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# Case Report of Multiple Breast Fibroadenomas in a Young Nigerian Woman

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#### **Abstract**

**Background:** Breast fibroadenomas are common in women of reproductive age group. Multiple bilateral fibroadenomas are not commonly found in clinical practice. The exact aetiology remains unknown. The aim of this report was to document a case of multiple bilateral breast fibroadenomas in a young Nigerian woman.

Case presentation: She was a 20-year-old lady who presented to the National Obstetric Fistula Centre, Abakaliki, Nigeria with a history of bilateral breast lumps and associated pain of eight months duration. Clinical breast examination, imaging studies and cytology were all in keeping with multiple bilateral breast fibroadenoma. She had surgical excision of eleven breast lumps using the Gaillard-Thomas incision and the post operative period was unremarkable. Histological analysis of the excised specimens confirmed multiple bilateral breast fibroadenomas. She has remained symptom free on follow up.

**Conclusion:** Multiple bilateral breast fibroadenomas are uncommon. Various age groups can be affected. Surgery remains the mainstay of treatment.

**Keywords:** Breast; Fibroadenoma; Gaillard-Thomas incision; Abakaliki; Nigeria

## Introduction

Fibroadenomas are benign tumours which are made up of epithelial and fibrous tissues [1]. Fibroadenomas are the most common lesions/masses found in the female breast occurring mainly in women of reproductive age group [2]. Most cases are single masses. Multiple breast fibroadenomas are not common, and are usually seen in 15% to 20% of women [3]. The affected woman may be psychologically disturbed because of the obvious irregularity of her breasts.

The exact aetiology of multiple breast fibroadenomas have not been clearly defined but its incidence tends to be higher in women on hormonal contraceptives [4]. The triple test for breast diseases using clinical assessment, imaging and histological analysis is helpful in investigating breast lumps including the multiple variety. Complete excision of the breast lumps in the affected patient is recommended. The aim of this report was to document a case of multiple bilateral breast fibroadenomas in a young Nigerian woman.

### **Case Presentation**

She was a 20-year-old nulliparous woman who presented with bilateral breast lumps and pain of 8 months duration. The patient attained menarche at the age of 13 years and had a regular menstrual cycle. She had no family history of breast disease and was not exposed to irradiation in the past. There was no history of contraceptive use. She had no other co-morbidities. Her weight was 60 kg and her height was 1.7 m which puts her body mass index at 20.76 kg/m<sup>2</sup>. Clinical breast examination revealed multiple discrete masses that were well circumscribed and freely mobile. Breast ultrasound scan done revealed multiple well defined echogenic thin-walled masses with lobulation at different positions which was in keeping with multiple fibroadenoma. Findings of fine needle aspiration cytology were cohesive clusters of ductal epithelial cells in both breasts with no features suggestive of malignancy and an assessment of fibroadenoma was made. She had surgical excision of breast lumps under general anaesthesia. During surgery, Lateral inframammary (Gaillard-Thomas) incision and reflection of the breast from the pectoralis muscle was done in each breast (Figure 1).. Eleven (11) lumps were subsequently removed from beneath the breast tissue (Figure 2). A drain was left on each breast which was removed on the

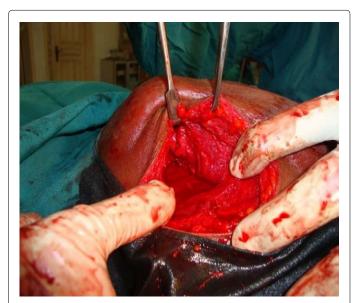


Figure 1: Reflection of the right breast from the pectoralis muscle.

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Figure 2: Multiple breast lumps removed from the patient.

4th postoperative day. Histological analysis of the excised specimens confirmed the diagnosis of multiple bilateral breast fibroadenomas. The postoperative period was unremarkable and the incision scar was acceptable to the patient.

#### Discussion

Breast fribroadenomas are commonly single. Multiple breast lumps are uncommon and occur in 15 to 20% of patients [3]. Samala and co-workers reported 12 unilateral breast fibroadenomas [5]. Panda reported 27 bilateral fibroadenomas in a 46-year-old woman [2]. In another study conducted among users of hormonal contraceptives, 2 to 4 lumps were identified in the patients that were studied [4]. However, in this case report eleven lumps were removed from both breasts of the patient.

The aetiology of fibroadenoma appears elusive. Multiple fibroadenoma has been linked to use of hormonal contraceptives [4]. The role of oestrogens, inheritance and dietary factors in the formation of breast fibroadenoma has been postulated [6]. Unlike single fibroadenoma, most people with multiple fibroadenomas have a family history of these tumors [3]. The aetiology of multiple fibroadenoma in this patient could not be linked to contraceptive use, family history or any other known factor, hence it remains unknown.

Evaluation of breast lumps including the multiple type involves the triple test; clinical evaluation, imaging and histological analysis. Fibroadenomas are usually well circumscribed lesions that are clearly distinct from the surrounding tissues. The diagnosis can be suspected following a clinical evaluation as seen in the index patient.

Breast ultrasonography was also performed for our patient and was suggestive of bilateral multiple fibroadenoma. Histopathological analysis (cytology) was also done for the patient before surgery which was in keeping with findings of both clinical examination and ultrasonography. A final histological diagnosis of multiple breast fibroadenoma was made in this patient.

The treatment of choice for multiple breast lumps is surgical excision. The aim is breast conservation although multiple fibroadenomas may be a challenge [2]. The semi-circular sub-mammary Gaillard-Thomas incision which was used in this case was first described in 1882 and has subsequently been modified by others [1]. It is usually made at the margin of the breast and multiple lumps can be removed using this method without making multiple incisions on the breast [1]. The Ribeiro and Rezai technique has also been used by others in the surgical management of multiple bilateral fibroadenomas of the breast [7].

Literatures regarding multiple bilateral breast fibroadenomas appear to be few. This case report has added to the available data on multiple breast fibroadenomas. It also demonstrated the usefulness of the Gaillard-Thomas incision in the removal of multiple breast lumps.

#### Conclusion

Multiple breast fibroadenomas are uncommon. It can be assessed using the triple test. Treatment is mainly surgical. The Gaillard-Thomas incision is a reliable method for removal of multiple breast lumps with good cosmetic outcomes. Prognosis following surgical management is good.

#### **Conflicts of Interest**

None.

#### Consent

Consent was obtained from the patient.

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