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Radio-histopathological correlation in breast biopsies guided by ultrasound at FCECON-AM

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Objective

Describe ultrasound and mammography image findings and compare them to the histopathological results of patients undergoing percutaneous biopsy guided by ultrasound.

Methods

Cross-sectional, descriptive, retrospective study with quantitative approach, analyzing 267 patients medical records between January 2020 and December 2024. Women aged ≥18 years with breast nodules and available histopathological results were included;incomplete records were excluded.Variables analyzed were age, classification of the system of reports and recording of breast image data and histopathological diagnosis.The study was approved by the Research Ethics Committee.

Results

With an average age of 52.8 years old (51 fashion) (53 median).Breast ultrasound showed sensitivity of 97.4%, 46.1% specificity, positive predictive value of 72.6%, negative predictive value of 93.3% and accuracy of 75.3%.Mammography showed sensitivity of 90.0%, 70.7% specificity, 71.5% positive predictive value, negative predictive value of 89.6% and 79.4% accuracy. BI-RADS 5 category (image1,2) was strongly related with carcinoma invasive ductal in both methods, while the BI-RADS 4A concentrated most benign findings. A radio histopathological agreement was higher in the high categories of suspicion, validating the effectiveness of stratification.

Conclusion

The combination of mammography and ultrasound improves diagnostic safety minimizing the risk of false-negative results. Ratifying the effectiveness of the standardized systematization in the prediction of malignancy.The rigor in stratification radiological allows the optimization of oncological therapeutic flow,ensuring early and assertive interventions, fundamental for strengthening assistance in Northern Region centers.

