Chiyewon

News Letter

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Ti-OSS® CANCELLOUS SUBSTITUTE

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Clinical Results of Ridge Augmentation Using Ti-oss® bone graft material in the Aesthetic Zone

Article 12. Horizontal and vertical ridge augmentation in the aesthetic zone

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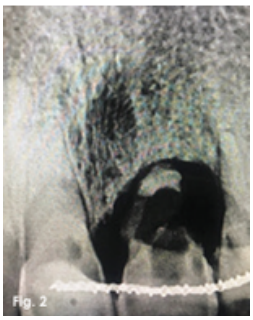
Lanka Mahesh, Sandeep Singh, Sagrika Shukla, India

ABSTRACT: This case report presents horizontal and vertical ridge augmentation in the aesthetic zone using **Ti-oss® bovine xenograft** at sites 21 and 22. A patient with a long-standing edentulous area and severe bone loss was treated with simultaneous grafting and immediate implant placement. One-year follow-up confirmed **successful implant integration** without complications and showed **excellent hard** and **soft tissue regeneration**, supporting **Ti-oss®** as a reliable option for **ridge augmentation** and **implant success**.

Managing combined horizontal and vertical ridge defects in the anterior maxilla can be challenging. A patient with a long-standing edentulous space was treated using Ti-oss® xenograft in combination with a non-resorbable membrane. Immediate implants were placed in sites 21 and 22.

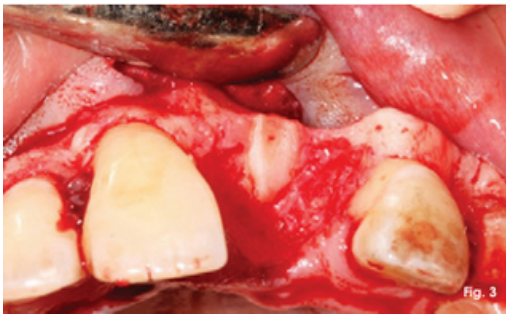
Pre-operative clinical image

Healthy patient with a long-standing edentulous space at site 21, bone loss near 22, and a splinted crown following trauma.



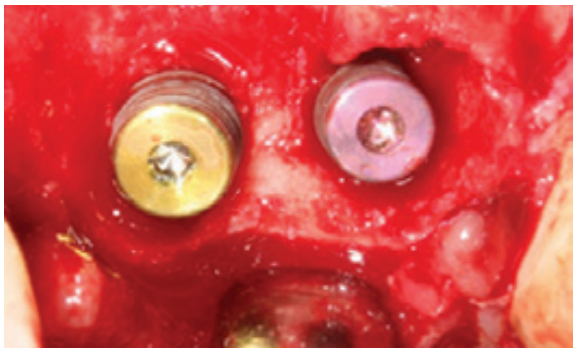
Crown on 21 with composite-wire splint and bone defect.

C.2.e Defect type



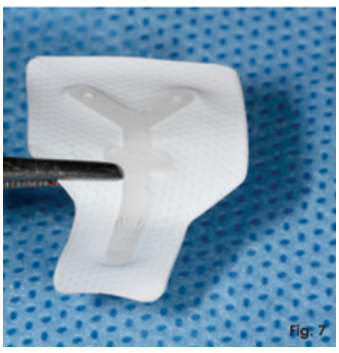
Surgical view of a C.2.e defect showing combined ridge loss, requiring advanced bone regeneration for implant placement.

Clinical images of implant placed



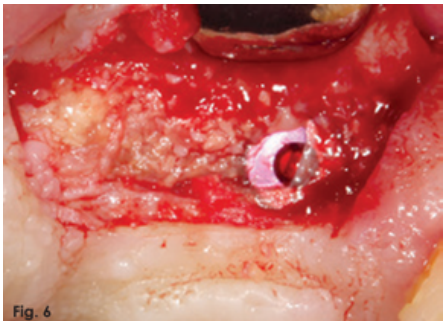
Immediate implants were placed at 21 and 22 after grafting with Ti-oss® and a titanium-reinforced membrane.

Graft material: **Ti-oss® 05-0512**



Titanium reinforced membrane stabilized graft and space.

At membrane removal



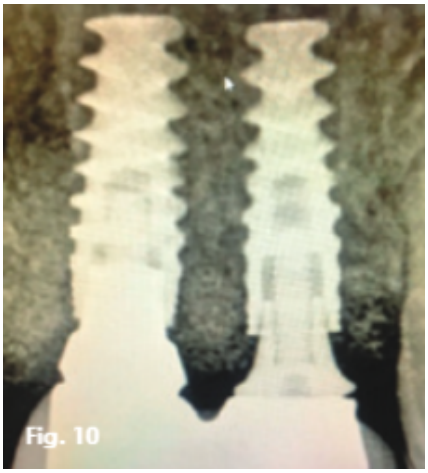
Five-month membrane removal showing good bone regeneration and healthy soft tissue.

X-ray confirms correct implant placement at sites 21 and 22.

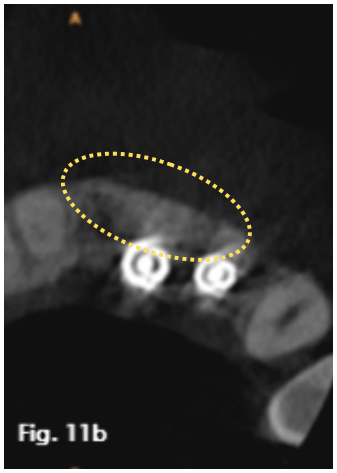
Implant loading at 5 months

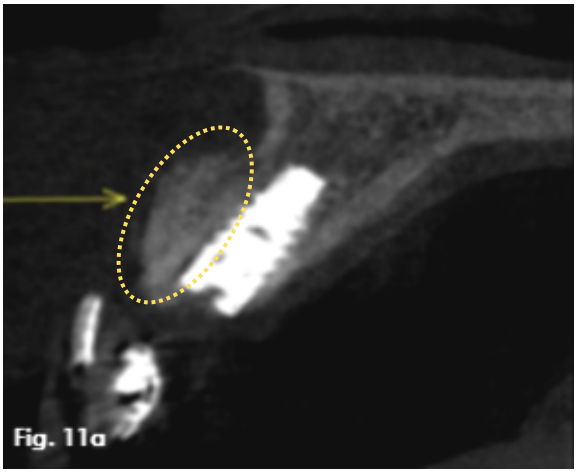
Implant loading after 5 months, with well-integrated fixtures and healthy surrounding tissue.

Post-op 1 year follow up



One year X-ray shows stable bone and implant success.





Radiopaque images show dense, mature bone arround the implants, confirming successful graft integration.

Discussion:

This clinical case demonstrates that **Ti-oss®** bone graft material has shown good results and efficacy in treating large defects with no complications. The follow-up examinations, including clinical and radiographic assessments at 5 months and 1 year, revealed **excellent hard** and **soft tissue healing**, **bone volume maintenance**, **bone quality**, and **soft tissue stability**.

These results highlight the **osteopromoting properties** of **Ti-oss®**. Its surface has a **pre-HA structure** and **Octacalcium Phosphate (OCP) crystals** with excellent bone regenerating properties.

Ti-oss® also have **unique fish-fin-like surface structures**, which contribute to its **osteopromoting properties** and **enhance bone regeneration**. This advanced technology is produced by only a limited number of companies worldwide.

Thank You

Ti-OSS®
CANCELLOUS SUBSTITUTE

Octabone

Premium Brand

Cost-Effective Brand

Ti-oss® Bone Substitute - Vial Type

Re	Code	Product/Weight		Size
1	25-0512	Ti-oss®	0.25g/0.6CC	0.5-1.2mm
2	05-0512	Ti-oss®	0.5g/1.2CC	0.5-1.2mm
3	10-0512	Ti-oss®	1.0g/2.3CC	0.5-1.2mm
4	20-0512	Ti-oss®	2.0g/4.5CC	0.5-1.2mm
5	25-1217	Ti-oss®	0.25g/0.75CC	1.2-1.7mm
6	05-1217	Ti-oss®	0.5g/1.5CC	1.2-1.7mm
7	10-1217	Ti-oss®	1.0g/3.0CC	1.2-1.7mm
8	20-1217	Ti-oss®	2.0g/6.0CC	1.2-1.7mm
Economic Line				
9	25-0210	Ti-oss®	0.25g/0.45CC	0.2-1.0mm
10	05-0210	Ti-oss®	0.5g/0.8CC	0.2-1.0mm
11	10-0210	Ti-oss®	1.0g/1.5CC	0.2-1.0mm
12	20-0210	Ti-oss®	2.0g/3.0CC	0.2-1.0mm

Octabone ® Bone Substitute - Vial Type

Re	Code	Product/Weight		Size
1	25-0512	Octabone®	0.25g/0.6CC	0.5-1.2mm
2	05-0512	Octabone®	0.5g/1.2CC	0.5-1.2mm
3	10-0512	Octabone®	1.0g/2.3CC	0.5-1.2mm
4	20-0512	Octabone®	2.0g/4.5CC	0.5-1.2mm
5	25-1217	Octabone®	0.25g/0.75CC	1.2-1.7mm
6	05-1217	Octabone®	0.5g/1.5CC	1.2-1.7mm
7	10-1217	Octabone®	1.0g/3.0CC	1.2-1.7mm
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12	20-0210	Octabone®	2.0g/3.0CC	0.2-1.0mm

Ti-oss® Bone Substitute - Syringe Type

13	S25-0512	Ti-oss®	0.25g/0.6CC	0.5-1.2mm
14	S05-0512	Ti-oss®	0.5g/1.2CC	0.5-1.2mm
15	S25-1217	Ti-oss®	0.25g/0.75CC	1.2-1.7mm
16	S05-1217	Ti-oss®	0.5g/1.5CC	1.2-1.7mm
Economic Line				
17	S25-0210	Ti-oss®	0.25g/0.45CC	0.2-1.0mm
18	S05-0210	Ti-oss®	0.5g/0.8CC	0.2-1.0mm

Octabone® Bone Substitute - Syringe

13	S25-0512	Octabone®	0.25g/0.6CC	0.5-1.2mm
14	S05-0512	Octabone®	0.5g/1.2CC	0.5-1.2mm
15	S25-1217	Octabone®	0.25g/0.75CC	1.2-1.7mm
16	S05-1217	Octabone®	0.5g/1.5CC	1.2-1.7mm
Economic Line				
17	S25-0210	Octabone®	0.25g/0.45CC	0.2-1.0mm
18	S05-0210	Octabone®	0.5g/0.8CC	0.2-1.0mm

Ti-oss® Bone Substitute - Block Type

19	BLK8812	Ti-oss® Block	8 x 8 x 12mm
20	BLK8825	Ti-oss® Block	8 x 8 x 25mm

Octabone® Bone Substitute - Block Type

19	BLK8812	Octabone® Block	8 x 8 x 12mm
20	BLK8825	Octabone® Block	8 x 8 x 25mm

Ti-OSS Guide®

Ti-oss® Guide - Biodegradable Collagen Membrane

21	DTG-10002	Ti-oss® Guide	15 x 30mm

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