

CRESTAL APPROACH

SINUS KIT

Lateral & Trephine Drills

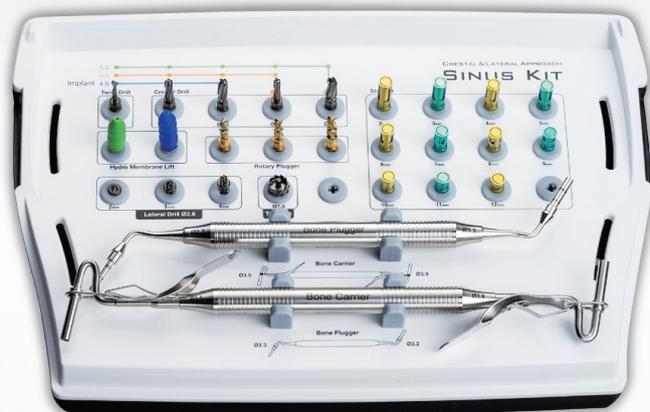


OVERVIEW

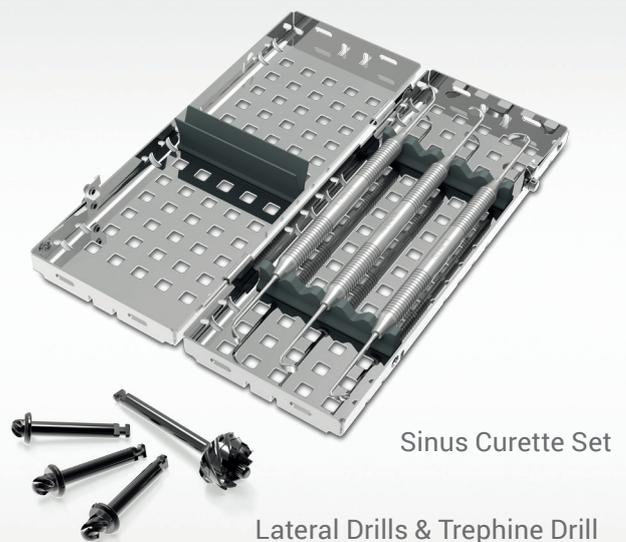
The Crestal & Lateral Approach Sinus Kit quickly cuts through the maxilla while the hydromembrane lift uses hydraulic pressure to safely lift the sinus membrane and allows for safe and successful crestal and lateral sinus procedures.

Indication	Maxillary Sinus Elevation by Crestal & Lateral Approach	
Implant Systems	Luna S / Sola S / Stella S	
Components	Ø2.0 Twist Drill (1) Sinus Drills (4) Rotary Pluggers (3) Hydro Membrane Lifts (2) Stoppers (11) Sinus Lateral Drills (3)	Trephine Drill (1) Bone Carrier (1) Bone Plugger (1) Depth Gauge (1) Titanium Bowl (1)

Prevent sinus membrane damage with the “Sinus Crestal & Lateral Solution”



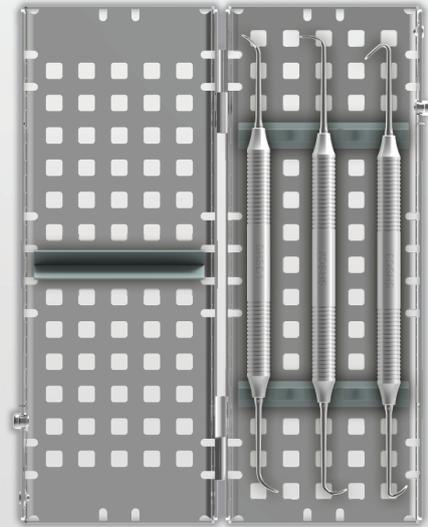
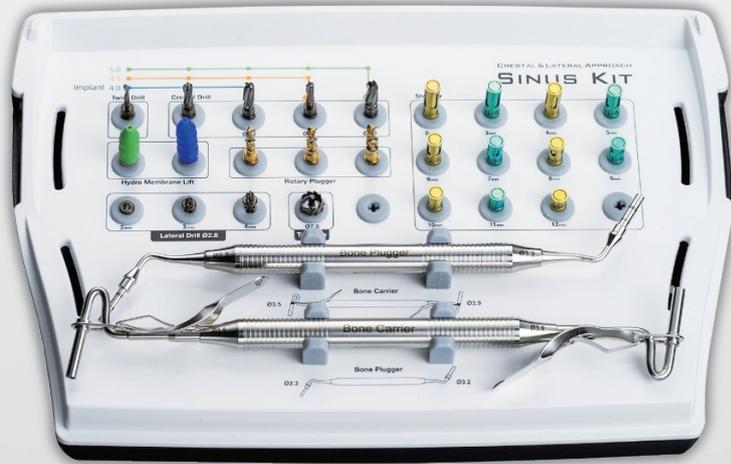
Sinus Kit



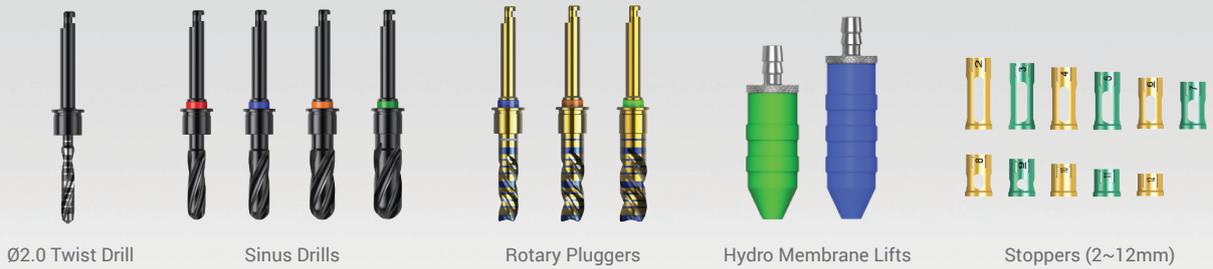
Sinus Curette Set

Lateral Drills & Trephine Drill

Sinus Kit Crestal & Lateral Approach



Crestal Approach



Ø2.0 Twist Drill

Sinus Drills

Rotary Pluggers

Hydro Membrane Lifts

Stoppers (2~12mm)

Lateral Approach



Lateral Drills

Trepine Drill

Sinus Curettes

Instruments



Titanium Bowl



Bone Carrier



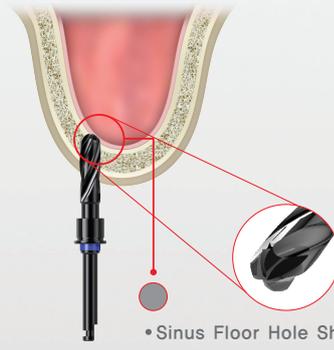
Bone Plugger



Depth Gauge

COMPOSITION

Sinus Drill

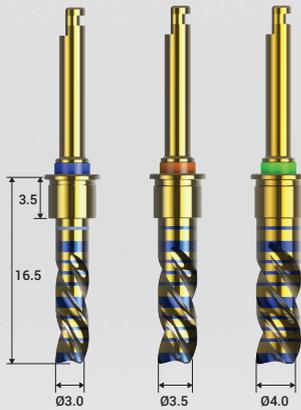


• **Sinus Floor Hole Shape**
When the dome type sinus drill is used the entrance to the sinus cavity will always be circular.

- The round dome type drill has been designed to quickly penetrate the sinus floor without damage to the fragile sinus membrane
- To ensure sufficient initial stability during fixture implantation, 4 different diameter drills have been developed
- Can be used with uneven bone
- Suggested RPM: 400–600



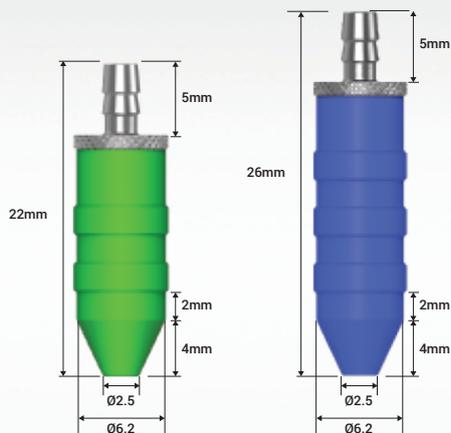
Rotary Pluggers



- The drill will clean the opening to the sinus cavity of any overhanging edges
- Bone graft material can be easily moved into the sinus cavity using minimal force
- Bone graft material will be formed into a wide dome shape within the sinus cavity

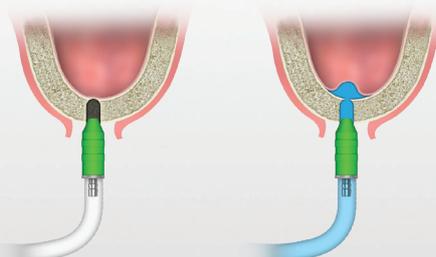


Hydro Membrane Lifts



Hydro Membrane Lift

Membrane Elevation



- Check if the sinus floor has been opened after drilling
- Separate the membrane from the sinus floor
- Two sizes are available

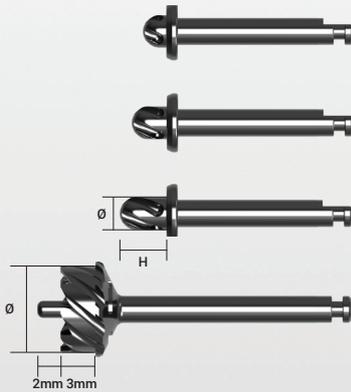


- Membrane lift use for a crestal approach procedure



- Membrane lift use for a lateral approach procedure

Lateral Drills & Trepine Drill



• Lateral Drills

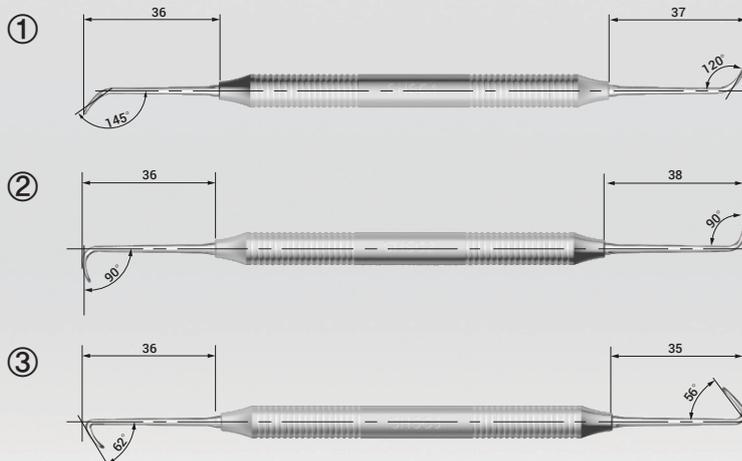
- Ø2.8/ lengths: 2mm, 3mm, 4mm
- Lateral drills are milled with a stopper for safety
- The round type drill penetrates the sinus wall while preserving the integrity of the sinus membrane

• Trepine Drill

- Ø 7.5/ guide 2mm, total 5mm
- Minimize sinus damage while decreasing surgery time



Sinus Curette Set



Curette Use Tip!

1. Using curette ①, peel away the membrane in the immediate vicinity of the removed bone window and then continue distally
2. Use curette ② to separate the bone and sinus membrane crestally
3. Use curette ③ (along with ②) to separate the bone and membrane towards the anterior
 - ※ If there is good access, use ②, if there is poor access use ③
4. With curette ① (and ②) raise the membrane on the medial side

※ We recommend the shorter end of the curettes be use initially and when the membrane has been elevated slightly, the longer end be used

SIS Sinus Kit SINUS LATERAL APPROACH

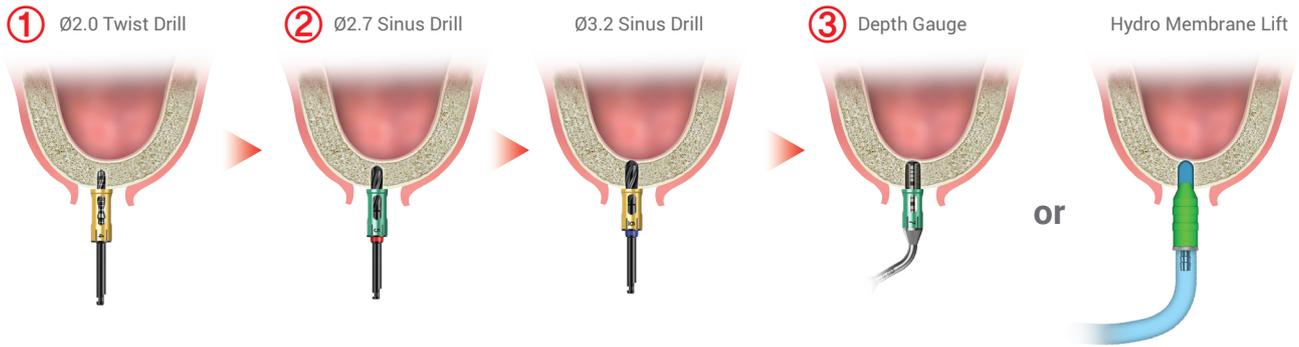
Dr HyeonJong Kim (Kaya Dental Hospital)

The hydo-lateral approach in the SIS Sinus Kit reduces the surgeon's concern about tearing the membrane. I have found that the hydromembrane lift successfully separates the membrane from the bone allowing the trephine drill to operate safely. After the bone graft material has been placed, the small size of the window allows it to be replaced and for the operation to be completed without an additional membrane.



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SURGICAL PROCEDURE : Crestal Approach



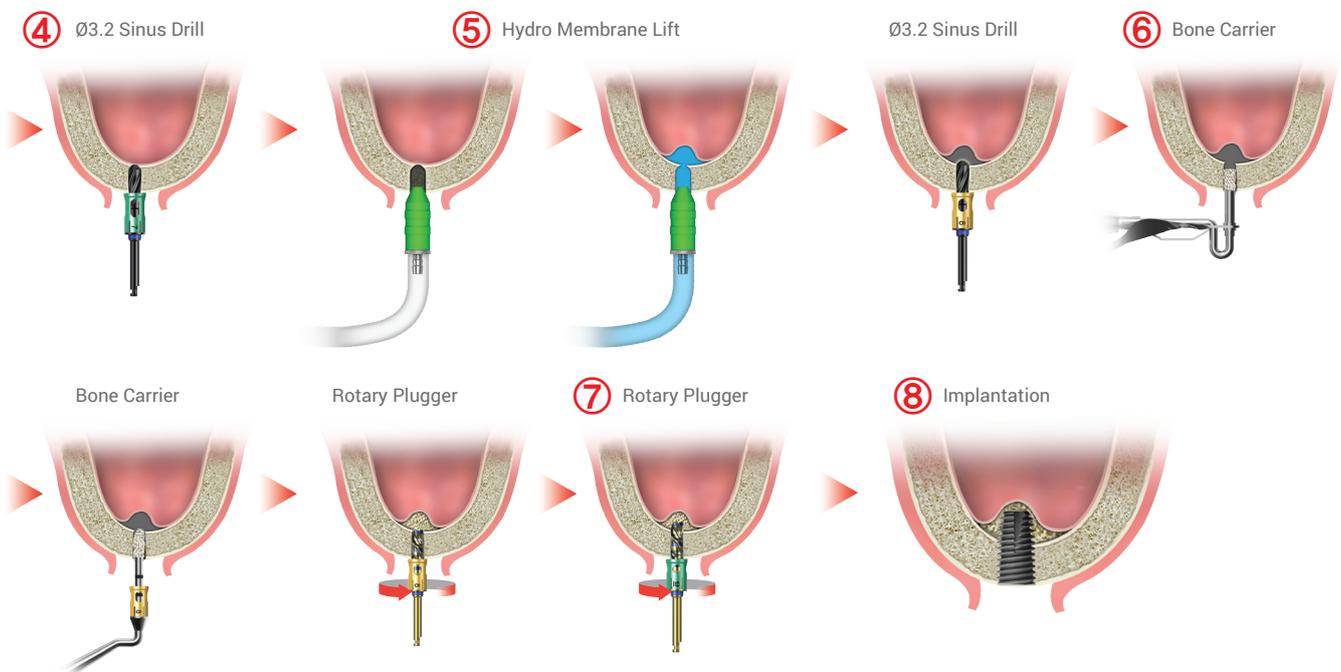
- ① Use the 2.0 twist drill to drill to approximately 1mm beneath the sinus floor
- ② Use the sinus drills to progressively widen the osteotomy site to the appropriate diameter (400~600rpm)
- ③ Check if the sinus floor has been opened using:
 - i) A front surface mirror
 - ii) Depth gauge and stopper
 - iii) Hydromembrane lift
 - We recommend the use of a syringe with 1cc of saline. The tubing will hold an additional 1cc
 - Aspirate with the saline solution 2-3 times
 - If the floor has been successfully opened, very little saline will leak from the hole and the fluid will be thoroughly mixed with blood during aspiration
 - If the floor has not been opened, back pressure will be substantial when attempting to inject the saline solution and the fluid will mix with air during aspiration



Sinus cavity not penetrated

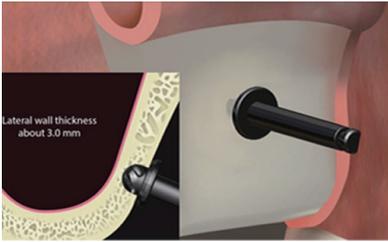


Sinus cavity penetrated

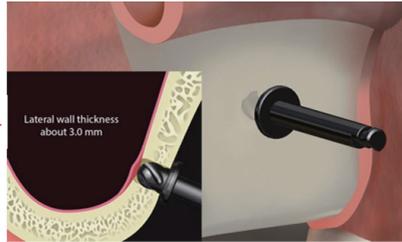


- ④ If the sinus floor has not been opened, use the sinus drill and a 1mm shorter stopper and drill again. Repeat steps 3 and 4 as required
- ⑤ When the sinus floor has been successfully opened, and the hydromembrane lift has been used to separate the membrane from the sinus floor, use a 1mm shorter stopper with the sinus drill to remove any overhanging bone fragments
- ⑥ Use the bone carrier and bone plugger to introduce graft material to the osteotomy site, followed by the rotary plugger, with the appropriate stopper, 3-5 times
- ⑦ Using a 1mm shorter stopper, insert the rotary plugger into the osteotomy site and sinus cavity
- ⑧ After the correct volume of bone graft material has been inserted, use the final diameter sinus drill or rotary plugger to clean up the site, and insert the fixture

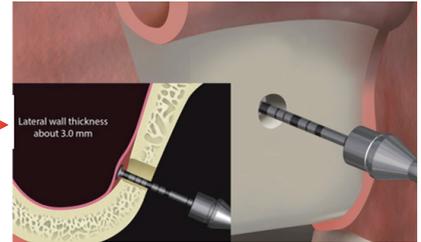
SURGICAL PROCEDURE : Lateral Approach



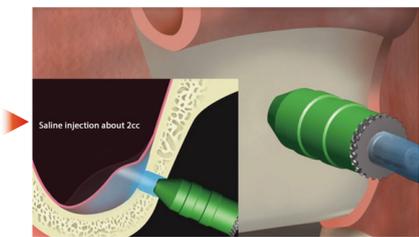
① Begin with the 2.0 lateral drill and penetrate the sinus wall



② Use the 3.0mm lateral drill to enter the sinus cavity
A. The sinus wall has an average thickness of 3.0mm
B. Use the 4.0mm lateral drill if necessary



③ Check that the sinus cavity is open using the depth gauge



④ Use the hydromembrane lift with 2ccs of saline and aspirate 2-3 times
- The tubing holds 1cc
- Additional 1cc in the syringe



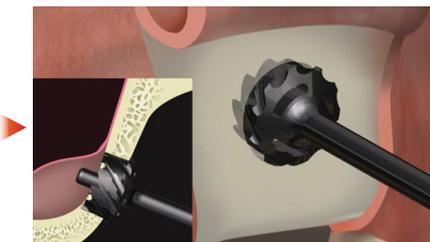
Sinus cavity not penetrated



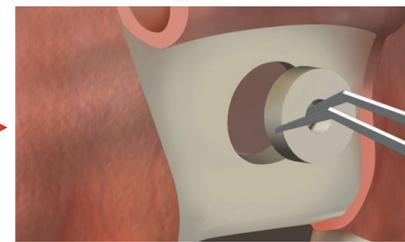
Sinus cavity penetrated

※ Using the hydromembrane lift to check for successful opening of the sinus wall

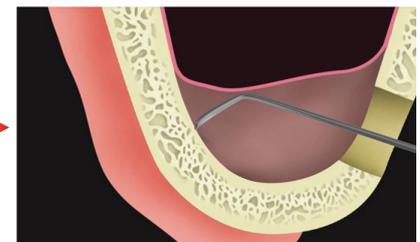
- If the sinus wall has NOT been opened, there will be back pressure when attempting to inject the saline and the tube will fill with air bubbles
- If the sinus wall has been opened, the saline will not leak from around the sinus cavity entrance, and during aspiration the saline will mix with blood



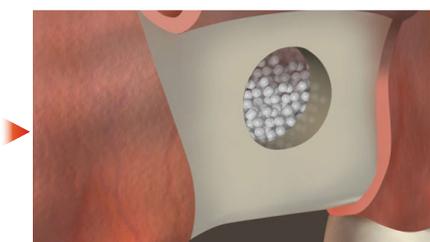
⑤ Use the trephine drill to create a window into the sinus cavity



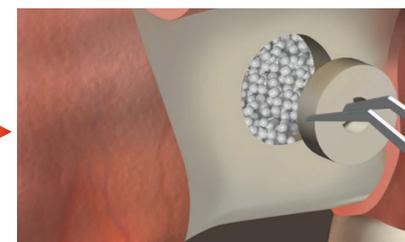
⑥ Remove the bone cover



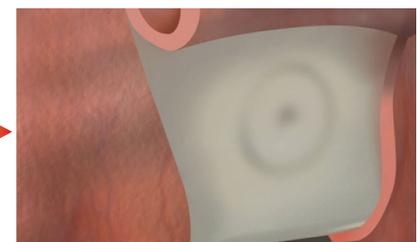
⑦ Use the sinus curettes to separate the sinus membrane from the bone



⑧ Insert bone graft material



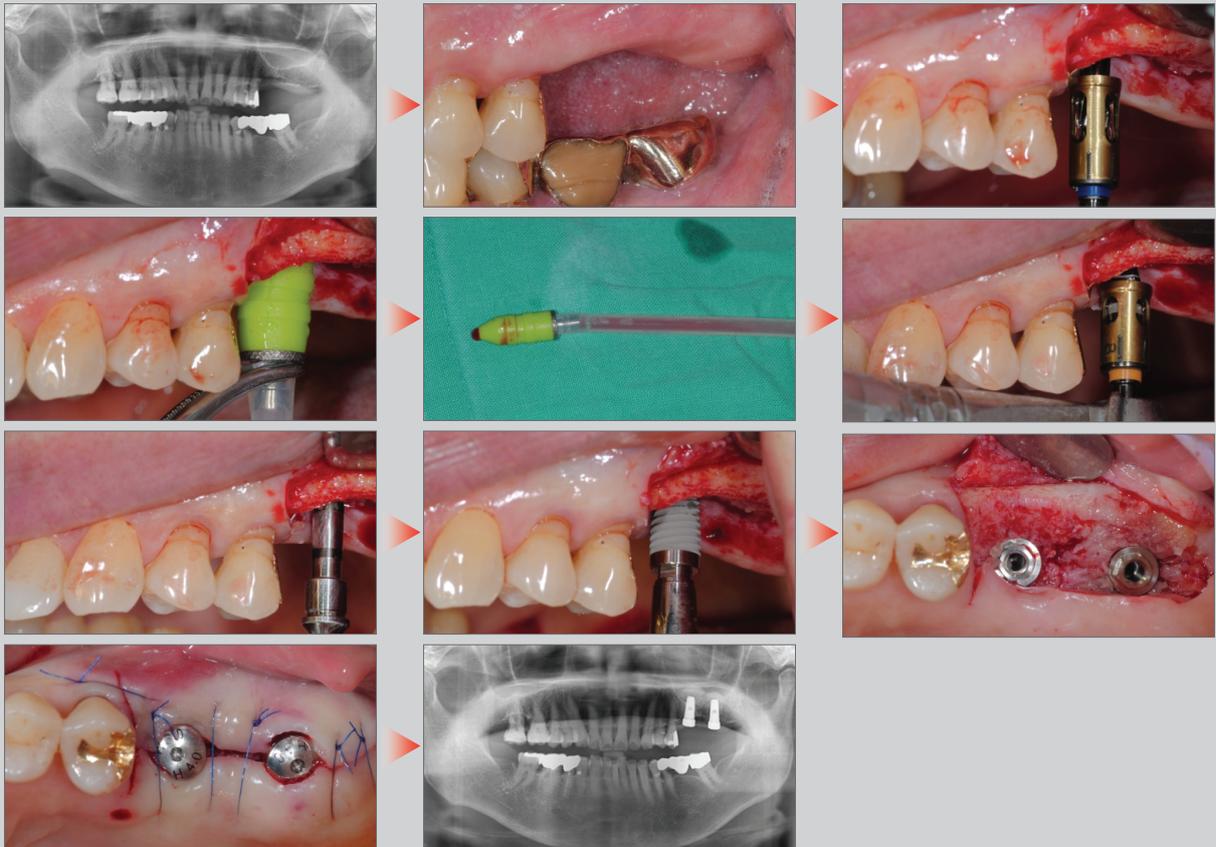
⑨ Replace the cover



⑩ Optional: Cover with membrane

CLINICAL CASE

Crestal Approach



Lateral Approach

