

FIBROADENOMA AND ITS CAUSES

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Abstract

This article explores fibroadenoma, a common benign breast tumor, and its causes. It highlights the role of hormonal imbalance, genetic predisposition, and lifestyle factors in the development of fibroadenomas. The study also discusses diagnostic methods and treatment options.

Keywords: Fibroadenoma, causes, diagnosis, treatment.

Introduction

Fibroadenoma is one of the most common benign breast tumors, predominantly affecting young women of reproductive age. It is a well-circumscribed, mobile, and painless lump, often detected during routine self-examinations or medical check-ups. While fibroadenomas are generally not life-threatening, their presence can cause anxiety and discomfort, necessitating further investigation.

Objectives

To analyze the primary causes of fibroadenoma.

- To assess the role of hormonal and genetic factors in its development.
- To review the diagnostic approaches and treatment options.

Materials and methods. This study is based on a comprehensive review of medical literature, clinical studies, and case reports related to fibroadenoma. The data was collected from scientific journals, medical textbooks, and online research databases. The methods used in this study include:

- **Literature review** – Analysis of previous studies on fibroadenoma etiology and treatment.
- **Comparative analysis** – Evaluation of different diagnostic and treatment modalities.
- **Statistical data assessment** – Examination of prevalence rates and risk factors.

1. Hormonal Imbalance

Hormonal changes, particularly those related to estrogen and progesterone, play a significant role in the formation of fibroadenomas.

2. Genetic Factors

Several studies suggest that genetic predisposition may contribute to the development of fibroadenoma.

3. Lifestyle and Environmental Factors

Lifestyle choices, such as excessive caffeine consumption, smoking, and an unhealthy diet, have been linked to an increased risk of fibroadenoma.





4. Breast Tissue Sensitivity

Some women have increased sensitivity to hormonal fluctuations, leading to abnormal tissue responses.

- **Clinical Examination** – A physical breast exam to identify the lump's characteristics.
- **Ultrasound and Mammography** – Imaging techniques to distinguish fibroadenomas from malignant tumors.
- **Fine-Needle Aspiration Biopsy (FNAB)** – A minimally invasive procedure to analyze the tumor cells.
- **Core Needle Biopsy** – A more definitive test to confirm the diagnosis.
- **Observation** – In cases of small, asymptomatic fibroadenomas, regular monitoring is recommended.
- **Surgical Removal** – Indicated for large, rapidly growing, or symptomatic fibroadenomas.
- **Cryoablation** – A minimally invasive procedure that uses extreme cold to destroy the tumor.
- **Hormonal Therapy** – Used in cases where hormonal fluctuations significantly impact tumor growth.

Conclusion

Fibroadenoma is a common benign breast condition that predominantly affects young women. Although its exact cause remains uncertain, hormonal imbalances, genetic factors, and lifestyle choices appear to contribute to its development. Early detection through self-examination and medical screening is essential for effective management. While most fibroadenomas do not require treatment, surgical or minimally invasive interventions may be necessary in specific cases.

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