

# step by step biologics

## Ridge Augmentation with MinerOss®, MinerOss® X and Mem-Lok® RCM

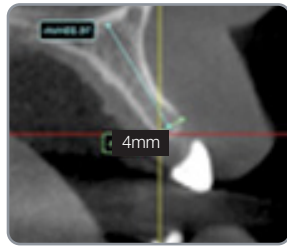
### Augmentation of a Congenitally Deficient Ridge Utilizing a Composite of Allograft and Xenograft Hard Tissue Material

Dr. Cary A. Shapoff, Diplomate, American Board of Periodontology, Fairfield, CT

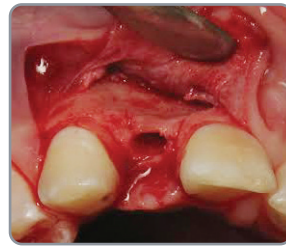
A 17-year-old female with congenitally missing maxillary lateral incisors (teeth # 7 and #10) was referred for consideration of dental implants. Clinically, the alveolar ridge was narrow on both the right and left sides because the normal eruption process of the permanent lateral incisors did not occur, resulting in underdevelopment of the alveolar bone. As a result, grafting was performed in preparation for implant placement.



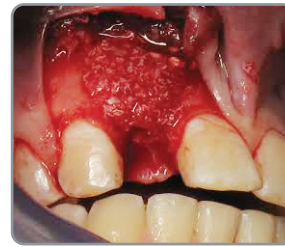
Clinical view of tooth #7



A CBCT radiologic study demonstrated a 4mm wide alveolar ridge on the right side.



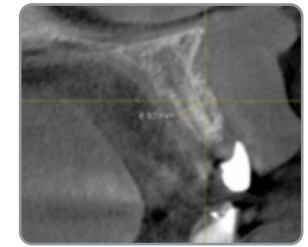
A full thickness mucoperiosteal flap was raised on the facial surface with a vertical releasing incision distal to tooth #6. The existing ridge was first split using a Piezotome blade and then widened using a series of hand-held elliptical ridge expanders.



Onlay grafting was performed on the facial dimension using a composite graft of **MinerOss** and **MinerOss X** covered with a collagen barrier (**Mem-Lok RCM**) to further expand the ridge.



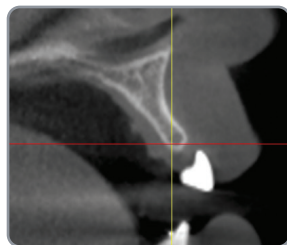
A periosteal releasing incision was used to obtain tension-free closure. The incisions were closed with 6-0 propylene and maintained for 3 weeks.



A CBCT at 7 months post-op, shows excellent ridge augmentation with expansion of the buccolingual dimension from 4mm to 7mm.



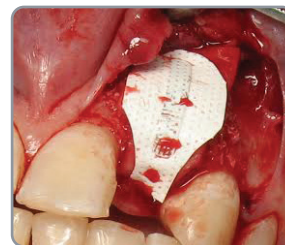
Clinical view of tooth #10



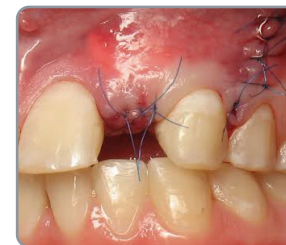
A CBCT radiologic study demonstrated a 3mm wide alveolar ridge on the left side.



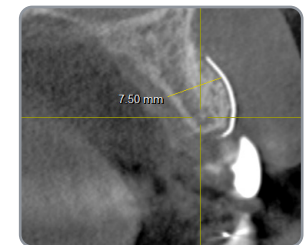
Following flap elevation and decortication of the facial surface of the alveolar process, a mixture of **MinerOss** allograft and slower resorbing **MinerOss X** xenograft was placed.



The composite graft was covered with a collagen barrier (**Mem-Lok RCM**) and a titanium-reinforced PTFE barrier (**Cytoplast**) to maintain the space.



Tension-free primary closure of the mucoperiosteal flap was obtained and maintained with 6-0 polypropylene sutures for 3 weeks.



A CBCT at 7 months post-op shows excellent ridge augmentation with expansion from 3mm of width to 7.5mm of width prior to implant placement.

# the choice is yours

BioHorizons offers clinicians a variety of hard and soft tissue solutions. The diverse family of regeneration products can be used in a wide variety of grafting applications:

- ridge and sinus augmentation
- extraction socket grafting
- periodontal defects
- grafting for implant placement
- root coverage
- gingival augmentation

## MinerOss® X Cancellous

MinerOss X is an anorganic bovine bone mineral matrix that is physically and chemically comparable to the mineral structure of human bone. The complex trabecular architecture and natural consistency allow for ideal bone formation at the defect site.

## MinerOss® Cortical & Cancellous Chips

The unique blend of cortical and cancellous chips forms an osteoconductive scaffold providing volume enhancement and effective site development for successful dental implant placement.



## Mem-Lok® Resorbable Collagen Membrane (RCM)

Mem-Lok RCM is engineered from highly purified type I collagen to provide an increased resorption period and ensure optimal bone regeneration.

### MinerOss® X Cancellous

Particle size range

<b>MINX-CAN0.25GR</b>	250-1000µm	0.25g/0.5cc
<b>MINX-CAN0.5GR</b>	250-1000µm	0.5g/1.0cc
<b>MINX-CAN1.0GR</b>	250-1000µm	1.0g/2.0cc
<b>MINX-CAN2.0GR</b>	250-1000µm	2.0g/4.0cc

### MinerOss® Cortical & Cancellous Chips

Particle size range

<b>MO-C0.5</b>	600-1250µm	0.5cc
<b>MO-C1.0</b>	600-1250µm	1.0cc
<b>MO-C2.5</b>	600-1250µm	2.5cc

### Mem-Lok® RCM

<b>RCM-ML1520</b>	15mm x 20mm
<b>RCM-ML2030</b>	20mm x 30mm
<b>RCM-ML3040</b>	30mm x 40mm

\*Xenograft-derived bone graft matrix. Mem-Lok® and MinerOss® are registered trademarks of BioHorizons. Cytoplast™ is a registered trademark of Osteogenics Biomedical, Inc. Not all products are available in all countries. © BioHorizons. All Rights Reserved.

For more information, contact your local Territory Manager or call Customer Care: **1.888.246.8338**  
Order 24/7 at [store.biohorizons.com](http://store.biohorizons.com)

**BIOHORIZONS®**