



Understanding Your Pathology Report: Esophagus With Reactive or Reflux Changes, Not Including Barrett's Esophagus

When your esophagus was biopsied with an endoscope, the samples taken were studied under the microscope by a specialized doctor with many years of training called a *pathologist*. The pathologist sends your doctor a report that gives a diagnosis for each sample taken. Information in this report will be used to help manage your care. The questions and answers that follow are meant to help you understand medical language you might find in the pathology report from your biopsy.

What does GEJ mean?

The esophagus is a tubular organ that connects the mouth to the stomach. The place where the esophagus meets the stomach is called the *gastro-esophageal junction*, or *GEJ*.

What does squamous mucosa mean?

The inner lining of the esophagus is known as the *mucosa*. It is called *squamous mucosa* when the top layer is made up of squamous cells. Squamous cells are flat cells that look similar to fish scales when viewed under the microscope. Most of the esophagus is lined by squamous mucosa.

What are reactive changes?

A number of things, including chronic reflux (regurgitation) of stomach contents up into

the esophagus, trauma from taking medicines, and infections can injure the squamous lining of the esophagus. The esophagus reacts to the injury and tries to repair itself. This creates changes that can be seen under the microscope that are called *reactive changes*. (Reflux of the stomach contents into the esophagus is sometimes called *gastro-esophageal reflux disease* or *GERD*. It can cause heartburn.)

Do reactive changes in my esophagus put me at risk for cancer?

No. Reactive changes do not mean that you will get cancer. Still, the process that is causing the reactive changes needs to be treated so that the esophagus can heal and the lining can go back to normal.

What are reflux changes?

Reflux means regurgitation of the stomach contents up into the esophagus. It can cause heartburn. The contents of the stomach contain acid, and when the esophagus is exposed to the acid over a long time it can injure its squamous lining. This causes certain changes that the pathologist can see under the microscope.

Does reflux cause cancer?

By itself, reflux does not cause cancer. Reflux most commonly causes reactive changes in the lining of the esophagus. However, if reflux occurs over a long time, it can also lead to other changes in the lining of the esophagus that can increase the risk of cancer. That is why reflux is considered a [risk factor for cancer of the esophagus](#)¹. Your doctor will work with you to treat your reflux, which may help prevent more problems from developing in your esophagus.

What if the report mentions gastric cardiac-type mucosa?

The cardia is the part of the stomach near the place that the esophagus enters the stomach. Sometimes this area is sampled when the esophagus is biopsied.

What does it mean if it also says that the cardiac-type mucosa has inflammation?

Inflammation can be caused by acid from the stomach or by infection. The most common cause of infection is the bacteria *Helicobacter pylori* (also known as just *H. pylori*). When the stomach gets infected with this bacteria, it can cause problems like gastritis (irritation of the stomach) and stomach ulcers.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-pathology-report/faq-initiative-understanding-your-pathology-report.html

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Written by

This series of Frequently Asked Questions (FAQs) was developed by the Association of Directors of Anatomic and Surgical Pathology to help patients and their families better understand what their pathology report means. These FAQs have been endorsed by the College of American Pathologists (CAP) and reviewed by the American Cancer Society.

Learn more about the FAQ Initiative (www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-pathology-report/faq-initiative-understanding-your-pathology-report.html)²

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