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Case Report

Near the eye, but out of sight: A case report on foreign body reaction imitating periporitis

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Abstract A 4-year-old male child presented with a stubborn skin lesion situated close to his left eye, failing multiple prior treatments. A wooden splitter was found on wound exploration. The child was treated with linezolid for superadded methicillin-resistant staphylococcus aureus infection. Bacterial skin infections frequently affect children; however, a foreign body reaction malingering a classical presentation of periporitis is not common.

Key words
Foreign body reaction; Periporitis.

Introduction

Skin disorders are one of the most common causes of illness in the pediatric age group, with more than 65% of children consulting a dermatologist for a skin disease as early as 5years of age.[1] Periporitis is a severe secondary complication of miliaria, also known as 'heat rash,' a common disorder of eccrine sweat glands. It often occurs in conditions similar to foreign body reactions like increased heat, moist and humid conditions, nosocomial environment, warmer seasons and the pediatric age group.[2]

Case report

A 4-year-old male child presented to our dermatology outpatient department with a single, pus oozing skin lesion near the left eye. The child had already failed the treatment with commonly advised antibiotics and antifungal agents on earlier prescriptions over the past seven months before he visited us. Cutaneous examination showed a single, pea-sized, indurated papule-nodule on an erythematous background with pus tinted crust present over the surface. The lesion was infraorbital near the left inner canthus with associated swelling of the left eye **(Figure 1)**.

The child was conscious and cooperative with no abnormality on general and systemic examination. His parents gave no history of any recent trauma or surgical intervention preceding the present complaints. A long-standing, non-healing lesion in this age group prompted us to order ultrasonography (USG) to look for any concealed foreign body and check for eye involvement **(Figure 2)**. Slit-lamp examination was performed to look for any remnants of the foreign body, but it turned out to be normal. Also, pus culture and sensitivity were sent to rule out an underlying aerobic, anaerobic bacterial and fungal infection.

Both the eyes appeared normal on USG. Surgical exploration under local anesthesia revealed a wood splitter, testing positive for

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Figure 1

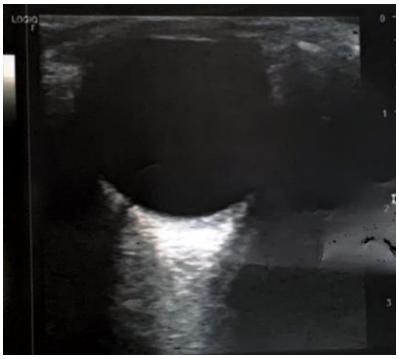

Figure 2

Figure 3

methicillin-resistant staphylococcus aureus (MRSA). The child was started on oral linezolid and has been asymptomatic since after the removal **(Figure 3)**.

Discussion

Bare skin and outdoor recreation in warmer seasons can increase the risk of developing conditions like periporitis, puncture wounds, and foreign body reactions. Periporitis is a skin condition characterized by miliary papules and papulovesicles accompanied by infection with staphylococcal bacteria. Both periporitis and foreign body reactions often occur in similar conditions, with a higher occurrence of foreign body reactions in children and adults with mental disabilities. A foreign body reaction is a tissue response to a foreign body within biological tissue, usually characterized by the formation of a granuloma. Foreign bodies may enter and are retained in the body through various routes such as placement, bodily orifices, and surgical errors.[3] Foreign bodies made of wood are delicate, and it is hard to remove them completely. Only a few cases of wooden foreign bodies being diagnosed and treated have been documented. They undergo calcification and organization and eventually lead to the formation of an inflammatory granuloma.[4]

Most of the time, patients are oblivious of the retained foreign body, and minor emergencies are caused by wounds with neglected foreign body reactions.[5] Therefore, it becomes essential to find the cause of any sensation that is felt. Most of the time, antimicrobials do not help in healing, and the ideal treatment would be to thoroughly wash the wound with clean water and extract the fragments of the foreign object. Imaging methods like ultrasound can be used to detect the site of the object, assess it, and remove it to prevent the further spread of infection.[3]

Conclusion

Our study focuses on how foreign body reactions can often mimic other diseases making it difficult for the physician to identify them. Therefore, it is imperative that an accurate history of the mechanism of injury is taken and the wound is adequately explored. A retained foreign body should be considered if a patient presents with an infected wound.

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