

## PREGNANCY-LIKE (PSEUDOLACTATIONAL) HYPERPLASIA: UNCOMMON CAUSE OF MICROCALCIFICATIONS AND MASS IN TWO CASES

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**Pregnancy-like (pseudolactational) hyperplasia (PLH) is an uncommon lactational change occurring independently from pregnancy and lactation. PLH has been incidentally found during breast biopsies. We report two different cases of PLH with their clinical, radiologic, and pathologic findings.**

**Key-word: Breast.**

Pregnancy-like (pseudolactational) hyperplasia (PLH) is not a common lactational change in hyperplastic duct. PLH has been determined as an incidental finding in surgical breast biopsies for benign and malignant cases. The frequency of PLH is approximately 3% among reported autopsy and surgical series (1-3). Pathologic features have been reported in the literature. However, radiologic findings have not been previously demonstrated. Herein, we report two different cases of PLH with their clinical, radiologic, and pathologic findings.

### Case reports

#### Case 1

A 45-year-old woman with a family history of breast cancer underwent a screening mammogram. According to the American College of Radiology Breast Imaging and Reporting Data Systems (BIRADS), suspicious microcalcifications (category IV) were detected in the upper quadrant of the left breast (Fig. 1). Ultrasound examination did not show any abnormality. Physical examination was normal. Stereotactic vacuum-assisted biopsy was achieved via 10-gauge Vacura on a prone mammography biopsy table (Fig. 2). Histopathologic examination showed pseudolactational hyperplasia including acini containing intraluminal calcification with a laminated appearance, hypersecretory cells with vesicular nuclei and vacuolated cytoplasm.

#### Case 2

A 75-year-old woman was admitted for screening mammogram. Mammograms showed retroareolar

localized microlobulated mass (BIRADS category IV) measuring 15 × 12 mm (Fig. 3). Ultrasound examination confirmed a hypoechoic mass in the same location

(Fig. 4). Physical examination was normal. She had been taking an anti-hypertensive drug including besarten and hydrochlorthiazide. Ultrasound guided 14-gauge trucut biopsy was performed. Pathologic examination revealed hyperplastic secretory changes with pregnancy like changes including acinar cells with vacuolated eosinophilic cytoplasm and cystic hyperplastic ductus in multipl adenosis foci.

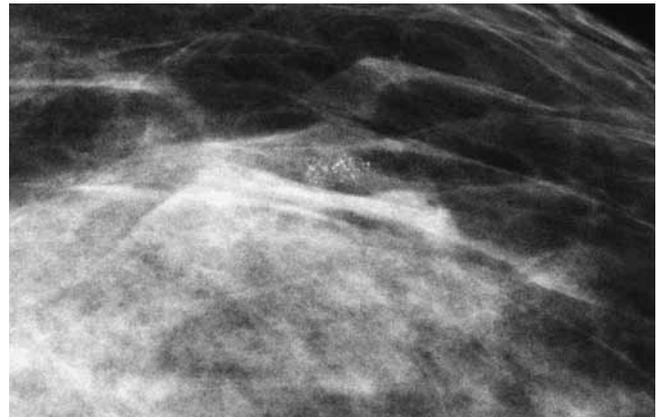


Fig. 1. — Craniocaudal mammogram of the left breast shows cluster of microcalcifications.

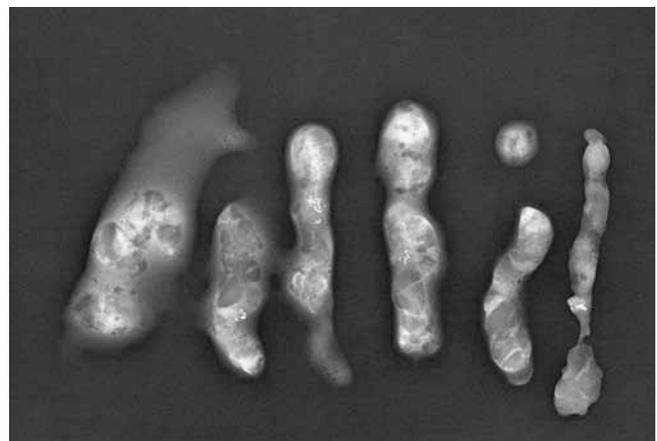


Fig. 2. — Mammogram of the specimen obtained by stereotactic vacuum-assisted biopsy shows microcalcifications.

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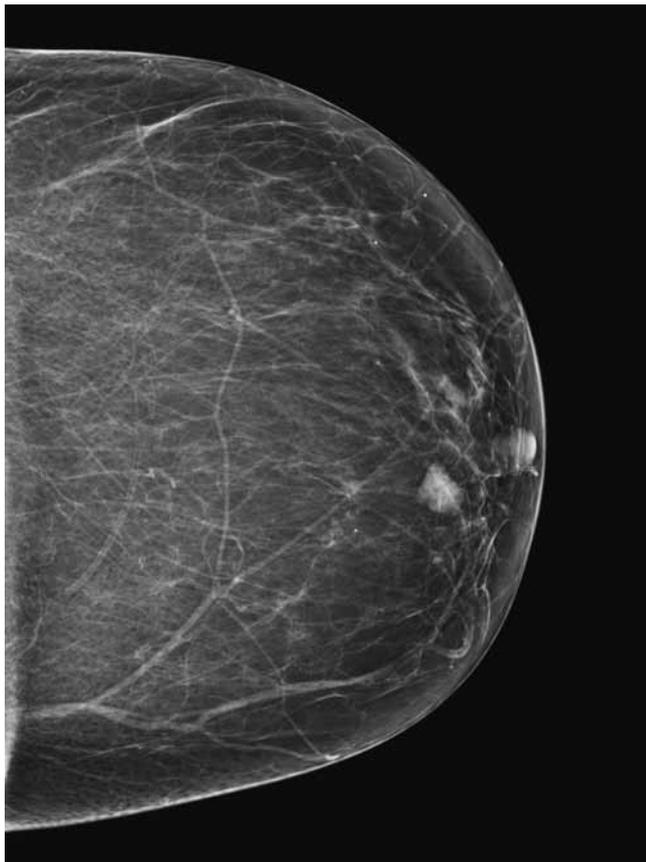


Fig. 3. — Craniocaudal mammogram of the left breast determines retroareolar localized microlobulated mass.

## Discussion

Pregnancy-like changes in non-pregnant women were described by Moran in 1935 (4). PLH is a pregnancy-like change in hyperplastic epithelium which occurs independently from pregnancy and lactation. PLH is often associated with intraluminal secretions and laminated microcalcifications detected on mammography (5). Shin et al. reported the pathologic features of PLH including microcalcifications or breast masses detected on mammography (6). In one of the cases, we observed microcalcifications and in the other, a breast mass on mammography.

PLH was often seen many years after pregnancy and lactation. Hormonal status and history of parity were not important in the occurrence of PLH. Some patients had no history of pregnancy or hormonal use. It was concluded that PLH in nonlactating, nonpregnant women was the result of selective

susceptibility to estrogen as a non-pathologic variation of normal female breast (2). On the other hand, antipsychotic and antihypertensive drugs, high dose estrogen for advanced breast carcinoma and prostatic carcinoma were reported to correlate with PLH (7-9). Both of our cases had a history of pregnancy and lactation. One of them with breast mass has been taking antihypertensive drug including besarten and hydrochlorthiazide.

Microcalcifications and breast masses detected by mammography could be the result of PLH. In the differential diagnosis, this uncommon entity should be kept in mind by the radiologists and surgeons. Pathologic examination is necessary for accurate diagnosis. PLH without atypia is often considered a physiologic abnormality and not a precancerous sign. Whenever PLH is associated with atypia or cystic hypersecretory hyperplasia, surgical excision is recommended (6, 10).

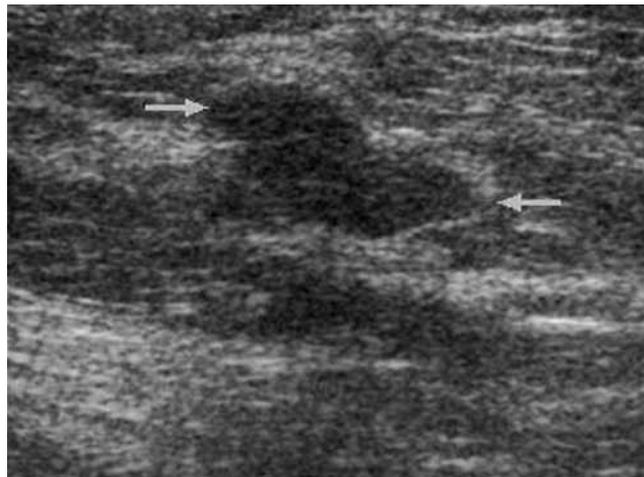


Fig. 4. — Ultrasonographic examination shows a hypoechoic lobulated breast mass (arrows).

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