

ANTI-EMETICS

Drugs used to treat or prevent vomiting or the feeling of sickness (nausea) are known as anti-emetics. Vomiting is a reflex action for getting rid of harmful substances, but it may also be a symptom of disease. Vomiting and nausea are often caused by a digestive tract infection, travel sickness, pregnancy, or vertigo (a balance disorder involving the inner ear). They can also occur as a side effect of some drugs, especially those used for cancer, radiation therapy, or general anaesthesia.

Commonly used anti-emetics include metoclopramide, domperidone, cyclizine, haloperidol, ondansetron, granisetron, prochlorperazine, promethazine, and cinnarizine. The phenothiazine and butyrophenone drug groups are also used as antihistamines (see p.82) and to treat some types of mental illness (see Antipsychotic drugs, p.41).

Why they are used

Doctors usually diagnose the cause of vomiting before prescribing an anti-emetic because vomiting may be due to an infection of the digestive tract or some

other condition of the abdomen that might require treatment such as surgery. Treating only the vomiting and nausea might delay diagnosis, correct treatment, and recovery. Anti-emetics may be taken to prevent travel sickness (using one of the antihistamines), vomiting resulting from anticancer (see p.112) and other drug treatments (metoclopramide, haloperidol, domperidone, ondansetron, and prochlorperazine) to help the nausea in vertigo (see right), and occasionally to relieve cases of severe vomiting during pregnancy. You should not take an anti-emetic during pregnancy except on medical advice.

No anti-emetic drug should be taken for longer than a couple of days without consulting your doctor.

How they work

Nausea and vomiting occur when the vomiting centre in the brain is stimulated by signals from three places in the body: the digestive tract, the part of the inner ear controlling balance, and the brain itself via thoughts and emotions and via its

VERTIGO AND MENIERE'S DISEASE

Vertigo is a spinning sensation in the head, which is often accompanied by nausea and vomiting. It is usually caused by a disease affecting the organ of balance in the inner ear. Anti-emetic drugs are prescribed to relieve the symptoms.

Mènière's disease is a disorder in which excess fluid builds up in the inner ear, causing vertigo, noises in the ear, and gradual deafness. It is usually treated with cinnarizine, betahistine, prochlorperazine, or an anti-anxiety drug (see p.39). A diuretic (see p.57) may also be given to reduce the excess fluid in the ear.

chemoreceptor trigger zone, which responds to harmful substances in the blood. Anti-emetic drugs may act at one or more of these places (see Action of anti-emetics, left). Some help the stomach to empty its contents into the intestine. A combination may be used that works at different sites and has an additive effect.

How they affect you

As well as treating vomiting and nausea, many anti-emetic drugs may make you feel drowsy. However, for preventing travel sickness on long journeys, a sedating antihistamine may be an advantage.

Some anti-emetics (in particular, the phenothiazines and antihistamines) can block the parasympathetic nervous system (see p.35), causing dry mouth, blurred vision, or difficulty in passing urine. The phenothiazines may also lower blood pressure, leading to dizziness or fainting.

Risks and special precautions

Because some antihistamines can make you drowsy, it may be advisable not to drive while taking them. Phenothiazines, butyrophenones, and metoclopramide can produce uncontrolled movements of the face and tongue, so they are used with caution in people with parkinsonism.

COMMON DRUGS

Antihistamines

Cinnarizine *
Cyclizine
Meclozine
Promethazine *

Phenothiazines

Chlorpromazine *
Levomopromazine
Perphenazine
Prochlorperazine *
Trifluoperazine

5HT₃ antagonists

Granisetron
Ondansetron *
Tropisetron

Butyrophenones

Haloperidol *

Other drugs

Aprepitant
Betahistine *
Domperidone *
Dexamethasone *
Hyoscine
hydrobromide *
Metoclopramide *
Nabilone

* See Part 3

ACTION OF ANTI-EMETICS

