

# Osseodensification

## Guided Expansion Graft\*

For cases with initial ridge width of  $\leq 3.0$  mm

- USE PILOT DRILL IN (CW) MODE AND DRILL TO IMPLANT DEPTH AND ANGULATION
- USE THE SUBSEQUENT DENSAH™ BURS IN SMALLER INCREMENTS TO EXPAND THE OSTEOTOMY AND TO INCREASE BONE PLASTICITY
- FINAL EXPANSION DIAMETER SHOULD NOT EXCEED THE PLUS ONE FORMULA (INITIAL RIDGE WIDTH + 1 MM)
- GRAFT THE NEWLY FORMED SOCKET WITH A 70/30 CANCELLOUS/CORTICAL COMBINATION ALLOGRAFT
- ALLOW HEALING FOR 3-6 MONTHS
- RE-ENTER THE SITE TO PREPARE FOR IMPLANT PLACEMENT USING OSSEODENSIFICATION WITH THE DENSAH™ BURS

### Step 1:

Flap the soft tissue using the technique indicated for the implant position. **Drill to implant depth and angulation** using a narrow Pilot Drill preferably 1.3 mm – 1.5 mm. (CW-speed 800-1500 rpm with copious irrigation).

### Step 1



### Step 2:

Depending upon the implant type and diameter, follow the corresponding Implant System Drilling Protocol starting with the smallest Densah™ Bur to 1 mm deeper than the intended implant length. Run the Densah™ Burs in OD mode (counterclockwise, drill speed 800-1500 rpm with copious irrigation). **Use the subsequent Densah™ Burs in smaller increments to increase bone plasticity and expand the osteotomy.** For example, use Densah™ Bur (2.0) after the pilot then expand with Densah™ Bur (2.3) then move to Densah™ Bur (2.5) before introducing the Densah™ Bur (3.0).

### Step 2



### Step 3:

Increase osteotomy diameter in small increments until reaching the intended expansion. As the bur diameter increases, the bone will slowly expand to the final expansion diameter. **Final expansion diameter should not exceed the plus 1 formula (initial ridge width + 1 mm).** For example, if you start with a 3 mm ridge, the maximum expected final osteotomy diameter is not to exceed  $(3+1) = 4$  mm.

### Step 3



Step 4



Step 4:  
Graft the newly formed socket/osteotomy including surrounding area with your preferred bone allograft materials, **preferably a 70/30 cancellous/cortical ratio**. Use membrane and try to achieve tension free primary closure. Allow healing for 3-6 months.

12 WKS Healing

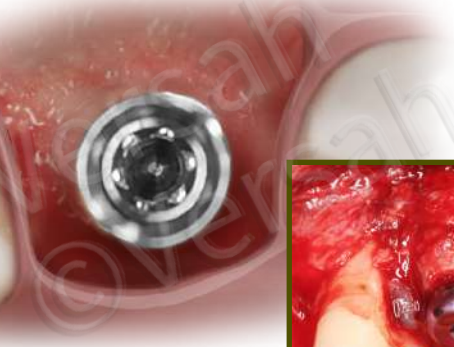


Step 5



Step 5:  
Re-enter the site and perform Osseodensification to facilitate further expansion if needed and place the implant. Use the Densah™ Burs in smaller increments. **Do not under-prep the osteotomy beyond 0.5 mm - 0.7 mm in the maxilla or 0.2 mm - 0.5 mm in the mandible.**

Step 6



Step 6:  
If using the surgical motor to tap the implant into place, the unit may stop when reaching the placement torque maximum. Finish placing the implant to depth with a torque indicating wrench. The proper diameter implants should be included in the treatment plan and on hand at the surgical appointment.



12 WKS



12 WKS



2 YRS



2 YRS

Case courtesy of Dr. Salah Huwais



\*Clinician experience and judgement should be used in conjunction with this suggested use protocol

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