

# WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Impact Factor: 6.842

ISSN (O): 2455-3301 ISSN (P): 3051-2557

Coden USA: WJPMBB

# NON-SURGICAL RESOLUTION OF PERIDUCTAL MASTITIS: A CASE REPORT ON ZUSKA'S DISEASE

## Dr. Preetam Mandawat, Dr. Parul Agarwal, \*Dr. Pragya Gautam

Department of Pathology, Government Medical College, Kota, Rajasthan, India.



\*Corresponding Author: Dr. Pragya Gautam

Department of Pathology, Government Medical College, Kota, Rajasthan, India.

**DOI:** https://doi.org/10.5281/zenodo.17801582



How to cite this Article: Dr. Preetam Mandawat, Dr. Parul Agarwal, \*Dr. Pragya Gautam (2025). Non-Surgical Resolution Of Periductal Mastitis: A Case Report On Zuska's Disease. World Journal of Pharmaceutical and Medical Research, 11(12), 257–260

This work is licensed under Creative Commons Attribution 4.0 International license.

Article Received on 03/11/2025

Article Revised on 24/11/2025

Article Published on 01/12/2025

#### ABSTRACT

Introduction: Zuska's disease, also known as recurrent periductal mastitis, is a rare inflammatory breast condition predominantly affecting premenopausal women. It presents with painful breast lumps, nipple discharge, and erythema, which may mimic infections or malignancies. Early diagnosis and treatment are essential to prevent recurrence and complications. Case Presentation: We report a case of a 32-year-old, obese Indian Muslim female who presented with left sided mastalgia, nipple discharge, and subareolar breast lump with normal looking overlying skin for 1 month. Blood investigations were normal, and USG guided Fine Needle Aspiration Cytology (FNAC) findings were suggestive of periductal mastitis, consistent with Zuska's disease. The patient was treated with antibiotics and analgesics for 15 days. Outcome: Following the course of treatment, the patient made a full recovery, with resolution of the subareolar breast lump and symptoms. No recurrence was noted during follow-up. Conclusion: This case underscores the importance of recognizing Zuska's disease in patients presenting with breast lumps and discharge. Early intervention with antibiotics can lead to successful resolution and prevent the need for surgical intervention in uncomplicated cases.

**KEYWORDS**: Zuska's disease, periductal mastitis, nipple discharge, breast lump.

#### INTRODUCTION

Zuska's disease, also known as recurrent periductal mastitis, is a rare, chronic inflammatory condition of the breast ducts, first described by Dr. Ernest Zuska in 1951. It predominantly affects premenopausal women and is associated with subareolar duct inflammation and abscess formation. Zuska's disease is characterized by painful breast lumps, nipple discharge, and erythema, which can mimic breast infections or malignancies, making it an important differential diagnosis in patients presenting with breast symptoms. In this case report, we discuss a 32-year-old female presenting with classic signs of periductal mastitis, its clinical course, and successful management with antibiotics.

# Patient Information

Age: 32 yearsGender: Female

• **Ethnicity**: Indian Muslim

• **Presenting Symptoms**: Mastalgia and discharge from the breast for 1 month

#### **Clinical Presentation**

A 32-year-old Indian Muslim female presented to the clinic with complaints of breast pain (mastalgia) and nipple discharge for the past month. On examination, an indurated lump was noted in the breast, with skin erythema over the areola.

No fever or other systemic symptoms were reported. The patient had no significant past medical history, and there was no history of smoking or recent trauma to the breast.

#### **Investigations**

- **Blood tests**: Routine blood investigations, including complete blood count (CBC) and inflammatory markers, were within normal limits.
- USG guided Fine Needle Aspiration Cytology (FNAC): FNAC of the subareolar lesion showed metaplastic squamous cells, anucleate squamous cells, acute and chronic inflammatory cell infiltration along with abundant giant cells and macrophages. Hence, features suggestive of

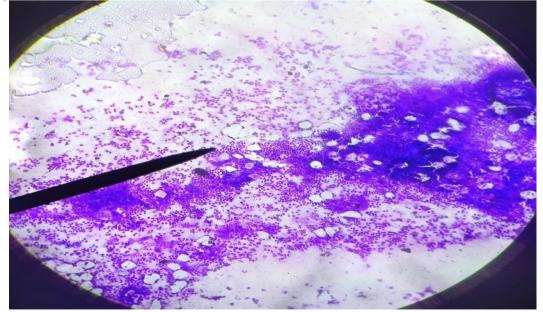
www.wjpmr.com Vol 11, Issue 12, 2025. ISO 9001:2015 Certified Journal 257

periductal mastitis consistent with a diagnosis of Zuska's disease.

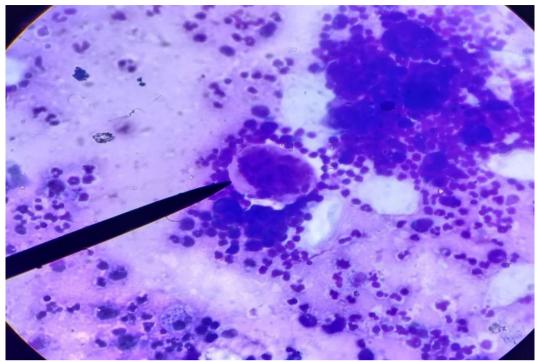




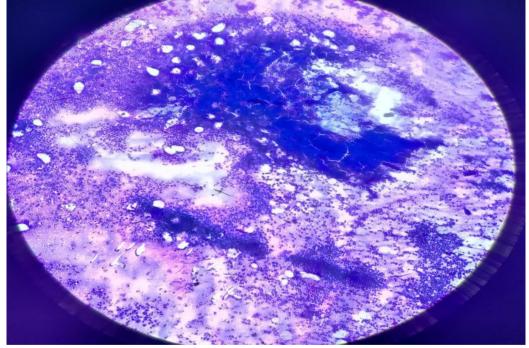
USG images of breasts



Zuska's disease- Low power view. The cytology smear shows neutrophilic infiltration along with macrophages and necrosis at places.



Zuska's disease- high power view. The cytology smear showing Macrophage with engulfed neutrophils. Macrophages seen arranged in clusters and singly scattered



High power view-The cytosmear shows necrosis

### Diagnosis

• **Final Diagnosis**: Periductal mastitis (consistent with Zuska's disease).

# Treatment

The patient was prescribed a 15-day course of oral antibiotics, anti- inflammatory drugs and analgesics to manage pain and inflammation. She was advised to follow up for any worsening symptoms or recurrence of

the breast lump.

# Outcome

After 15 days of treatment, the patient showed significant clinical improvement. The breast pain resolved and the indurated lump decreased in size. At the time of follow-up, the patient had no further complaints, and the condition was considered resolved.

www.wjpmr.com Vol 11, Issue 12, 2025. ISO 9001:2015 Certified Journal 259

#### DISCUSSION

Zuska's disease, a form of recurrent periductal mastitis, is a rare inflammatory breast condition often associated with subareolar abscess formation and recurrent infections. While it is more commonly linked to smoking, our patient had no known risk factors such as smoking or prior breast surgery. The clinical presentation of mastalgia, nipple discharge, and a subareolar mass, however, is typical of the disease.

FNAC played a key role in the diagnosis, distinguishing periductal mastitis from other potential conditions, such as breast malignancies. The management of Zuska's disease involves a combination of antibiotics and analgesics, and surgery may be considered in recurrent or complicated cases. In this case, timely antibiotic therapy led to the complete resolution of symptoms, with no evidence of recurrence during the follow-up period. Department of Pathology, Government Medical College, Kota, Rajasthan, India.

#### CONCLUSION

This case highlights the importance of recognizing Zuska's disease as a differential diagnosis in patients with subareolar breast lumps and discharge. Early diagnosis and appropriate antibiotic therapy can prevent complications and recurrence. As seen in this case, a straightforward course of antibiotics resulted in a full recovery, underlining the efficacy of non-surgical management in uncomplicated periductal mastitis.

www.wjpmr.com | Vol 11, Issue 12, 2025. | ISO 9001:2015 Certified Journal | 260