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**Case Report**

# Fibroadenoma with pseudo angiomatous stromal hyperplasia and hamartoma of the breast: a case report

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## ABSTRACT

Pseudo angiomatous stromal hyperplasia (PASH) is an uncommon benign proliferative lesion of the breast stroma, characterized histologically by interanastomosing slit-like spaces within a dense collagenous background, mimicking vascular channels but lacking true endothelial lining. It was first described in 1986 by Vuitch, Rosen, and Erlandson, who reported nine cases of breast masses simulating vascular tumors, composed of proliferative mammary stromal tissue. Although PASH is often an incidental microscopic finding in breast biopsies, it can occasionally present as a palpable mass, particularly in premenopausal women, likely influenced by hormonal factors such as estrogen and progesterone. Fibroadenomas and hamartomas are also common benign breast entities, each with distinct histopathological features. However, the coexistence of PASH, fibroadenoma, and hamartoma within a single lesion is exceedingly rare, and its presentation with bloody nipple discharge, a symptom more often associated with intraductal carcinoma or papilloma, makes diagnosis particularly challenging. Accurately distinguishing benign from malignant lesions requires a multimodal approach, integrating clinical examination, radiologic imaging and core needle biopsy. Lesions that are classified as B3 on histopathology-including cellular fibroadenomas, papillomas with atypia, or complex sclerosing lesions-typically mandate complete surgical excision to rule out associated malignancy. This case report underscores the diagnostic complexities associated with overlapping benign breast lesions and highlights the importance of comprehensive evaluation and interdisciplinary collaboration in guiding management. Further prospective studies are warranted to optimize early detection strategies and decision-making in cases involving lesions with uncertain or mixed histology. This case emphasizes the need for a multidisciplinary approach, combining clinical, radiological, and pathological evaluations to accurately diagnose complex presentations. Recognizing rare benign lesions can prevent overtreatment and alleviate patient anxiety.

**Keywords:** Fibroadenoma, Pseudoangiomatous stromal hyperplasia, Hamartoma, Bloody nipple discharge

## INTRODUCTION

Pseudoangiomatous stromal hyperplasia (PASH) is a benign entity of the breast and typically found incidentally. It warrants thorough investigation in order to exclude more sinister pathology masquerading as this form of benign breast disease and can often be managed expectantly without the need for surgical intervention.[1] It is of note that 95% of the PASH tumors in a study stained positive for ER and/or PR receptors.[2] Most of the reported cases in the literature demonstrate the presence of progesterone receptor activity and weak to no estrogen receptor activity.[3-5] Fibroadenoma tends to occur in early life. It is most commonly found in adolescents and less commonly in postmenopausal women.

The incidence of fibroadenoma decreases with age and is generally found in females before 30 in the general population. It is estimated that 10% of the world's female population suffers from fibroadenoma once in a lifetime.[6] Breast hamartoma is an uncommon breast tumor that accounts for approximately 4.8% of all benign breast

masses. The pathogenesis is still poorly understood and breast hamartoma is not a well-known disorder, so its diagnosis is underestimated by clinicians and pathologists.[7] Benign breast conditions such as fibroadenomas and hamartomas are common, while pseudoangiomatous stromal hyperplasia (PASH) is relatively rare. These lesions typically present as palpable masses or incidental findings.

Fibroadenomas are stromal-epithelial tumors, while hamartomas consist of a disorganized mixture of fibrous, glandular, and adipose tissue. PASH, a benign stromal lesion, is characterized histologically by slit-like spaces mimicking vascular neoplasms. Bloody nipple discharge, though more commonly associated with malignancies such as ductal carcinoma in situ (DCIS), can occasionally occur in benign conditions.

The coexistence of fibroadenoma, PASH, and hamartoma presenting with this symptom is rare and poses a diagnostic challenge. This report details such a case and highlights the importance of a systematic diagnostic approach.

## CASE REPORT

A 35-year-old female presented with a one-year history of a right breast lump, which had been gradually increasing in size. She also reported bloody nipple discharge from the same breast for the past 10 days. She denied any associated pain, systemic symptoms, or menstrual irregularities. The patient had a history of chronic tobacco chewing for 20 years but no significant family history of breast or ovarian malignancies.

On local examination, a lump measuring approximately 4×3 cm was palpable in the upper outer quadrant and retro areolar region of the right breast. The lump was firm in consistency with ill-defined borders. Bloody nipple discharge was present. No skin changes, nipple retraction, or axillary lymphadenopathy were noted.

### *Follow-up*

The patient was closely followed up during both the early and late postoperative periods. She was discharged one week after the procedure and was counselled for alternate day dressing. Her anxiety related to the lesion and bloody discharge was resolved. At postoperative day 14, she developed pain at the surgical site, which exhibited some features of cellulitis. She was managed on an outpatient basis for cellulitis.

The patient was followed up postoperatively and prescribed the following medications for 1 week. Tablet Amoxiclav 625 mg–twice daily (oral). Antibiotic coverage (Amoxicillin+Clavulanic acid). Tablet Diclofenac 50 mg–twice daily (oral).

Non-steroidal anti-inflammatory drug (NSAID) for pain and inflammation. Tablet Pantoprazole 20 mg–Once daily (oral). Proton pump inhibitor to prevent NSAID-induced gastritis. Tablet Chymoral Forte (Trypsin-Chymotrypsin)–Thrice daily (oral). Proteolytic enzyme for reducing postoperative edema and inflammation. The patient was advised to continue these medications for 7 days.

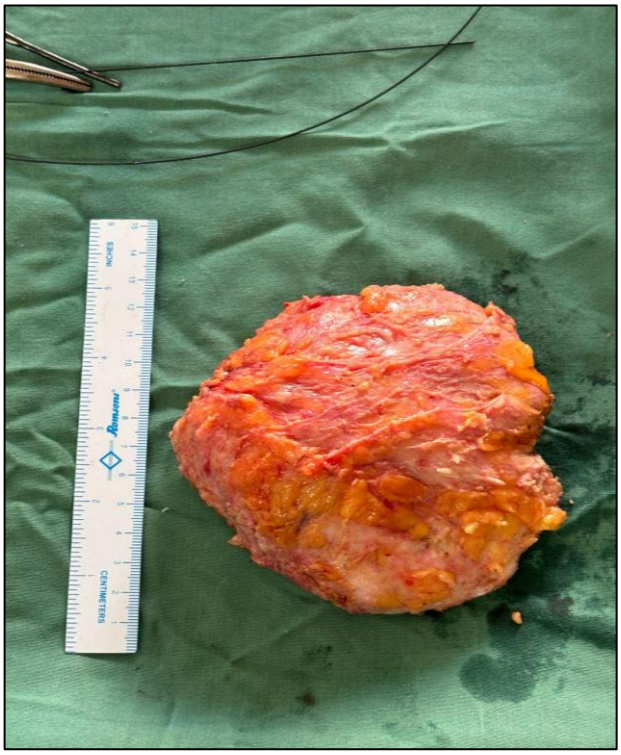

**Figure 1: Intraoperative image of the excised specimen.**

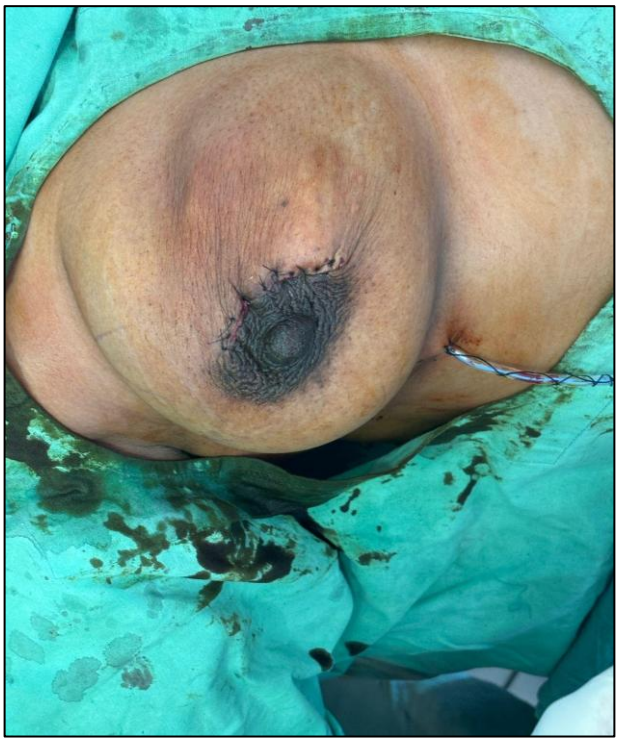

**Figure 2: Postoperative photo (day 0).**

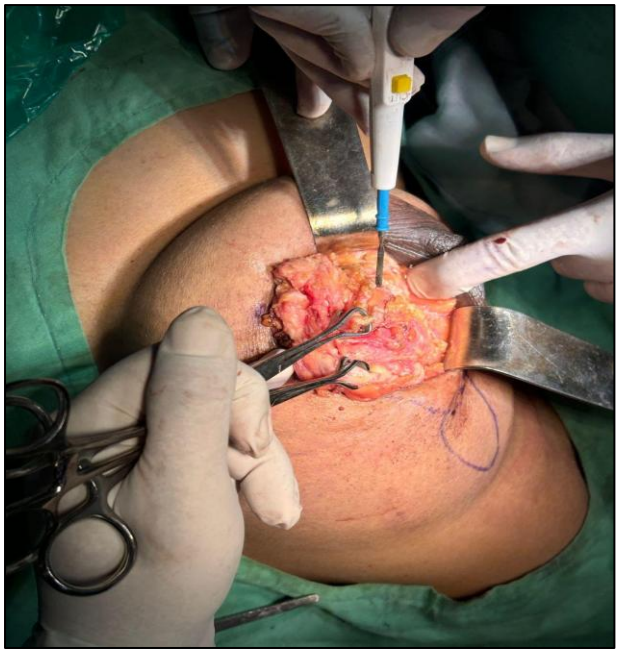

**Figure 3: Intraoperative photo of lumpectomy.**

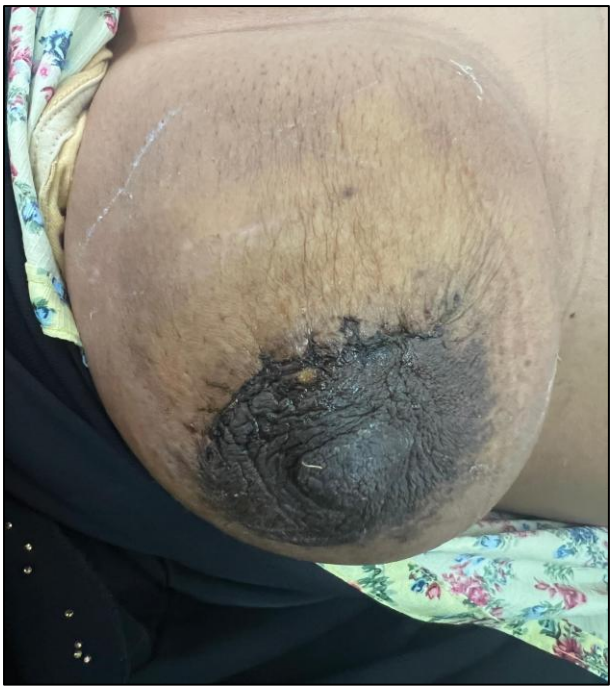

**Figure 4: Postoperative photo (day 14).**

## DISCUSSION

The combination of a palpable breast lump with bloody nipple discharge raises suspicion for both benign and malignant conditions. Pseudoangiomatous stromal hyperplasia should be included in the differential diagnosis of a circumscribed or partially circumscribed mass, especially in the premenopausal population.[8] Pathologic diagnosis of the lesion may be difficult unless the pathologist is aware of the presence of a mass lesion and appreciates the stromal changes characteristic of such a lesion.[8] Pseudoangiomatous stromal hyperplasia (PASH) is rarely reported in the medical literature. Consequently, its etiology and optimal treatment are still controversial.[9] These masses often grow over time and can recur locally. Common differentials include.[10]

***Benign conditions***

Intraductal papilloma, duct ectasia, fibroadenoma, PASH, and hamartoma.

***Malignant conditions***

Ductal carcinoma in situ (DCIS) and invasive ductal carcinoma. The unique coexistence of fibroadenoma, PASH, and hamartoma was confirmed histologically. Management involved surgical excision, which provided both diagnostic clarity and symptomatic relief.

## CONCLUSION

The simultaneous occurrence of fibroadenoma, pseudoangiomatous stromal hyperplasia (PASH), and hamartoma within a single breast lesion is exceptionally uncommon, posing significant diagnostic challenges-particularly when presenting with suspicious symptoms such as bloody nipple discharge. This case highlights the critical importance of a multidisciplinary approach involving clinical assessment, imaging, and histopathological analysis to accurately distinguish benign from malignant breast pathology.

Early and accurate diagnosis not only guides appropriate surgical management but also helps prevent overtreatment and reduces patient anxiety. Recognizing rare benign entities that mimic malignancy is essential for improving diagnostic confidence and optimizing patient outcomes.

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## REFERENCES

1. Jaunoo S, Thrush S, Dunn P. Pseudoangiomatous stromal hyperplasia (PASH): a brief review. Int J Surg. 2011;9:20–2.
2. Bowman E, Oprea G, Okoli J, Gundry K, Rizzo M, Gabram-Mendola S, Manne U, Smith G, Pambuccian S, Bumpers HL. Pseudoangiomatous stromal hyperplasia (PASH) of the breast: a series of 24 patients. Breast J. 2012;18:242–7.
3. Anderson C, Ricci A Jr, Pedersen CA, Cartun RW. Immunocytochemical analysis of estrogen and progesterone receptors in benign stromal lesions of the breast. Evidence for hormonal etiology in pseudoangiomatous hyperplasia of mammary stroma. Am J Surg Pathol. 1991;15:145–9.

4. Powell CM, Cranor ML, Rosen PP. Pseudoangiomatous stromal hyperplasia (PASH). A mammary stromal tumor with myofibroblastic differentiation. Am J Surg Pathol. 1995;19:270–7.
5. Zanella M, Falconieri G, Lamovec J, Bittesini L. Pseudoangiomatous hyperplasia of the mammary stroma: true entity or phenotype. Pathol Res Pract. 1998;194:535–40.
6. Ajmal M, Khan M, Van Fossen K. Breast fibroadenoma. In: StatPearls. Treasure Island (FL): StatPearls Publishing. 2022.
7. Sevim Y, Kocaay AF, Eker T, Celasin H, Karabork A, Erden E, Genc V. Breast hamartoma: a clinicopathologic analysis of 27 cases and a literature review. Clinics (Sao Paulo). 2014;69:515–23.
8. Polger MR, Denison CM, Lester S, Meyer JE. Pseudoangiomatous stromal hyperplasia: mammographic and sonographic appearances. AJR Am J Roentgenol. 1996;166:349–52.
9. Tahmasebi S, Zadeh AKR, Zangouri V, Akrami M, Johari MG, Talei A. Pseudoangiomatous stromal hyperplasia of the breast: a case report. Clin Case Rep. 2022;10:5387.
10. Ibrahim S. Bailey & Love's Short Practice of Surgery. Malaysian Orthop J. 2019;13(2):63.

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