

## **Barrett's Esophagus**

My last column was about heartburn. Remember that antacids act like fire extinguishers. They can relieve heartburn, but repeated burns can lead to irreversible damage. Barrett's esophagus is such a complication. In response to chronic acid injury, the lining or "mucosa" of the esophagus can change from the normal squamous lining (like in your mouth) to an intestinal type columnar mucosa. This change occurs in some patients to better resist the chronic acid injury. The importance of Barrett's esophagus is that these altered cells also have an increased risk of becoming malignant.

Years ago, esophageal cancers were most often squamous and seen in heavy smokers and alcohol abusers. Today, although esophageal cancer is on the increase, we now see more adenocarcinomas, the cancer type related to Barrett's. Most patients with Barrett's do not develop esophageal cancer with current estimates of the risk estimated at less than 1% each year. But, that's more than 30 times higher than the general population.

The only way to diagnose whether a patient has developed Barrett's esophagus is by endoscopy. While the patient is sedated, the flexible gastroscope enables the gastroenterologist to visually examine the esophagus, stomach and duodenum for changes that might indicate Barrett's or other GI disorders like ulcers. Biopsies can be obtained to be examined microscopically by a pathologist. Most patients with a history of chronic reflux (especially middle aged men) are advised to be "scoped".

If Barrett's has been found, it is advisable to re-examine the esophagus periodically to look for the development of "dysplasia". Dysplasia refers to more serious microscopic cell changes that indicate that the risk of esophageal cancer is even further increased. The pathologist can assess the severity of any dysplasia. "High grade dysplasia" is the condition just short of diagnosing the patient with an esophageal cancer. Management decisions are guided by these biopsy reports.

Neither medicines nor anti-reflux surgery have fully reversed Barrett's changes. Various techniques aimed at destroying the Barrett's mucosa offer no proven benefits despite their risks.

Current management of Barrett's includes:

- Potent daily acid blocker medications to inhibit further injury.
- Endoscopic monitoring of patients with proven Barrett's change every 1-3 years (more often if dysplasia is discovered). This hopes to find (or prevent) early and still curable cancer.
- Consideration of "chemoprevention". Aspirin and other NSAIDs promise significant benefit against cancer development in Barrett's. This same effect has already been shown for colon cancer. The acid blockers used to treat Barrett's also protect against drug irritation.

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