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Case Series

Breast hamartoma: A case series of 4 hamartoma cases including a rare myoid hamartoma of male breast

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ABSTRACT

Hamartomas by definition are masses of disorganised mature tissue indigenous to the particular site. They are seen in anatomical sites like skin, spleen and lungs where the latter is the most common site. Breast hamartomas are benign lesions not that commonly encountered in clinical practice. It is also synonymously known by other terms like adenolipoma. Terms like fibroadenolipoma and adenolipofibroma which were previously used are not recommended by the WHO. Hamartomas of the breast are composed of fibrous glandular or fat tissue. Breast hamartomas are rare in females and rarest in males. We report 4 cases of breast hamartomas one of which was myoid hamartoma in 38-year-old male and hamartoma with PASH (pseudoaangiomatous stromal hyperplasia) in a 32 year old female.

1. Introduction

The term hamartoma was first used by Arrigoni.[1] Breast hamartomas benign breast lesions that account for less than 5% of all benign breast masses.[2] The individuals with hamartomas usually present with a painless palpable breast lump. In mammographic examination, they revealed well demarcated circumscribed density and there was a thin radiolucent area between the lesion and the adjacent breast.[3] But varied appearances can be seen in mammography.[4] These lesions are more often less reported because they lack a characteristic morphology under the microscope. Hence many cases are closed up as 'no significant lesion' or 'normal breast tissue'. With increasing screening programs and social awareness, now the diagnosis of hamartomas has picked up. Breast hamartomas are composed of lobular breast tissue and the components include adipose, fibrous and fibrocystic tissue.[5]

The exact pathogenesis of how hamartomas are formed are still a grey area for the scientific community. Even in literature search, hamartomas are reported mainly as case reports. Review articles and large number case studies are rare on hamartomas. This case series is to report four cases of breast hamartomas.

2. Case Reports

2.1. Case 1

A 55-year-old female patient presented with the history of right breast lump. On clinical examination, a diagnosis of fibroadenoma was made. The patient underwent lumpectomy. On gross examination, the lesion was a circumscribed tissue of size 3.5 x 3.5 cm. Cut section showed a central stellate scar like lesion. Microscopy showed lactiferous ducts admixed with adipose tissue and fibrous tissue arranged haphazardly. With that a diagnosis of hamartoma was made.

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2.2. Case 2

A young 20-year-old female patient presented with a palpable right breast mass. On physical examination, well defined, firm, mobile lump was palpable for which the clinical diagnosis was fibroadenoma. Grossly, we received two tissue pieces, one of size 4 x 3 cm and other of size 3.5 x 2 cm. Cut surface of both the tissue pieces were whitish. Microscopic examination showed ducts and adipose tissue admixed with collagenous stroma for which the diagnosis of hamartoma was made.

2.3. Case 3

32-year-old female patient presented with breast lump which was clinically diagnosed as fibroadenoma. On macroscopic examination, a grey brown globular tissue piece of size 2 x 1.5 cm was received. On cut section, a circumscribed grey white lesion was seen. Microscopic examination revealed breast tissue surrounded by hyalinized stroma. Mature adipose tissue was seen in between. The tissue also showed Pseudoangiomatous stromal hyperplasia (PASH) in the form of vascular like spaces and interspersed atypical fibroblast. Diagnosis of PASH with hamartoma was made based on the microscopy.

2.4. Case 4

A 38-year-old male presented with lump in the left breast of one month duration. Clinically a diagnosis of gynecomastia was made. On clinical examination, a lump was palpable below the nipple area region of size 2 x 1 cm. the lump was mobile and firm. FNAC and cytological examination on the lump revealed rich cellularity of sheets of ductal epithelial cells and fibrous stromal fragments because of which excision biopsy was advised. Grossly we received two tissue pieces, each of size 2.5 x 1 cm. cut surface was grey brown. Microscopy showed ducts surrounded by stroma which have a smooth muscle appearance with adjacent area showing adipose tissue. A diagnosis of Myoid Hamartoma was made in this case.

3. Discussion

Arrigoni et al who first proposed the term mammary hamartoma defined hamartoma as a well circumscribed mass of abnormal cells intermixed with normal breast tissue.[6] Hamartomas are most commonly encountered in females usually in the age range of 33.5 to 66.5 years.[7] The growth of these lesions are usually slow, and are sometimes identified incidentally on a clinical or physical examination. Hamartomas are considered benign, but at times it can turn into malignant. So, a histopathological examination following excision is mandated for confirmation of diagnosis.

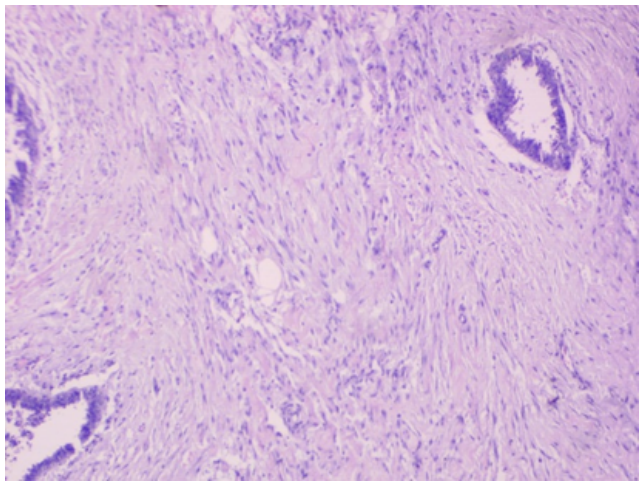

Fig. 1: Myoid hamartoma 10x

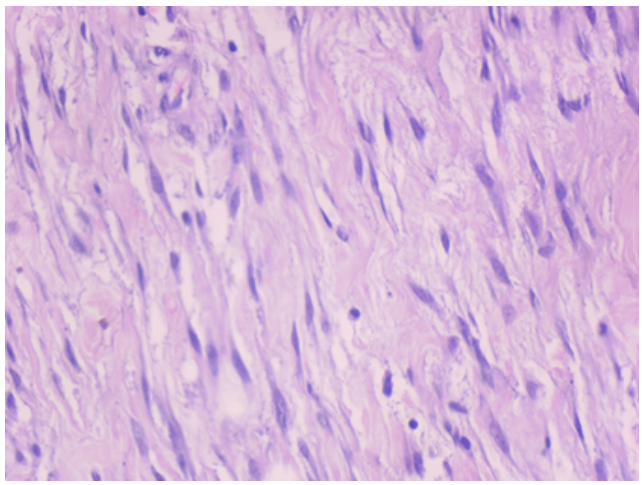

Fig. 2: Myoid hamartoma 40x

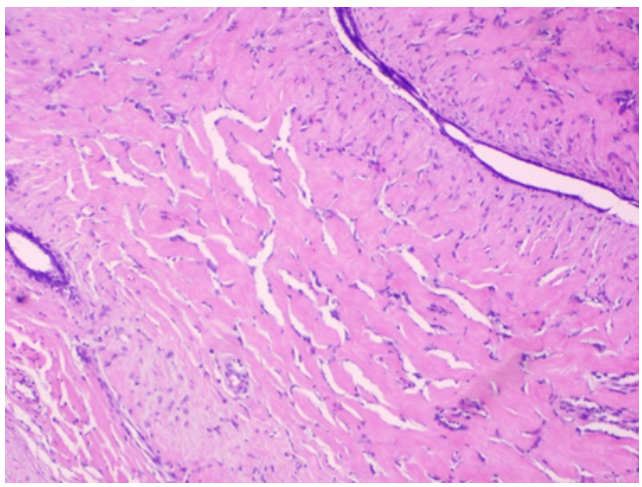

Fig. 3: PASH with hamartoma

On mammographic examination, these lesions are usually described as breast within breast. It has a similar composition as that of normal breast tissue, so a multi-disciplinary approach integrating clinical, radiological and histopathological examination is necessary for a definitive diagnosis.[8]

One of the four cases was reported as Myoid hamartoma. They present as painless breast mass. Case report by Chin Cheng et al reported a case of myoid hamartoma with microcalcifications which was not seen in our study. The same case also had chondroid metaplasia and PASH.[9] This case of Myoid Hamartoma was reported in a male patient which is extremely rare. Literature search revealed less than six cases of mammary hamartomas reported in males. First case was 36-year man, second was a 13-year-old boy, third was 30-year-old man, fourth was a 41-year-old man.[10–12]

The probable reason for rarity of this lesion in males is under-reporting of cases as most of the cases are over looked as gynecomastia.

Another case we reported was hamartoma associated with PASH. In a study of 25 cases of hamartomas by Tse et al, eight (32%) cases showed PASH.[13] A study by Fisher et al reported a high association of hamartoma and PASH with 71% cases of hamartoma showing PASH. In his observation, it is important to distinguish PASH from low grade angiosarcoma.[5]

4. Conclusion

Hamartomas as disorganized tissue native to that particular site. Therefore, there is high chance of over looking this lesion thereby missing the diagnosis of a mammary hamartoma. It is important to know the incidence of this case even in male patients. Hamartomas are treated by simple excision. Recurrence or other problems have not been reported following excision.

5. Conflict of Interest

There are no conflicts of interest in this article.

6. Source of Funding

None.

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