



# Bilateral Symmetric Cellulitis and Auricular Perichondritis due to *Streptococcus pyogenes*

*Streptococcus pyogenes*'e Bağlı İki Taraflı Simetrik Selülit ve Aurikular Perikondrit

Ergin Çiftçi (ID), Döndü Nilay Penezoğlu (ID), Belkıs Hatice İnceli (ID), Hülya Akat (ID), Halil Özdemir (ID)

Division of Pediatric Infectious Diseases, Department of Pediatrics, Ankara University Faculty of Medicine, Ankara, Türkiye

**Cite this article as:** Çiftçi E, Penezoğlu DN, İnceli BH, Akat H, Özdemir H. Bilateral symmetric cellulitis and auricular perichondritis due to *Streptococcus pyogenes*. J Pediatr Inf 2023;17(4):e312-e313.

A 10-year-old girl presented with complaints of high fever, redness and swelling in both preauricular skin and auricle. Two days ago, hyperemia and crypts were found in the tonsils when she presented with left ear pain, throat culture was taken and analgesic treatment was started. It was learned that the patient had recently undergone ear piercing for earrings but no earring

was worn. On physical examination, body temperature was 38 °C, both preauricular skin and auricles were hyperemic and edematous, and both eardrums were dull. Ultrasonography revealed several reactive lymph nodes in both submandibular areas, diffuse thickening of the preauricular skin more prominent on the right, and increased inflammatory echogenicity



## Correspondence Address/Yazışma Adresi

Ergin Çiftçi

Ankara Üniversitesi Tıp Fakültesi,  
Çocuk Sağlığı ve Hastalıkları Anabilim Dalı,  
Çocuk Enfeksiyon Hastalıkları Bilim Dalı,  
Ankara-Türkiye

E-mail: erginciftci@gmail.com

Received: 02.11.2023

Accepted: 24.11.2023

Available Online Date: 22.12.2023

©Copyright 2023 by Pediatric Infectious Diseases and Immunization Society.  
Available online at www.cocukenfeksiyon.org

in the subcutaneous adipose tissue consistent with cellulitis. Intravenous ceftriaxone and clindamycin treatment was started. *Streptococcus pyogenes* was isolated from throat culture. After the second day of treatment, the redness and swelling in both ears decreased markedly. After receiving intravenous treatment for one week, treatment was continued with oral cefdinir for another week. At follow-up, the fever did not recur and the patient recovered uneventfully.

*Streptococcus pyogenes*, the usual causative agent of tonsillopharyngitis, also frequently causes skin infections. Perichondritis, usually resulting from traumatic injuries such as ear piercing, is an infection of the skin and tissues surrounding the cartilage of the pinna. Cellulitis is a skin infection involving the deep dermis and subcutaneous fatty tissue. Erysipelas is a skin infection involving the superficial dermis and lymphatic

involvement, causing the presence of a demarcation line between the affected tissue and normal tissue. Although both erysipelas and cellulitis can affect any part of the body, the lower extremities are most commonly affected. In both cases, unilateral involvement is common, bilateral involvement is rare. The risk of bilateral cellulitis is higher in the presence of predisposing conditions such as malignancy, diabetes mellitus, cirrhosis, immunodeficiency, organ transplantation. Bilateral erysipelas-like erythema, often involving the lower extremities, is an important cutaneous manifestation of familial Mediterranean fever. In cellulitis and erysipelas where skin integrity is intact and there is no purulent drainage, the causative agent is usually *S. pyogenes*. Conditions that disrupt skin integrity such as ear piercing may cause cellulitis, perichondritis and infection spreading to the surrounding tissue.