



## Pathology Page

## Pseudoangiomatous stromal hyperplasia



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A 40-year-old woman had a breast mass for 3 months. She received an excisional biopsy in one hospital. Pathology proved the mass to be Grade II infiltrating ductal carcinoma. She received a partial mastectomy and axillary lymph node dissection in our hospital. No residual tumor was noted. Only one well-encapsulated,

whitish, firm tumor nodule 2.0 cm in diameter was seen. Histopathology showed slit-like spaces within a collagenized stroma and myofibroblasts distributed singly at the margins of the spaces, diagnostic of pseudoangiomatous stromal hyperplasia (PASH; Fig. 1).

PASH is a benign process that mimics a vascular lesion and is usually found incidentally in biopsies performed for other reasons, such as in our case. However, some PASH lesions can present as a discrete, painless, mobile mass, clinically indistinguishable from a fibroadenoma. It is frequently seen in gynecomastia and most female patients are premenopausal, suggesting that hormone factors play a role in their development and growth. Grossly, PASH is a circumscribed, 1–7 cm mass with a homogeneous, tan, cut surface. Microscopically, the tumor nodule contains a network of inter-anastomosing slit-like spaces simulating vascular proliferation. The spaces are empty and devoid of red blood cells. They are lined by a discontinuous layer of flat cells, which have thin, elongated nuclei with a pointed end. Mitoses are very rare and necrotic areas are absent, indicating a benign stromal lesion.

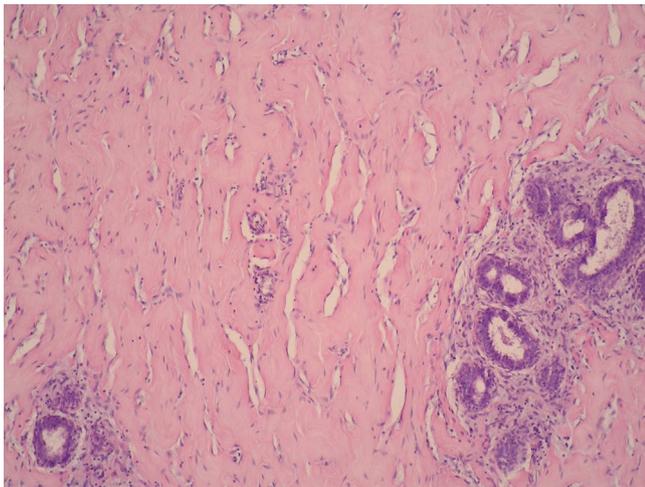


Fig. 1. Histopathology shows anastomosing spaces embedded in dense collagenous stroma.

## Further reading

- [1] Drinka EK, Bargaje A, Erşahin ÇH, Patel P, Salhadar A, Sinacore J, et al. Pseudoangiomatous stromal hyperplasia (PASH) of the breast: a clinicopathological study of 79 cases. *Int J Surg Pathol* 2012;20:54–8.
- [2] Jaunoo SS, Thrush S, Dunn P. Pseudoangiomatous stromal hyperplasia (PASH): a brief review. *Int J Surg* 2011;9:20–2.

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