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# Histopathological findings of patients undergoing vacuum breast biopsy

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**Objective:** This study aimed to categorize the histopathological findings of breast lesions investigated through vacuum-assisted biopsy, in a reference service, using the National Health Service Screening Program (NHSBSP) classification.

**Methodology:** This was a cross-sectional observational study. Information was collected from a database available in a private clinic in the city of João Pessoa/PB – UD Diagnóstico por Imagem from June 2021 to June 2023. A total of 416 female patients who underwent the procedure were included in this study, and 13 patients who did not have data on anatomopathological results were excluded, totaling a final sample of 403 patients. Associations between categorical variables were verified using the chi-square test or Fisher's exact test. The significance level will be 5%. **Results:** Patients were divided according to the classification of the anatomopathological results of the lesions by the NHSBSP category. Of the 403 patients, 2 were selected as B1 (0.5%), 224 (55.6%) were selected as B2, 123 (30.5%) as B3, only 1 (0.2%) as B4, and 53 (13.2%) as B5. Of the B3 lesions, 66.67% corresponded to histopathological findings of radiating scar. Of the malignant lesions (B5), the highest percentage was histopathological results of ductal carcinoma *in situ*, representing 58.49% of the lesions. Of these cases, 30 (96.7%) were diagnosed using aspiration biopsy guided by mammography and with the indication of the procedure due to grouped Bi-RADS<sup>®</sup> 4 microcalcifications. The microcalcifications for B5 lesions compared with B3 lesions were significant  $p < 0.0001$ . **Conclusion:** The prevalence of "*in situ*" lesions favors the early diagnosis of breast neoplasms. Mammotomy has proven to be a safe and effective method for diagnosing suspicious non-palpable lesions, and benign cases can be considered treated.

**Keywords:** breast neoplasms; carcinoma intraductal noninfiltrating; breast carcinoma *in situ*; pathology; biopsy.