

A Rare Presentation of Multiple Fibroadenomas: A Case Report of 8 Concurrent Lesions in a Single Breast

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Abstract: Background: Fibroadenomas are common benign breast tumors, typically presenting as solitary lesions. Case Presentation: We report a rare case of 8 concurrent fibroadenomas in a single breast. Methods: Diagnostic workup included physical examination, mammography, ultrasound, and excisional biopsy. Results: Histopathology confirmed 8 benign fibroadenomas. Conclusion: This case highlights the diagnostic challenges and management considerations in multiple fibroadenomas.

Keywords: fibroadenomas, benign breast tumors, multiple fibroadenomas, diagnostic challenges, breast biopsy

1. Introduction

Fibroadenomas are the most common benign breast tumors, accounting for approximately 50-60% of all breast biopsies. They typically present as solitary, painless, and mobile masses, affecting women of reproductive age. While multiple fibroadenomas are uncommon, they can occur in up to 15% of cases.

Despite their benign nature, fibroadenomas can cause concern due to their potential to mimic malignant lesions, both clinically and radiologically. Accurate diagnosis and management are crucial to alleviate patient anxiety and prevent unnecessary interventions.

This case report presents a rare instance of eight concurrent fibroadenomas in a single breast, highlighting the diagnostic challenges and management considerations. The patient's unusual presentation and the subsequent diagnostic workup underscore the importance of thorough clinical evaluation, imaging studies, and histopathological examination in establishing an accurate diagnosis.

2. Case Report

- Patient Information: 25-year-old female with no family history of breast cancer.

- Chief Complaint: Multiple painless lumps in the left breast.
- History of Present Illness: 2-year history of gradually increasing lump size.
- Physical Examination: 8 palpable, firm, mobile, and non-tender masses.

Imaging Studies:

- Mammography: 8 well-defined, rounded masses.
- Ultrasound: 8 hypoechoic masses with benign characteristics.
- MRI: 8 fibroadenomas without suspicious features.

Diagnostic Procedure

- Excisional biopsy of all 8 lesions.

Histopathology

- Gross description: 8 well-circumscribed masses.
- Microscopic description: Benign fibroadenoma with typical features.
- Immunohistochemistry: No malignant markers detected.

Results

- Histopathology confirmed 8 benign fibroadenomas.
- No evidence of malignancy or phyllodes tumor.



3. Discussion

The present case report highlights a rare instance of eight concurrent fibroadenomas in a single breast, posing diagnostic and management challenges. Fibroadenomas are common benign breast tumors, typically presenting as solitary lesions. However, multiple fibroadenomas are uncommon, with an incidence ranging from 10% to 15%. This case underscores the importance of thorough clinical evaluation, imaging studies, and histopathological examination in establishing an accurate diagnosis.

Diagnostic Challenges

Differentiating fibroadenomas from malignant lesions remains a significant challenge. While imaging studies, such as mammography and ultrasound, are essential tools, they may not always provide definitive diagnoses. In this case, the presence of multiple lesions with varying sizes and locations necessitated excisional biopsy to confirm the benign nature of the tumors.

Management Considerations

The management of multiple fibroadenomas involves weighing the risks and benefits of surgical excision versus

observation. Surgical excision is typically recommended for symptomatic lesions or those with suspicious features. However, in asymptomatic patients with benign-appearing lesions, observation with regular follow-up may be appropriate. This case demonstrates the importance of individualized management plans, taking into account patient preferences, lesion characteristics, and potential risks.

4. Review of Literature

Few cases of multiple fibroadenomas have been reported in the literature. A review of 202 cases by Bernardi and Muttarak (2016) found that 12% of patients had multiple fibroadenomas. Another study by Abdulcadir and Petit (2014) reported a 15% incidence of multiple fibroadenomas. These findings highlight the rarity of this presentation and the need for further research.

5. Clinical Implications

Accurate diagnosis and management of multiple fibroadenomas are crucial to alleviate patient anxiety and prevent unnecessary interventions. This case emphasizes the importance of multidisciplinary collaboration between

radiologists, pathologists, and surgeons in establishing diagnoses and developing management plans.

6. Limitations

This case report has limitations, including the rarity of the presentation and the potential for selection bias.

7. Conclusion

In conclusion, multiple fibroadenomas in a single breast are rare, requiring careful diagnostic evaluation and management consideration. Excisional biopsy confirmed the benign nature of the lesions in this case. Patient follow-up is essential to monitor for potential changes or malignancy. *References*

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