

## **An Uncommon Presentation: Bilateral Breast Erysipelas**

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### **Abstract**

Bilateral breast erysipelas is a rare condition [1]. Bilateral breast localization is exceptional and the diagnosis is often made late due to the frequent confusion of this form with breast abscesses. The management is multidisciplinary medical and surgical. We report the case of bilateral bacterial breast cellulitis in a 64-year old woman and we describe the clinical features and therapeutic results of this rare form.

**Keywords:** Erysipelas; Breast; Infection

### **Introduction**

Bilateral BREAST erysipelas is a rare condition, and bilateral breast localization is exceptional, and the diagnosis is often made late due to the frequent confusion of this form with breast abscesses. Management is multidisciplinary, involving both medical and surgical approaches.

### **Case Report**

We report a case of bilateral breast erysipelas. The patient is a 64-year-old woman with a significant medical history of bilateral breast cancer. Her cancer was treated conservatively on the right side and with radical surgery on the left. She presented to our emergency department with a sudden onset of inflammatory skin plaques over both breasts.

On clinical examination, the patient exhibited well-defined, non-confluent inflammatory plaques bilaterally (**Figure 1**). These were associated with a fever of 38.5°C. The onset of



*Figure 1 : An image of our patiente with bilateral breast erysipelas.*

symptoms occurred four days following an insect bite on her right breast.

Given her medical history and clinical presentation, further investigations were warranted. These investigations effectively ruled out carcinomatous mastitis, a potential differential diagnosis given her cancer history. Instead, they confirmed the diagnosis of bilateral breast erysipelas, a form of bacterial dermohypodermatitis.

The management of her condition required a multidisciplinary approach, combining both medical and surgical expertise. She was treated with a course of antibiotic therapy, specifically amoxicillin-clavulanic acid, for ten days. Her response to the treatment was favorable, leading to a significant reduction in the inflammatory symptoms and resolution of the fever.

This case highlights the importance of considering bilateral bacterial dermohypodermatitis in the differential diagnosis of inflammatory breast conditions, especially in patients with a history of breast cancer. Early recognition and appropriate treatment are crucial for favorable outcomes. The rarity of bilateral involvement adds to the diagnostic challenge, emphasizing the need for awareness and a high index of suspicion among clinicians.

### **Discussion**

Bacterial dermohypodermatitis, or erysipelas, involves varying depths of the hypodermis but does not include necrosis or affect the deep fascia [2].

This form is treated medically. Necrotizing bacterial dermohy-

podermatitis (necrotizing cellulitis) involves necrosis of connective and adipose tissue without affecting the deep fascia and requires surgical treatment [3-5].

The causative organism is often Group A beta-hemolytic streptococcus. Reported risk factors include diabetes, alcohol consumption, hematologic diseases, cancers, the use of nonsteroidal anti-inflammatory drugs or immunosuppressive treatments, and age over 65 years [6,7].

The diagnosis is primarily clinical and is often mistaken for a breast abscess or cellulitis.

### Conclusion

Breast localization of dermohypodermatitis is rare and primarily poses a diagnostic delay problem because it is often mistaken for cellulitis or an abscess due to the delayed appearance of skin signs. Diagnostic delays can lead to severe complications, sometimes life-threatening, and significantly affect the aesthetic outcome.

### Author Contributions

**Malek Medemagh** - Conception of the work, Design of the work, Acquisition of data, Analysis of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

**Dhekra Toumi** - Conception of the work, Design of the work, Acquisition of data, Analysis of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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