Gigantomastia is a rare breast condition characterized by excessive mammary tissue growth, which can lead to significant physical and psychosocial implications.\(^1\) It can be associated with pain, ulceration, infection, back pain, loss of nipple sensation, and social stigmata. Gigantomastia can arbitrarily be defined as a breast size requiring a volume reduction of 1500 g or more.\(^2\) We present a unique case of a 40-year-old woman who presented with spontaneous bilateral gigantomastia occurring over several months that was due to pseudoangiomatous stromal hyperplasia (PASH) histopathological pattern.

**CASE PRESENTATION**

A 40-year-old woman presented with bilateral cyclical breast swelling and localized erythema. Upon physical examination, bilateral breast enlargement was noted as well as the presence of mobile lumps (4–5 cm) and the absence of palpable lymphadenopathy (Fig. 1). A first ultrasound-guided biopsy was then performed, which revealed urticarial allergic lymphocytic dermatitis with slight increase in intra-dermal mast cells. At that point, it remained unclear if the growth was related to the patient’s menstrual cycle. A medical management plan was elected with the use of tamoxifen 10 mg for a period of 4 months. Meanwhile, a mammogram revealed extremely dense breasts limiting the sensitivity of the study. Multiple masses were also present. Following this study, the patient underwent a bilateral breast ultrasound examination that revealed multiple fibroadenomas and innumerable nodules. Again, this modality of assessment needed to be complemented to obtain further information. A magnetic resonance imaging study was performed and showed multiple areas of mass-like and non–mass-like uptake more marked on the right side.

Both breasts continued to increase in size despite medical management. Due to strain and back pain from the excess weight, the patient opted for a plastic surgery consultation and possible surgical management. A bilateral breast reduction with free nipple graft was done using the modified Wise pattern (Fig. 2). A total of 5.55 kg was removed from the right side and 2.866 kg was removed from the left side. Histological analysis revealed a PASH pattern (Fig. 3) and a giant fibroadenoma. The patient’s postoperative course was unremarkable (Fig. 4).

**Disclosure:** The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the authors.
Although gigantomastia was first described in 1960, its official definition remains equivocal. Multiple authors defined this excessive growth in mammary tissue of more than 1500 or 1800 g. More recently, a classification system was proposed based on the etiology (idiopathic, hormonal, or drug induced). In cases of idiopathic gigantomastia, patients can be considered for surgical reduction if their body mass index is less than 30.

In the case of our patient, further evaluation of the histology of the disease revealed a benign uncommon breast condition known as PASH, although a well-described entity. Histologically, it is characterized by interanastomosing slit-like spaces lined by spindle-shaped cells in a collagenous prolifera-
The pathology is referred to as pseudoangiomatous, considering it mimics the appearance of blood vessels and endothelial cells. Markers such as CD31 and CD34 confirm the cellular origin of these cells that are in fact fibroblastic. PASH has been associated with tissue proliferation possibly derived from myofibroblastic overreaction to a hormonal response, most likely progesterone. PASH presents mostly in women of childbearing age and can be related to cyclical hormonal changes. This histopathology can be observed in a wide spectrum of clinical findings, ranging from incidental histological finding to palpable fast-growing breast mass. The typical presentation remains a firm, solitary mass that is well-circumscribed and mobile. Such a lesion can also be referred to as a nodular PASH. PASH can have significant management implications considering it is a benign condition, which can mimic clinical findings of a malignant tumor. The differential diagnosis can include low-grade angiosarcoma and fibroadenoma. The current recommendations are to excise lesions more than 2 cm and encourage conservative management and watchful waiting with smaller lesions. There has been only one reported case of PASH, which harbored malignant histological features. The recurrence rate following surgical excision has been reported to range from 0% to 22%.

**CONCLUSION**

Gigantomastia remains a rare clinical diagnosis with significant physical and psychological impacts on patients. To our knowledge, this is the first reported case of diffuse breast enlargement resulting from PASH, thus a rare presentation. Literature review revealed 24 reported cases of PASH; however, all presented with a breast mass, with 1 case of bilateral breast masses.