BONE TRANSPOSITION COMBINED TO TOOTH EXTRACTION FOR BONE AUGMENTATION **BOULARBAH REDA, Doctor of Dental Surgery (boularbah.mr@hotmail.com)**

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BACKGROUND

Pre-implant surgery often requires bone reconstruction procedures to ensure adequate bone width before implant placement. Among the various techniques, bone flap transposition stands out for its effectiveness in increasing bone width while preserving vascularization and surrounding tissues. This technique is particularly indicated in adult patients with significant bone resorption, requiring alveolar ridge augmentation. Here, we apply this technique to a case of an impacted canine in an adult, requiring extraction before an implant treatment plan.

This article aims to describe a precise method for performing and transposing a bone flap in adults, highlighting the critical steps, advantages, and clinical outcomes observed after the procedure. The objective is to provide a detailed framework for practitioners wishing to adopt or improve this technique in their daily practice.

MATERIALS&METHODS

A 52-year-old female patient presented with an impacted upper left canine (tooth 23) that had never undergone orthodontic traction, with a ridge requiring bone width augmentation. The procedure included a linear crestal incision, the creation of a rectangular bone flap using piezoelectric micro-saws, and the lateral transposition of the flap to widen the ridge. During the bone flap creation, the impacted canine was extracted. The patient was followed up on days 7, 14, 21, and 30 postoperatively. A CBCT scan was performed at 4 months to assess bone gain.



RESULTS

The results showed a significant increase in bone width in all cases, with an average bone gain of 4 mm, and no major complications were observed. Clinical outcomes demonstrated long-term bone stability, confirming the effectiveness of bone flap transposition for width augmentation.





CONCLUSIONS

Bone flap transposition is a reliable and effective technique for increasing bone width in adult pre-implant surgery, especially in cases involving impacted teeth. It allows for optimal implant site preparation with minimal risk of complications. This technique should be considered a viable option in cases of severe bone resorption requiring alveolar ridge augmentation. However, further studies with longer follow-up are needed to confirm these results and optimize surgical protocols.



DISCLOSURE OF INTEREST

The author declare no conflict of interest.