

Acidity of Stomach-Causes and Home Remedies



Chemistry

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ABSTRACT

The acid is secreted in stomach which helps in breaking down the food during digestion. When there is excess production of acid in the stomach, it results in the condition known as acidity. Dyspepsia (Talleyet al 2005) heartburn and the formation of ulcers are some of the symptoms. Emotional and nervous individuals can have acidity on higher side

Acidity refers to symptoms caused by an imbalance between the acid secreting mechanism of the stomach and the protective mechanisms that ensure their safety.

Causes

Hydrochloric acid and pepsin is secreted in the stomach (Kong & Singh 2008), it helps in breaking down and digesting food. Due to some weakness in the normal sphincter mechanism the acid may enter lower part of oesophagus. This causes heartburn. It commonly occurs after meals or when pressure is applied in the intra-abdominal area or at night when lying down after taking heavy dinner.

Zollinger-Elison Syndrome is a condition in which large amounts acid secretion is stimulated by tumours located in the pancreas or duodenum.

Also due to imbalance between the digestive juices and the various factors that protect the lining of the stomach and duodenum (the part of the small intestine that adjoins the stomach) there is occurrence of ulcer (duodenal ulcer or gastric ulcer). Duodenal ulcers are three times more common than gastric ulcers.

Alcohol consumption, spicy foodstuffs, non-vegetarian food, anti-inflammatory drugs can aggravate the symptoms.

Defence mechanism of body: The mucous layer and bicarbonate present into the mucous layer forms the defence mechanism for stomach. In addition to this hormone-like substance known as prostaglandins help to keep the blood vessels in the stomach dilated, for adequate blood flow. This adequate blood flow protects stomach from develop ulcers.

Symptoms and Signs

Dyspepsia and heartburn are often the main symptoms of acidity in the upper abdomen. Eating a meal usually relieves the pain in duodenal ulcer, but in a gastric ulcer there may be no change, or sometimes the pain may become worse.

Precautions and Treatments

Avoid spicy, salty and acidic foods. Smoking and alcohol consumption must be stopped. All measures should be taken to relieve stress.

Antacids may be used they provide immediate relief of symptoms by neutralising the excess acid which is secreted. The drugs called H₂ Receptor Blockers cause the stomach to produce less acid by blocking histamine receptors these drugs are Cimetidine, Ranitidine, Famotidine or Nizatidine. Another group of drugs called the Proton Pump Inhibitors (Vakil & Fenerty 2003) which selectively disable a mechanism in acid-making cells thus stopping acid production are more powerful and include Omeprazole and Lansoprazole.

If ulcer has been diagnosed proper treatment should be taken to avoid complications like perforations.

Home remedies; Some home remedies have been proved to show excellent results to counter problem of acidity.

Consumption of fruits

Consumption of Fruit such as banana can help to relieve acidity problem. As fruits are a rich source of potassium they help keep the level of acid production under control, certain components in the fruit also help increase the production of mucous in stomach, which helps protect it from the harmful effects of excessive acid production, high fibre content also helps speed up digestion.

Tulsi leaves

It help produce more mucous in stomach, it has antiulcer properties and reduces the effect of gastric acids.

Cold Milk

Due to presence of high amount of calcium it prevents acid build up thereby reducing the symptoms of acidity and also provides instant relief from the burning sensation one feels during acid reflux.

Saunf or aniseed

Due to presence of volatile oils it has anti-ulcer properties and relieves constipation. Aids in digestion cools the lining of the stomach, reduces the burning sensation produced by acid.

Jeera

Stimulates the production of saliva for better digestion, improves metabolism and relieves gas and other gastric troubles, It has a calming effect on irritated stomach nerves and helps heal ulcers.

Clove

It is calmatime and improves peristalsis (the movement of food down the stomach), secrete excess saliva.

Elachi

According to Ayurveda elachi balances all three *doshas* – *kapha*, *pitta* and *vata* stimulates digestion and relieve stomach spasms. It also soothes the inner lining of the stomach.

Pudina or Mint

It has a cooling effect which helps reduce the burning sensation due to acid reflux.

Ginger

The root helps in better absorption and assimilation of essential nutrients and has anti-ulcer properties

Amla

It has vitamin C and high fibre which helps in healing the injured stomach lining and Oesophagus.

Apple Cider Vinegar

It has alkalizing effect Thus, it helps treat stomach acidity.

Buttermilk

It contains lactic acid that normalizes the acidity in the stomach.

Luke warm water

Drinking a glass of lukewarm water every day before going to bed and immediately after waking up in the morning can give relief from acidity.

CONCLUSION

The problem of acidity can be managed by avoiding the known causative factors like alcohol consumption, spicy foods, drugs like NSAID's, steroids etc. Patients with highly nervous and emotional disposition and those involved in high-stress jobs must be given psychological treatment. Avoiding non-vegetarian diets is also useful in minimising symptoms of acidity.

REFERENCE

- Huang JQ, Sridhar S, Hunt RH.(2002) Role of Helicobacter pylori infection and non-steroidal anti-inflammatory drugs in peptic-ulcer disease: a meta-analysis. *Lancet*.359:14-22. | | Kong F, Singh RP (June 2008). 'Disintegration of solid foods in human stomach'. *J. Food Sci.* 73 (5): R67-80 | Talley NJ, Vakil NB, Moayyedi P. (2005).American Gastroenterological Association technical review on the evaluation of dyspepsia.*Gastroenterology*:129:1756-80. | | University of Michigan Health System. Peptic ulcer disease. Accessed May 4, 2007, at: <http://www.cme.med.umich.edu/pdf/guideline/PUD05.pdf>. | | Vakil N, Fennerty MB. (2003) Direct comparative trials of the efficacy of proton pump inhibitors in the management of gastro-oesophageal reflux disease and peptic ulcer disease. *Aliment Pharmacol Ther*.18,559-68. | | Ziegler AB.(2005).The role of proton pump inhibitors in acute stress ulcer prophylaxis in mechanically ventilated patients. *Dimens Crit Care Nurs*,24,109-14. |