CONTINUING EDUCATION PROGRAM: EDITORIAL

Radio-histological correlations in breast imaging: Understanding for providing better care

The histologist and radiologist pair plays an essential role in the diagnosis and management of a breast lesion.

In order to understand the "anatomical" substratum to our appearances, we need to understand the variety of underlying lesions which the main appearances represent: mammography/ultrasound masses, architectural distortion and microcalcifications. Knowing which diseases may be responsible for these enables the sampling technique to be adapted for complex masses and subtle ultrasound appearances. Images which are only visible on MRI, and particularly non-mass enhancement, have specific interpretative features as vascular effects are involved in the composition of the image. On receipt of breast sample results, it is essential to correlate the description provided by the histologist with the imaging appearances in order to confirm the appearance and benign/malignant result, if necessary in a multidisciplinary group.

Breast cancer has become a heterogeneous disease, with subgroups depending on their genomic changes which imply very different prognoses. Beyond characterizing a mass and obtaining its ACR BI-RADS category, it has become important to understand the predictive features of an aggressive tumor subtype in order to organize the fastest possible care for the patient.

It is the purpose of this CPD notebook to describe, explain and illustrate the imaging and histological correlations in breast medicine. A good understanding of the pathologist’s report will help us to offer the patient the most relevant treatment.

Declaration of interests

The author declares that he has no conflicts of interest with this article.

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