



PSEUDOANGIOMATOUS STROMAL HYPERPLASIA -BILATERAL BREAST- A CASE REPORT

Pathology

Dr Rabia Parveen Siddiqui	Associate Professor, Department Of Pathology, Pt. Jawahar Lal Nehru Medical College, Raipur, C.G.
Dr Vanita Bhaskar*	Assistant Professor, Department Of Pathology, Pt. Jawahar Lal Nehru Medical College, Raipur, C.G. *Corresponding Author
Dr Apurva Agrawal	Assistant Professor, Department Of Pathology, Pt. Jawahar Lal Nehru Medical College, Raipur, C.G.
Dr. Kiranlata Bhagat	Post Graduate student(3rd year), Pt. Jawahar Lal Nehru Medical College, Raipur, C.G.

ABSTRACT

Pseudoangiomatous stromal hyperplasia (PASH) is a benign proliferative mesenchymal lesion of the breast[1]. Etiologic factors unknown. It affects any age usually between 12 to 75 years. It is more commonly seen in premenopausal women[1]. It occurs commonly unilaterally and rarely occurs in bilateral breast.[2]

Differential diagnosis is **low grade angiosarcoma**, fibroadenoma, myofibroblastoma and mammary hamartoma[1]

KEYWORDS

Bilateral breast, Pseudoangiomatous stromal hyperplasia, mesenchymal lesion.

BACKGROUND:

Pseudoangiomatous stromal hyperplasia (PASH) is a benign proliferative mesenchymal lesion of the breast[1]. Etiologic factors unknown. But it believes to be due to proliferation of myofibroblasts. Progesterone may be responsible hormone[1]. Incidental finding in biopsies of breast[1-4]. Differential diagnosis is **low grade angiosarcoma**, fibroadenoma, myofibroblastoma and mammary hamartoma[1]. On Immunohistochemistry, it is positive for vimentin, CD34, PR and SMA[1-4]. Its relationship to breast cancer risk has not been characterized [5].

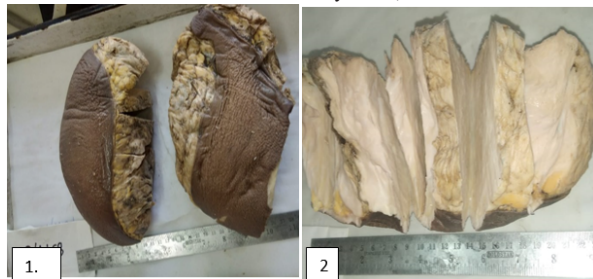
[Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Text Box Tools tab to change the formatting of the pull quote text box.]

Case history: A 17 years female had complaints of bilateral breast enlargement since 6 months and mild fever with normal menstrual history. On local examination a diffuse enlargement of bilateral breast, bilateral nipple areola was unremarkable. Hormonal investigations were within normal.

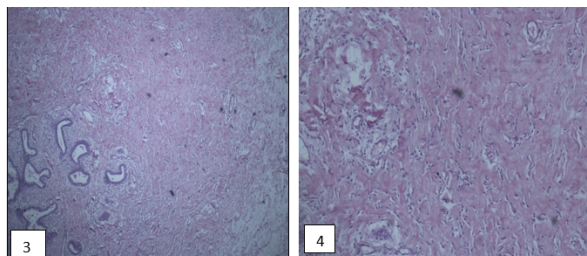
Radiological findings: MRI Breast- Bilateral bulky breast. Moderate enhancement of parenchyma glandular component suggestive of inflammatory mastitis.

Gross Examination: Bilateral excised breast specimen received left breast measuring 24x15x8cm with skin flap, measuring 18x11x0.2cm and right breast of measuring 23x17x6cm with skin flap of measuring 17x10x0.2cm.

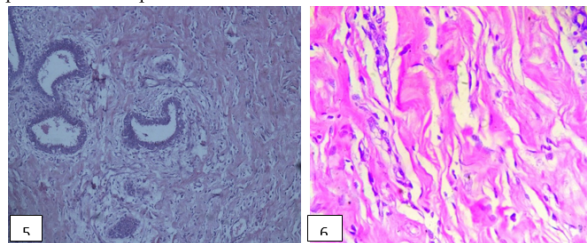
Bilateral nipple areola complex not identified. Bilateral breast outer surface – skin covered. Cut surface-Grey white, firm.



Gross photographs: 1and 2: E/s and C/s-bilateral breast.



Microphotographs 3 and 4: Low power view of PASH (H & E stain) Sections show benign ducts surrounded by stroma along with pseudovascular spaces.



Microphotographs 5 and 6: High power view of PASH (H & E stain) - Sections show benign ducts surrounded by stroma along with pseudovascular spaces lined by spindle cells.

On Immunohistochemistry: SMA was positive, CD 34 –Negative in the spindle cells.

Surgical excision was done on march 2018. On Follow up recurrence occurred since first week of December 2018.

DISCUSSION:

PASH was first described by Vuitch et al in 1986[1] Affects any age usually between 12 to 75 years. More commonly in premenopausal women [1]. It occur commonly unilateral and rarely bilateral breast is involved [2] . In literature 150 cases has been recorded so far. It can occur in male breast in association with Gyaenecomastia.

CONCLUSION:

Pseudoangiomatous stromal hyperplasia is a rare lesion of breast. It should be kept in differential diagnosis in rapidly growing tumour in premenopausal age group. Its prognosis is excellent. Recurrence rate after surgical excision is 22%[1]. Mimicking fibroadenoma when it is solitary, firm, painless, well-circumscribed and freely mobile mass. Its

rapid enlargement give a suspicion of malignant lesion[2].

REFERENCES

1. Renu K. Virk and Ashraf Khan (2010) Pseudoangiomatous Stromal Hyperplasia: An Overview. Archives of Pathology & Laboratory Medicine: July 2010, Vol. 134, No. 7, pp. 1070-1074.
2. Yoo, K. , O. H. Woo , H. S. Yong , et al. Fast-growing pseudoangiomatous stromal hyperplasia of the breast: report of a case. Surg Today 2007. 37 (11):967–970. [Crossref] [Google Scholar]
3. Pseudoangiomatous Stromal Hyperplasia: A Case Report, Yazan A. Masannat, 1 Stephen Whitehead, 2 Ian Hawley, 2 Lesley Apthorp, 2 and Elizabeth F. Shah 2 Correspondence should be addressed to Yazan A. Masannat, yazanmas@hotmail.com November 2010;
4. Pseudoangiomatous Stromal Hyperplasia: A Rare Cause of Idiopathic Gigantomastia , Mélissa Roy et al, (Plast Reconstr Surg Glob Open 2015;3:e501; doi: 10.1097/GOX.0000000000000468; Published online 4 September 2015.)
5. Pseudoangiomatous Stromal Hyperplasia and Breast Cancer Risk Amy C. Degnim, et al, Ann Surg Oncol. 2010 Dec; 17(12): 3269–3277.
6. Anderson, C. , A. Ricci Jr , C. A. Pedersen , and R. W. Cartun . 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 (2):145–149.
7. Zanella, M. , G. Falconieri , J. Lamovec , and L. Bittesini . Pseudoangiomatous hyperplasia of the mammary stroma: true entity or phenotype? Pathol Res Pract 1998. 194 (8):535–540.
8. Powell, C. M. , M. L. Cranor , and P. P. Rosen . Pseudoangiomatous stromal hyperplasia (PASH): a mammary stromal tumor with myofibroblastic differentiation. Am J Surg Pathol 1995. 19 (3):270–277.
9. Ferreira, M. , C. T. Albarracin , and E. Resetskova . Pseudoangiomatous stromal hyperplasia tumor: a clinical, radiologic and pathologic study of 26 cases. Mod Pathol 2008. 21 (2):201–207.
10. Wieman, S. M. , J. Landercasper , J. M. Johnson , et al. Tumoral pseudoangiomatous stromal hyperplasia of the breast. Am Surg 2008. 74 (12):1211–1214.