

# Drawing the Line Between Atypical Ductal Hyperplasia and Ductal Carcinoma in situ

Proehl, Joshua (School: New London-Spicer High School)

When diagnosing intraductal lesions in breast tissue, pathologists evaluate architectural, morphologic and at times immunohistochemical features to classify the disease. However, in the medical world the difference between atypical ductal hyperplasia (ADH) and ductal carcinoma in situ (DCIS) on core needle biopsy (CNB) is a judgment call by the pathologist. The problem with a judgment call is the follow-up for each diagnosis is significantly different. ADH will be marked on a medical record and closely watched over a long period of time whereas patients with DCIS will be offered lumpectomy with margin evaluation and likely undergo localized radiation therapy if conservative therapy is chosen. These treatments have been justified in the literature by the diagnosis of DCIS but how is the diagnosis justified? There are a few factors that can be considered in order to draw the line between the two diagnoses such as: number of ducts afflicted, size of ducts afflicted, age of the patient, and reasoning for CNB. Looking at these factors may help shed light on the grey area judgement call that pathologists must face every day.