Using an Implant Carrier as a Temporary Implant Abutment on Immediately Loaded Implants in Extraction Sockets

Objectives
Immediate implant placement and provisionalization in extraction sockets can be beneficial for preserving soft and hard tissues around the implant. However, there is a lack of research evaluating the clinical outcomes of using Ankylos implant carriers as temporary abutments for immediately loaded implants.
The study aimed to investigate the clinical and esthetic outcomes of immediately placed and loaded Ankylos implants in extraction sockets, using implant carriers as temporary abutments.

Materials and Methods:
Nine patients (four women, five men) aged 41-66 were included. Assessment included radiographic, clinical, and photographic analysis. Radiographic assessment involved periapical radiographs taken at different stages. Clinical assessments included plaque index, bleeding index, gingival index, and others. Photographic assessments involved photographs with a Nikon Z6 camera. Data analysis was performed using GraphPad Prism V.9.1 for macOS.

Results:
After 3 months, mid-facial peri-implant mucosal level showed a mean soft tissue loss of 1.18 ± 0.42 mm. Marginal bone level displayed a mean value loss of 0.53 ± 0.33 mm. Pink Esthetic Score scores averaged 7.9 ± 1.45. No major complications such as implant loss or inflammation were encountered. All implants remained stable and were loaded for 3-4 months before permanent crown restoration.

Conclusion:
The use of Ankylos implant carriers as temporary abutments for immediately loaded implants in extraction sockets can be an effective option, with minimal soft and hard tissue loss. The PES scores are comparable to other studies.

Clinical Implications:
This study suggests that immediate implant placement with Ankylos implant carriers as temporary abutments may be a viable option for preserving tissues and achieving satisfactory esthetic outcomes. Dental professionals should consider this as an alternative treatment option. Further research with larger sample sizes is needed for a more comprehensive understanding.