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Understanding Your Pathology Report: Esophagus Carcinoma (With or Without Barrett's)

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 if my report says adenocarcinoma?

Adenocarcinoma is a type of cancer that develops in gland cells. In the esophagus, adenocarcinoma can arise from the cells of [Barrett's esophagus](#)¹ (see below).

What if my report says squamous carcinoma (squamous cell carcinoma)?

The inner lining of the esophagus is known as the *mucosa*. In most of the esophagus the top layer of the mucosa is made up of squamous cells. This is called *squamous mucosa*. Squamous cells are flat cells that look similar to fish scales when viewed under the microscope. Squamous carcinoma of the esophagus is a type of cancer that arises from the squamous cells that line the esophagus.

What does it mean if in addition to cancer, my report also mentions Barrett's, goblet cells, or intestinal metaplasia?

Goblet cells normally line the intestines, not the esophagus. When goblet cells are found in a place where they are not supposed to be, like the esophagus, it is called

intestinal metaplasia. Intestinal metaplasia can develop any place where squamous mucosa is normally found. When intestinal metaplasia replaces the squamous mucosa of the esophagus, it is called *Barrett's esophagus*. The most common cause of Barrett's esophagus is reflux of the stomach contents into the esophagus, which is often called *gastro-esophageal reflux disease* or *GERD*.

What does it mean if I have Barrett's esophagus and cancer is already present?

Barrett's esophagus is only important because it raises your risk of [esophagus cancer](#)². If you already have cancer, having Barrett's is not important.

What does invasive or infiltrating mean?

Invasive or infiltrating means that cancer cells have grown beyond the mucosa (the inner lining of the esophagus). This means that it is a true cancer and not a pre-cancer.

Does this mean that the tumor has invaded deeply and is associated with a poor prognosis?

No, all it means is that it is a true cancer (and not a pre-cancer). On a biopsy, only a small sample of tissue is removed, and the pathologist usually cannot tell how deeply the tumor is invading into the wall of the esophagus.

Some early, small cancers can be treated with a special procedure called an endoscopic mucosal resection (EMR), which removes only part of the inner lining of the esophagus. In other situations, an esophagectomy (removal of part or all of the esophagus) is needed, and the depth of invasion is measured when the entire tumor is removed at surgery.

What does differentiation mean?

Differentiation or **grade** of the cancer is based on how abnormal the cells and tissue look under the microscope. It is helpful in predicting how fast the cancer is likely to grow and spread. Esophageal cancer is usually divided into 3 grades:

- Well differentiated (low grade)
- Moderately differentiated (intermediate grade)
- Poorly differentiated (high-grade)

Sometimes, it is just divided into 2 grades: well-moderately differentiated and poorly

differentiated.

What is the significance of the grade of the cancer?

Grade is one of the many factors that helps determine how likely a cancer is to grow and spread. Poorly differentiated (high-grade) cancers tend to grow and spread more quickly, while well differentiated (low-grade) cancers tend to grow more slowly. However, other factors are also important.

What does it mean if there is vascular, lymphatic, or lymphovascular (angiolymphatic) invasion?

These terms mean that cancer is present in the blood vessels and/or lymph vessels (lymphatics) of the esophagus. If the cancer has grown into these vessels, there is an increased chance that it could have spread out of the esophagus. However, this doesn't mean that your cancer has spread. Discuss this finding with your doctor.

What if my report mentions HER2 (or HER2/neu) testing?

Some cancers have too much of a growth-promoting protein called HER2 (or HER2/neu). Tumors with increased levels of HER2 are referred to as HER2-positive.

Testing for HER2 tells your doctor whether [drugs that target the HER2 protein](#)³ might be helpful in treating your cancer.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/cancer/esophagus-cancer.html
3. www.cancer.org/cancer/esophagus-cancer/treating/targeted-therapy.html
4. 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)⁴

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