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## Biography

Nihal Yagmur Ozcan, graduated from Cumhuriyet University Faculty of Dentistry in 2019 and is currently a Research Assistant in Oral and Maxillofacial Surgery at Süleyman Demirel University, Faculty of Dentistry. She presented a poster entitled "Dental Autotransplantation: A Viable Alternative for Tooth Loss Management?" at the BASS Congress.

# Multidisciplinary Surgical Management Of An Extensive Radicular Cyst With Cortical Bone Destruction: A Case Report

## Abstract:

A 35 year old systemically healthy male with no history of trauma presented with palatal swelling. Radiographic examination using panoramic imaging and CBCT revealed a well-circumscribed lesion associated with teeth 21–23, extending to the nasal floor and exhibiting palatal cortical bone perforation. Following endodontic consultation, tooth 21—previously treated at an external center—was sensitive to percussion. Vitality testing showed a negative response for tooth 22 and a positive response for tooth 23. Accordingly, endodontic retreatment of tooth 21 and primary root canal treatment of tooth 22 were performed. Due to persistent clinical symptoms and lack of periapical healing despite conventional therapy, surgical intervention was deemed necessary. Under a preliminary diagnosis of a radicular cyst, surgical access to the lesion was achieved. The lesion was enucleated in toto, followed by thorough curettage and irrigation with sterile saline. Apical resection of 3 mm was performed; retrograde cavities were prepared using ultrasonic tips and filled with mineral trioxide aggregate (MTA). Histopathological examination confirmed the diagnosis of a radicular cyst. The patient was asymptomatic at the 10-day follow-up. Radiographic evaluations at 10 months demonstrated a significant reduction in lesion size. This case demonstrates that conventional endodontic treatment alone may be insufficient for managing lesions in close proximity to critical anatomical structures or those causing extensive palatal bone destruction; in such cases, a multidisciplinary approach combined with surgical endodontic intervention plays a critical role in achieving favorable clinical outcomes.