

Medicines for nausea and vomiting

Fact sheet

There are many different factors that trigger nausea and vomiting. An unpleasant odour, illness and treatment or anticipation and stress can provoke feelings which are unpleasant and can make us ill.

There is a part of the brain known as the vomiting centre which receives and reacts to messages from all our senses - sight, hearing smell, movement and position.

A highly sensitive part of the vomiting centre, the Chemo-receptor Trigger Zone (CTZ), has a role in monitoring our internal body chemistry for imbalances and abnormalities.

Nausea and vomiting are best managed by treating the cause. However, in some cases, the cause is not reversible. There are a number of medications available to manage nausea and vomiting either temporarily or long term. These medications work either by altering or blocking the messages being sent to the vomiting centre in the brain, or altering how the brain reacts to the messages.

Commonly prescribed medications

Metoclopramide (Maxalon, Pramin)

This is mostly used for nausea caused by the slowing of the gut, and in particular to offset the side effects of pain relief medication such as morphine.

It is known as a 'prokinetic' medicine. It works partly on the stomach, encouraging it to move its contents through, and has some action in the brain on the CTZ.

Domperidone (Motilium)

This is primarily a prokinetic agent with little effect on the vomiting centre in the brain.

It is useful where nausea and vomiting are due to sluggishness of the upper part of the gut.

Prochlorperazine (Stemetil, Stemizine)

This medication works on the CTZ part of the vomiting centre and is also useful for the nausea of motion sickness. It has a number of side effects so is generally limited to short term use.

Haloperidol (Serenace)

Commonly used in psychiatry, this medication works mostly at the CTZ and is very effective at relieving nausea caused by medication and chemical imbalances in the blood. It works in a similar way to Prochlorperazine (Stemetil) but has fewer side effects and can be used for longer periods.

Lorazepam (Ativan)

Lorazepam is used for nausea due to anxiety and is part of the benzodiazepine (Valium) group of drugs. It is commonly used to overcome the nausea which results from anticipation prior to chemotherapy, and is usually used together with other anti - nausea medication.

It comes as a tablet which can dissolve under the tongue as well as being swallowed.

Ondansetron* (Zofran)

Ondansetron blocks receptors in the gut and brain that send messages to the CTZ and vomiting centre.

These receptors are usually activated by chemicals (cytokines) released from cells broken down by chemotherapy or radiotherapy.

Zofran is often used in chemotherapy in combination with dexamethasone, but it can sometimes be effective in other situations as well.

Zofran comes as a wafer which can dissolve under the tongue, a tablet, or an injection.

It has the side effect of being extremely constipating.

Other members of the same drug group are: Anzemet (Dolasetron), Kytril (Granisetron), and Navoban (Tropisetron).

Hyoscine butylbromide (Buscopan)

Buscopan is a medication which has two actions. It

- reduces the secretions into the bowel; and
- suppresses and relieves the muscle spasms of the intestines which cause colicky pain.

It is particularly useful for blockage of the bowel.

Hyoscine Hydrobromide (Hyoscine, Scopolamine, Kwells, Travelcalm)

Like Buscopan, this drug works on the bowel but it is a more potent drying agent and is useful in motion induced nausea and vertigo.

It does however have a tendency to cause confusion in higher doses and its use is limited.

Dexamethasone

Dexamethasone is a steroid hormone used for reducing inflammation and swelling. It has a direct effect on the CTZ area of the vomiting centre and is usually used alongside another anti nausea medication like haloperidol, lorazepam or ondansetron.

It is also effective in managing some of the causes of nausea and is used to manage:

- increased pressure in the brain;
- early bowel obstruction; and
- chemotherapy-related nausea.

It can be taken as a tablet or given as an injection under the skin.

Side effects include:

- trouble sleeping, irritability, euphoria;
- acid stomach/indigestion; and
- muscle weakness with longer term use.

Cyclizine

Cyclizine is an antihistamine. It works directly on the vomiting centre, and is used for blockage of the bowel, pressure in the brain (used together with dexamethasone), motion sickness or inner ear problems.

Promethazine (Phenergan) is another antihistamine.

Both need a special Pharmaceutical Benefits Scheme (PBS) Authority prescription from your doctor.

Levomepromazine (Nozinan)**

Also known as Methotrimeprazine.

Levomepromazine belongs to the antipsychotic group of drugs, but also has anti nausea and analgesic properties.

It works at a number of sites and is called a 'broad spectrum' medication. This is very useful if the cause of nausea is unclear or if there are multiple causes of nausea or vomiting.

It needs careful monitoring because of its interactions with other medication.

It is very sedating, but may also cause restlessness.

Octreotide (Sandostatin)**

Octreotide is a synthetic hormone which reduces the secretion of fluids into the bowel and increases the amount of fluid the body absorbs from the bowel.

This is really useful when the bowel is blocked because it slows down the rate of fluid build up above the blockage and means you will be less sick, less often.

It is given as an injection under the skin. It generally needs to be given three times a day or by continuous infusion.

When and how to take these medicines

Persistent symptoms require persistent medication. Your doctor and nurse can advise you on the best times to take your medications.

Most medicines come in both tablet and injection form. Sometimes the medications are best given by injection under the skin to gain quick and

effective control of symptoms, for example when you are unable to keep tablets down to absorb medication from the gut.

Call your doctor or nurse

- If you are unable to keep your medication down;
- If you have any new symptoms including noticeable drowsiness, restlessness or confusion; or
- If your medication has no effect on how you feel: sometimes it takes fine tuning to get good relief.

* Limited by the Pharmaceutical Benefits Scheme to chemotherapy and radiotherapy but often prescribed for other reasons. Unfortunately they are also very expensive.

** Available through hospitals under a Special Access Scheme and generally needs to be prescribed by a Specialist doctor.

Related fact sheets

Nausea and vomiting

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