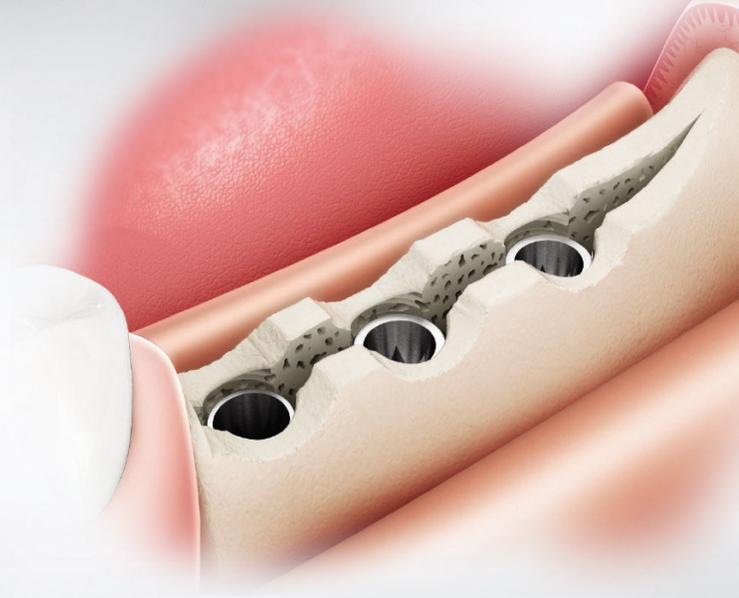


Esset KIT

Easy-To-Learn Ridge Split Technique

Our Esset Kit is the safe and effective solution for placing implants in patients with a narrow alveolar ridge. Compared to conventional ridge splitting methods, the Esset Kit's specialized tools, safely and predictably split and expand the crestal bone, preparing the site to accept dental implants.

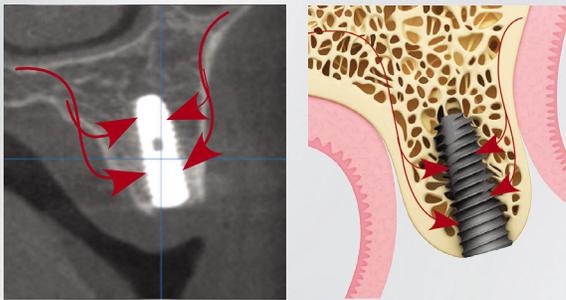


Reduced Recovery Time

Using the Esset Kit for narrow ridge cases can shorten the healing time by not using bone grafts but utilizing natural stem cells from the expanded bone. Dental implants are placed with high degree of stability.

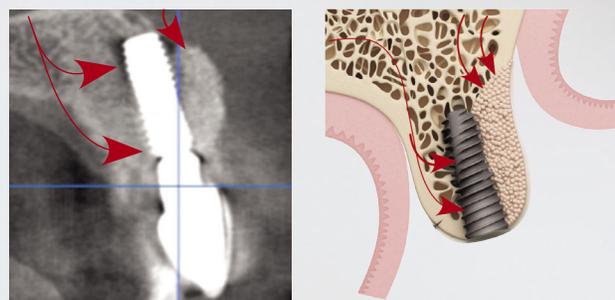
Ridge Splitting Procedure

In ridge split cases, the dental implant is enveloped by the patient's natural bone. Sufficient blood supply surrounding the implant allows for bone regeneration to occur quicker. This shortens the bone healing process and integration of the implant.



Guided Bone Restoration Procedure

In GBR cases, bone cells are supplied from a limited direction. Bone generation requires significant time to go through the multiple stages of healing; incorporation replacement, modeling and RAP.



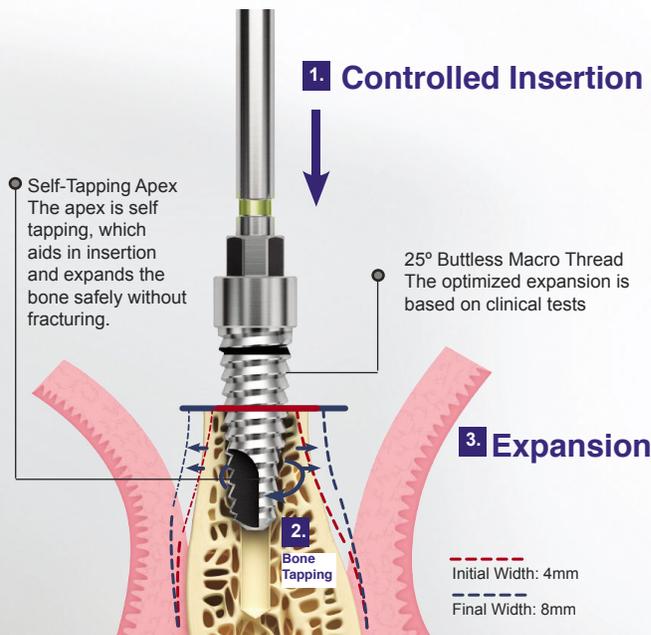
Clinical Evidence

1. This technique splits and expands the buccal-lingual bone to create space that allows for new bone to form. In other words, blood supply through the periosteum of the buccal cortical bone is maintained to form the osseous tissue and the lamellar bone.
2. The treatment period is relatively shorter compared to GBR procedures (4 to 6 months). Alternative bone expansion technique for implant placement in atrophic edentulous maxilla and mandible.

Alternative bone expansion technique for implant placement in atrophic edentulous maxilla and mandible.

Demetriades et al. Journal of Implantology, 2011

Minimal Bone Fracture with High Stability



ISQ Results

High initial stability is achieved even after ridge splitting due to the bone's elasticity.

Patient: Male, 50 Y.O.
#20-18 & #30-31



Photo Courtesy of Dr. B.H. Suh, Prosth-Line Dental Clinic

Table 1. Comparison of Elasticity

Elastic modulus of dental materials

Porcelain	6.89 x 10,000
Resin	0.27 x 10,000
Cortical	0.272 -1.5 x 10,000Pa
Trabecular	0.015 -0.137 x 10,000 Pa

[Source] Forst HM, Vital Biomechanics, 1987

Bone fracture occurs at an instant force of 10,000 to 20,000^{mm}, and the use of the viscoelastic properties of bone can allow increased expansion of bone volume-wise. Bone tapping effect is observed at the apical part of the bone in which there is strong resistance, while bone expansion occurs in the coronal part with less resistance. This increases the horizontal bone volume and prevents bone fracture.

The Esset Kit is the solution for easy, safe and stable implant placement in Narrow Ridge Situations

Benefit from the solutions of Hiossen[®] Implant

Since 2006 Hiossen[®] Implant a subsidiary of Osstem[®] Implant has been on a quest to provide professional dental surgeons with quality dental implants, service, and solutions for their patients.

Today, we are among the top five-implant manufacturers in the United States offering quality dental implants to more than 20 countries worldwide. We provide a complete array of dental implant systems and a variety of systematic educational programs with a unique and specialized training center equipped with state-of-the-art facilities, a renowned faculty, and curriculum management.

For more information

To request more information contact your local Hiossen manager or visit our website at www.hiossen.com.