Understanding Your Pathology Report: Atypical Hyperplasia (Breast)

When your breast was biopsied, 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 a breast biopsy, such as a needle biopsy or an excision biopsy.

In a needle biopsy, a needle is used to remove a sample of an abnormal area. An excision biopsy removes the entire abnormal area, often with some of the surrounding normal tissue. An excision biopsy is much like a type of breast-conserving surgery called a lumpectomy.

What does hyperplasia mean?

The normal breast is made of ducts (tiny tubes) that end in a group of sacs called lobules. Hyperplasia is a term used when there is growth of cells within the ducts and/or lobules of the breast that is not cancerous. Normally, the ducts and lobules are lined by 2 layers of cells. Hyperplasia means that there are more cells than usual and they are no longer lined up in just the 2 layers. If the growth looks much like the normal pattern under the microscope, the hyperplasia may be called usual. Some growths look more abnormal, and may be called atypical hyperplasia (see below).

The two major patterns of hyperplasia in the breast are ductal hyperplasia and lobular hyperplasia. What makes the hyperplasia ductal or lobular is based more on what the cells look like under the microscope rather than whether the hyperplasia is occurring within the ducts or lobules.
What does it mean if my report mentions E-cadherin?

E-cadherin is a test that the pathologist might use to help determine if the hyperplasia is ductal or lobular. (The cells in atypical lobular hyperplasia (ALH) are usually negative for E-cadherin.) If your report does not mention E-cadherin, it means that this test was not needed to figure out which type of hyperplasia you have.

What does it mean if my report says atypical ductal hyperplasia (ADH)?

In ADH, the pattern of growth of cells is abnormal and has some (but not all) of the features of ductal carcinoma in-situ⁴ (which is a pre-cancer). This means that ADH is not yet a pre-cancer, although it is linked to an increased risk of getting breast cancer later on.

If ADH is found on needle biopsy, more tissue in that area usually needs to be removed to be sure that nothing more serious is also present in the breast. The tissue that is removed is looked at under the microscope, and if nothing more serious is found, no other treatment is needed. The patient is then followed up with breast exams and breast imaging tests like mammography.

If ADH is found on excision biopsy, no additional surgical treatment is needed, but your doctor may recommend taking medicine to help reduce your risk of breast cancer.

What is the significance of atypical lobular hyperplasia (ALH)?

ALH is also an abnormal growth of cells within lobules of the breast that is linked with an increased risk of breast cancer. If ALH is found on needle biopsy, it isn’t clear what is the best thing to do—some doctors think that more surgery should be done to make sure that there isn’t anything more serious nearby, while other doctors think that it is enough to follow the patient with physical exams and imaging tests (like mammograms). If ALH is found on an excision (lumpectomy), patients are most often followed-up without further treatment, but your doctor may recommend taking medicine to help reduce your risk of breast cancer.

What does it mean if my report mentions special tests such as high molecular weight cytokeratin (HMWCK), CK903, CK5/6, p63, muscle specific actin, smooth muscle myosin heavy chain, calponin, or keratin?

These are special tests that the pathologist sometimes uses to help make the correct diagnosis of a variety of breast lesions. Whether your report does or does not mention these tests has no bearing on the accuracy of your diagnosis.
What does it mean if my report also uses any of the following terms: usual ductal hyperplasia, adenosis, sclerosing adenosis, radial scar, complex sclerosing lesion, papillomatosis, papilloma, apocrine metaplasia, cysts, columnar cell change, collagenous spherulosis, duct ectasia, fibrocystic changes, flat epithelial atypia, or columnar alteration with prominent apical snouts and secretions (CAPSS)?

All of these are terms for benign (non-cancerous) changes that the pathologist might see under the microscope. They are not important when seen on a biopsy sample that contains ADH or ALH.

What does it mean if my report mentions microcalcifications or calcifications?

Microcalcifications or calcifications are mineral deposits that can be found in both non-cancerous and cancerous breast lesions. They can be seen both on mammograms and under the microscope. Because certain calcifications are found in areas containing cancer, their presence on a mammogram may lead to a biopsy of the area. Then, when the biopsy is done, the pathologist looks at the tissue removed to be sure that it contains calcifications. If the calcifications are there, the treating physician knows that the biopsy sampled the correct area (the abnormal area with calcifications that was seen on the mammogram).

Microcalcifications and calcifications only matter because they are sometimes found in areas containing cancer. When they are found alone (without worrisome changes in the breast ducts or lobules), they are not important.

Hyperlinks


Last Medical Review: March 9, 2017 Last Revised: March 9, 2017
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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)⁶