Clinical Image / *Klinik Görüntü*

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# Infected Branchial Cleft Cyst Due to *Staphylococcus aureus*

## *Staphylococcus aureus*'a Bağlı Enfekte Brankiyal Yarık Kisti

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A two-year-old girl was admitted with complaints of high fever and swelling in front of the ear. Ten days ago, amoxicillin-clavulanate treatment had been initiated in the health institution where she was admitted due to swelling in front of the left ear. Although antibiotic treatment was continued, she was brought to our hospital because her fever persisted and the size of the swelling and erythema on it gradually increased. On examination, the body temperature was 39°C, the left half of the face was markedly edematous, a swelling about 4 cm in diameter and marked tenderness was observed in front of the left ear. Intravenous ampicillin-sulbactam treatment was started. Ultrasonography revealed a hypoechoic lesion in the left parotid gland with septa, with vascularity in the wall, compatible with a complicated cystic lesion or necrotic/abscessing lymph node and inflammation in the surrounding tissues. Facial tomography of the patient revealed infection and abscess developing on the background of type 1 branchial cleft cyst. Methicillin-susceptible *Staphylococcus aureus* was grown in the abscess drainage material. After receiving intravenous treatment for two weeks, treatment was switched to oral amoxicillin-clavulanate. Surgical removal of the branchial cleft cyst was planned after the end of treatment.

Head and neck masses can be categorized into three main categories as congenital, inflammatory and neoplastic. First branchial cleft cysts, which are a rare cause of branchial cleft anomalies, are divided into type I and type II. Type I first branchial cleft cyst is a duplication anomaly of the external auditory canal and is of ectodermal origin. Recurrent infections of branchial cleft cysts and consequent fistulization to the skin may develop. Recurrent infections may increase the risk of injury to important structures such as the facial nerve when parotid involvement is present, making surgical removal difficult. Infected branchial cleft cysts should be surgically removed after the infection is controlled with antibiotic treatment to prevent recurrence and further complication of the management of the process.

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