

## GAS, BELCHING, BLOATING, DISTENTION, AND FLATULENCE

A variety of gastrointestinal complaints, such as belching, bloating, or flatulence, are commonly attributed by the patient to "excess gas," even though this perception is usually incorrect. When excessive intestinal gas does occur, it may be due to excessive air swallowing, increased intraluminal production from malabsorbed nutrients, and decreased gas absorption due to obstruction, or expansion of intraluminal gas due to changes in atmospheric pressure. The understanding of intestinal gas syndromes has been aided by studies of intestinal gas composition and volume in normal individuals and in those with complaints of "too much gas." It may be uncomfortable or inconvenient but only rarely is gas associated with a serious illness.

### BELCHING

Belching is defined as the passage of stomach gas out of the mouth. It may be voluntary or involuntary. Involuntary belching typically follows a meal and is caused by the release of swallowed air after stomach distention.

Belching may be facilitated by foods that relax the lower esophageal sphincter, such as chocolate, fats, and mints.

Chronic, repetitive belching is a disorder caused by habitual air swallowing in which air may transit only to the esophagus before being vented. In these patients, belching frequently becomes habitual. Some people may also swallow larger amount of air when eating or drinking.

Occasionally, it is necessary to treat excessive belching with medications. In majority of cases, however, patients can reduce belching by doing lifestyle and dietary modifications. These include discontinuation of such habits as gum chewing, smoking, drinking carbonated beverages, and gulping food and liquids.

### ABDOMINAL BLOATING AND DISTENTION

Bloating refers to a person's sensation of abdominal fullness, whereas distention connotes visible or measureable increase in abdominal girth.

Approach to treatment of abdominal distention and gaseousness is similar to that used in irritable bowel syndrome, including a trial of the dietary and lifestyle modifications. If symptoms are refractory to dietary and lifestyle modifications, then medication therapy can be tried.

### FLATULENCE

Although excessive passage of flatus or its foul odor may be a source of embarrassment to the patient, it is rarely associated with serious illness. Offensive odor, when present, may be due to sulfur-containing compounds, such as methanethiol, dimethyl sulfide, and hydrogen sulfide, as well as short-chain fatty acids, skatoles, indoles, volatile amines, and ammonia.

A number of factors may account for a patient's awareness of bothersome flatus:

- An alteration of intestinal motility or bacteria.
- Dietary factors, such as an increased intake of lactose, fructose, sorbitol, undigestible starches in fruits, vegetables, and legumes, and carbonated beverages. Products such as pork, may release trace concentrations of malodorous gases.

- Psychological factors that may create a heightened sensitivity to normal flatus passage.

Approach to treatment of flatulence typically start off with a trial of the dietary and lifestyle modifications. If symptoms are refractory to dietary and lifestyle modifications, then medication therapy can be tried.

#### SUMMARY

Gas related symptoms are common in the population. Gas symptoms may vary from individual to individual. Working with an expert doctor can provide you with proper information, guidance, and treatment plan to reduce your gas related problem, as well as ensuring there is not any serious medical condition.