convincing evidence from adequate and well controlled studies of the benefit of chlorbutol (a sedative) in relieving motion sickness.

