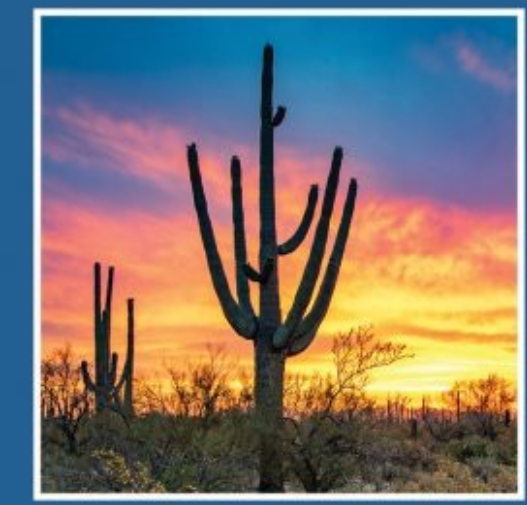




Alternative Treatment Option for Atrophic Ridges – Custom Alveolar Ridge Splitting Technique

Erick Lima, Benedetta Grassi, Usman Ghani Hussain, Jeffrey Scolnick, Stuart J Froum, Sang-Choon Cho, Leena Palomo
Ashman Department of Periodontology and Implant Dentistry New York University College of Dentistry



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Implant-supported restorations have proven to be a predictable option for replacing missing teeth. In cases of inadequate bone quantity, the bone volume can be increased by bone augmentation procedures. Several factors can affect bone regeneration, including the morphology of the defect at the implant site. A defect surrounded by bony walls (an intraosseous defect) is known to yield a highly successful regeneration. The recently introduced Customized Alveolar Ridge Splitting (CARS) technique may represent a viable, minimally-invasive augmentation technique for horizontal bone defects. This customized

alveolar ridge splitting technique is indicated for treating severely atrophic horizontal ridges that consist of only cortical bone with a reduced blood supply. This type of defect often requires multiple surgeries to obtain the necessary horizontal bone volume before dental implants placement. The objective of CARS is to convert an extraosseous defect into an intraosseous one with the aid of a trephine drill. The aim of this retrospective case series is to present the practical clinical considerations of customized alveolar ridge splitting technique in various clinical sites.

Custom Alveolar Ridge Splitting Technique

- Maxilla Anterior Area
 - Alone or combined with GBR
- Maxilla Posterior
 - Alone or combined with sinus augmentation
- Posterior Mandible
 - Alone or combined with implant lateral to IAN (LIAN)
- Anterior Mandible
 - Allow regular size implants for overdenture case
- Future Directions
 - Grafting without barrier membrane

