

# Omeprazole



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OMEPRAZOLE Omeprazole Omeprazole is a drug that is used in problems relating to the gastrointestinal tract. They are used for the pathologies of the gastrointestinal tract which include gastroesophageal reflux disease as well as peptic ulcer. They are considered superior in their pharmacologic actions to other drugs used to treat peptic ulcers. The drug functions basically as an inhibitor of the proton pump. The drug carries out its action by diffusion into the parietal cells of the stomach. In the cells, they get converted into substances which act on the H<sup>+</sup>/K<sup>+</sup> ATPase which forms an integral part of the pathway of the formation of the acid in the stomach. They inhibit this pump and hence lead to a reduction in the production of the acid. The drug has many indications which include the ulcers of the stomach which are the primary indication. Other indications include disturbances caused by the acid in the stomach and heartburn. It may also be given to relieve chronic cough. Certain medications like non-steroidal anti-inflammatory drugs cause damage to the lining of the stomach and the proximal part of the intestine. It is also considered to assist in reducing the risk of cancer of the esophagus. Omeprazole can be given to avoid this damage. It is also indicated as a pre-anesthetic drug before the administration of general anesthesia. Omeprazole can be taken orally and it is also available in the form of injections. The oral form of the drug is coated to prevent damage to it in the stomach by the acid. The action of the drug lasts for approximately 24 hours and it is extremely important to be understood that for complete results, the drug needs to be taken for at least 3 to 4 days. The drug may have a few adverse effects which include headache and pain in the abdomen. It may result in other gastrointestinal problems which include nausea, vomiting, diarrhea or constipation. It is also seen that treatment with this drug for prolonged

periods of time may result in increased levels of gastrin in the blood. The drug is also associated with reduction in the absorption of the vitamin B12. Also as the drug leads to reduction of acidity in the stomach, it may hinder the absorption of drugs like digoxin which require an acid medium for their absorption. The susceptibility of infections of the gastrointestinal tract and the respiratory system also increase with this drug. The intake of omeprazole also increases the chances of having bone fractures. This is particularly more important for people who take these drugs for extended periods as well as for the elderly. Omeprazole should be kept away from direct heat and light. The drug should be avoided in pregnancy until and unless it is very important to be taken. It is also preferable not to be prescribed in liver diseases owing to the fact that its metabolism also takes place in the liver. Nursing mothers should also be careful as this drug also comes in breast milk. References Drugs & Medications - Omeprazole Oral. WebMD. <http://www.webmd.com/drugs/mono-143-OMEPRAZOLE+DELAYED-RELEASE+CAPSULE+-+ORAL.aspx?drugid=3766&drugname=Omeprazole+Oral> Top of Form Katzung, Bertram G. Basic & Clinical Pharmacology. New York: McGraw-Hill, 2007. Internet resource. Bottom of Form Omeprazole. Patient UK 2007.