

Rehabilitation of atrophic edentulous area in the anterior Maxilla with implants using Multidisciplinary Approach – A case report

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The Aim: This case report aims to showcase a unique implant rehabilitation approach. It involves simultaneous bone augmentation and implant placement in the anterior maxilla, complemented by orthodontic treatment. This combined strategy is tailored to enhance the available restorative space, offering a comprehensive solution for effective rehabilitation.

CASE REPORT:

A 45 years old female, non-smoker without any major risk factors, presented for implant rehabilitation of her missing maxillary central and lateral incisors.

Horizontal and vertical ridge deficiency were present (Siebert class III).

Crowding and loss of space were evident as well. The treatment plan consisted of a placement of two bone level implants to restore #8,#9,#10 sites. During the eventless healing patient used a removable partial denture. Second stage was performed 6 months later in order to shape the gingiva. After 2 months, final conventional impression was taken.

Final prosthetic restoration was based on a all ceramic screw-retained Implant bridge. Patient was highly satisfied with the result.



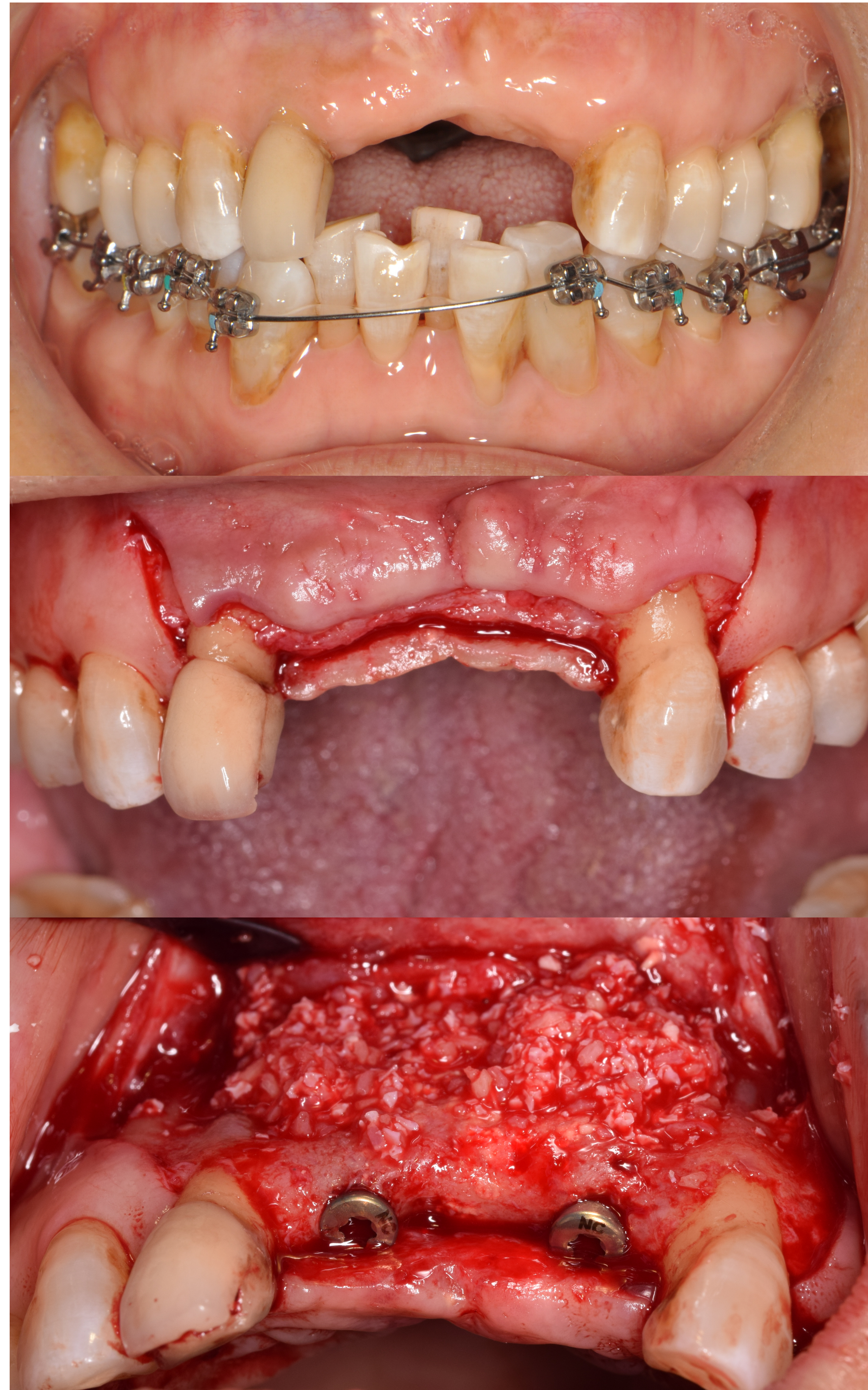
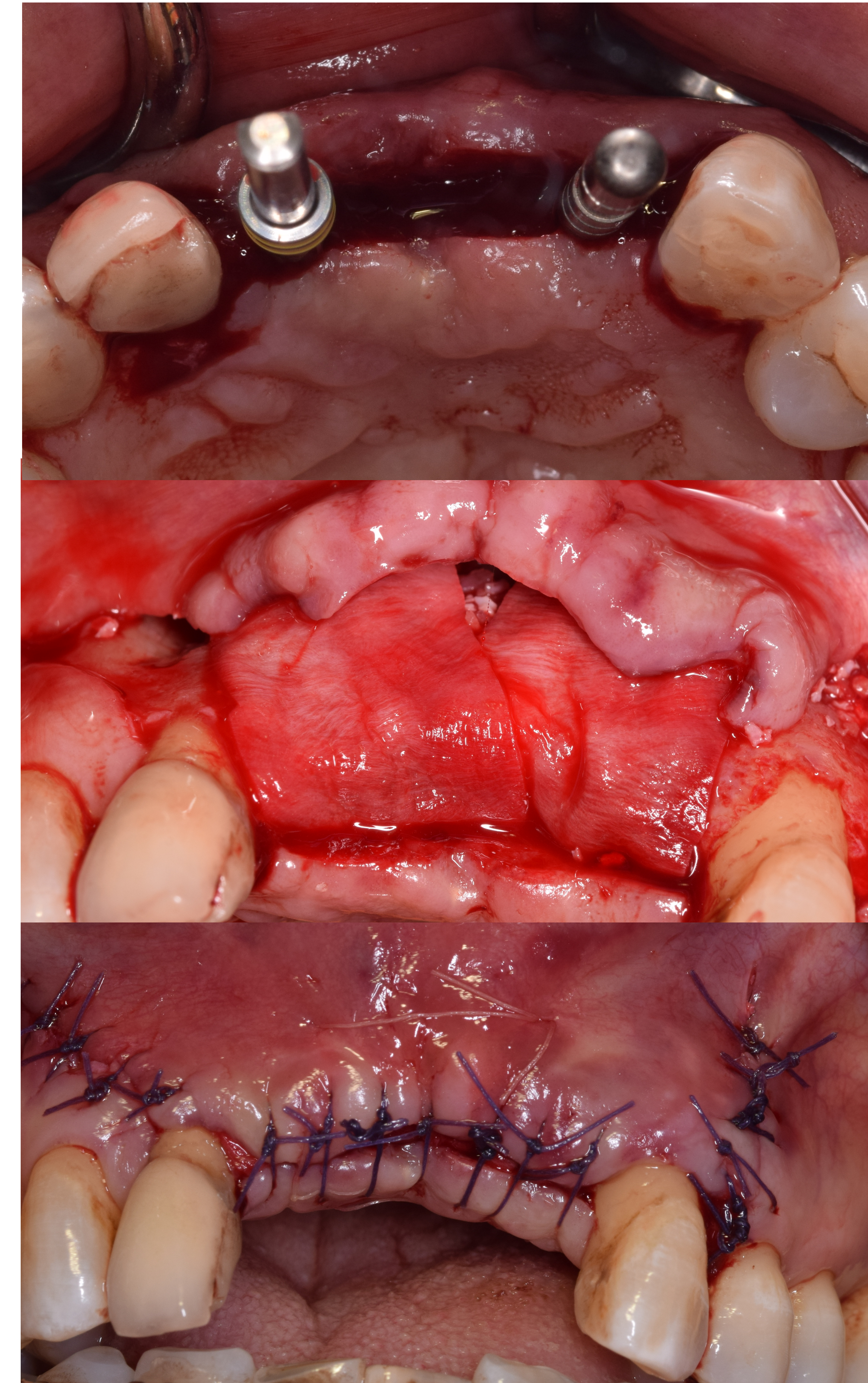
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Ortho Protocol: To address space loss and crowding issues, an orthodontic treatment was initiated. The objective was to realign the lower teeth to their natural position, thereby generating additional restorative space for the upper anterior teeth.

Surgical Procedure: Under local anesthesia. A midcrestal incision with a vertical releasing incision was made at the recipient site and the full thickness of the buccal mucoperiosteal flap was raised to expose the defective alveolar ridge.



Surgical Procedure (cont.): implant osteotomy was prepared following the usual protocol, using a pilot drill, and depth drills, the implant was inserted and primary stability was ensured. Finally, a cover screw was secured, defects around the implants were covered with cancellous bone granules material. Then, the augmented area was covered with a resorbable collagen barrier membrane for extra protection against the bone resorption process and the area was primarily closed.

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Prosthetic Rehabilitation

Second stage was performed 6 months after surgical procedure and provisional was fabricated . A final conventional impression was taken 2 months after second stage . Final prosthetic restoration was based on a all ceramic screw- retained bridge supported by two implants (Fig. 12). Patient was followed- up for 6 months after insertion.



Results: Esthetic rehabilitation was done using a screw retained prosthesis restoring the patient with satisfied esthetic and functional outcomes .

Conclusion: The prosthetic rehabilitation of implants in the esthetic zone can be demanding. Proper planning is a key for successful results and a happy patient.