



MARROW CELLUTION™ BONE GRAFT PROCEDURE

Bone Grafting Kit

MC-RAN-8C

MC-RAN-8CSTS

MC-RAN-13A

USA & Foreign Patent(s) Pending

IMPROVING THE STANDARD OF CARE*

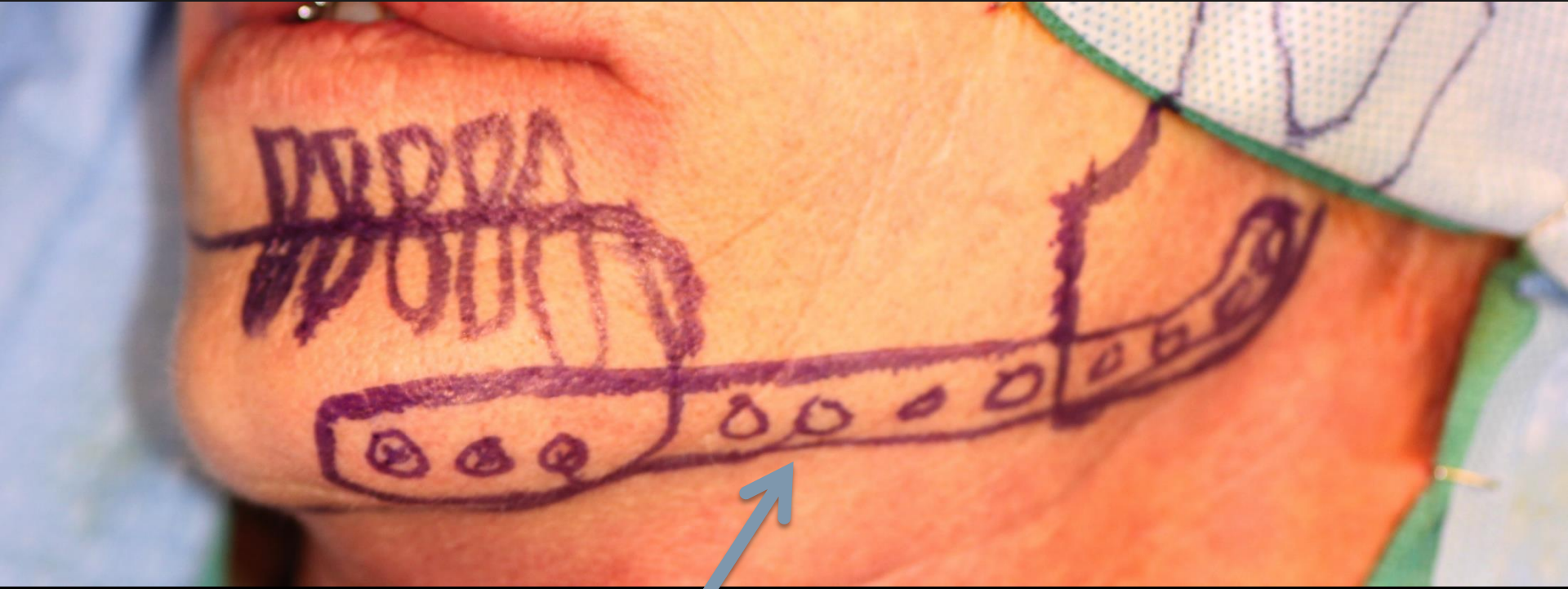
By using the Marrow Cellution™ Bone Grafting Kit, the clinician is able to obtain both high quality marrow aspirate and collect bone dowels in a minimally invasive manner; therefore, the morbidity of the procedure is lessened while the cellular quality of the graft is improved.

*Standard of care is bone marrow aspiration and autogeneous bone.

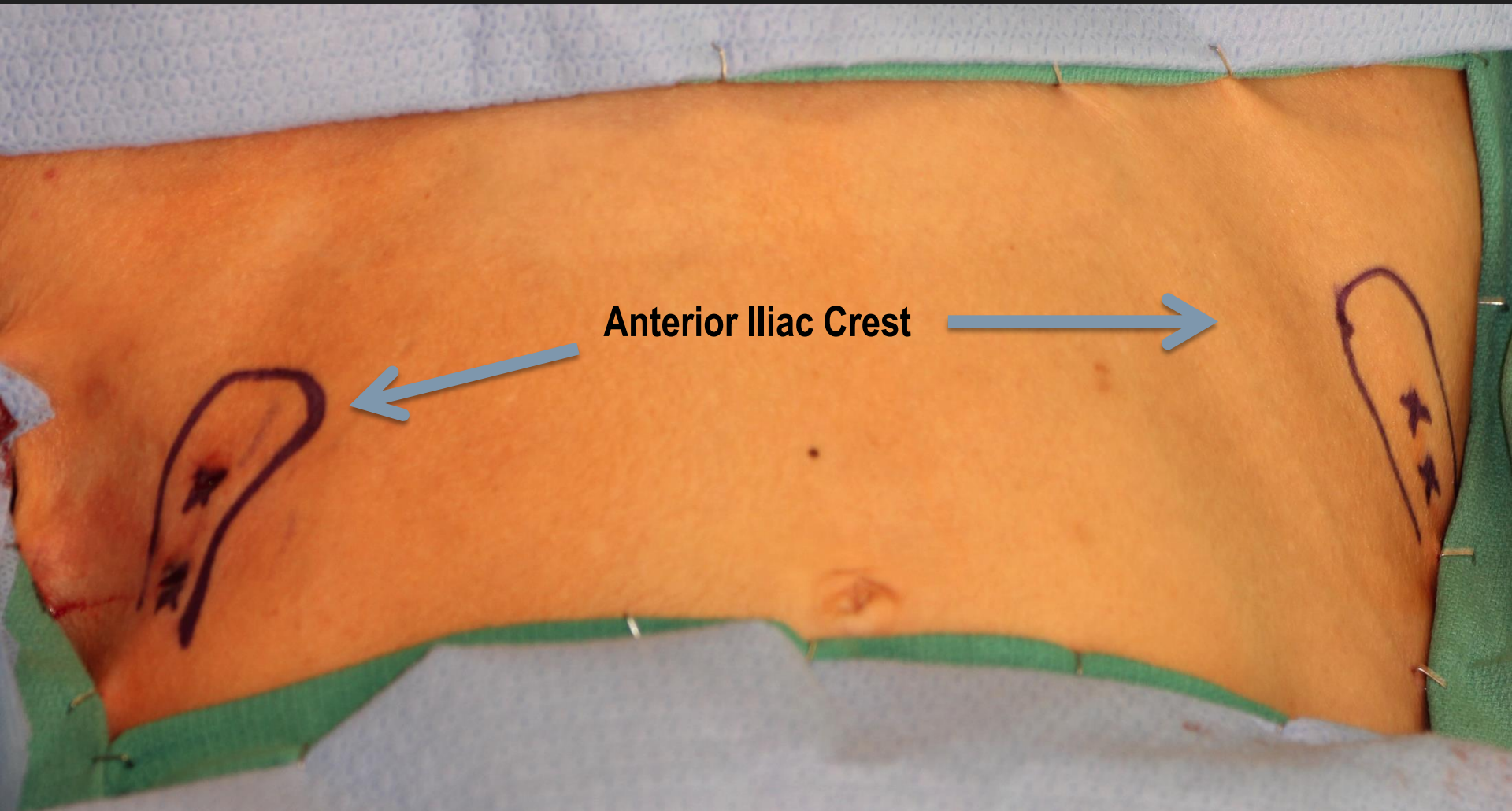
USA & Foreign Patent(s) Pending

BONE GRAFT COMPONENTS



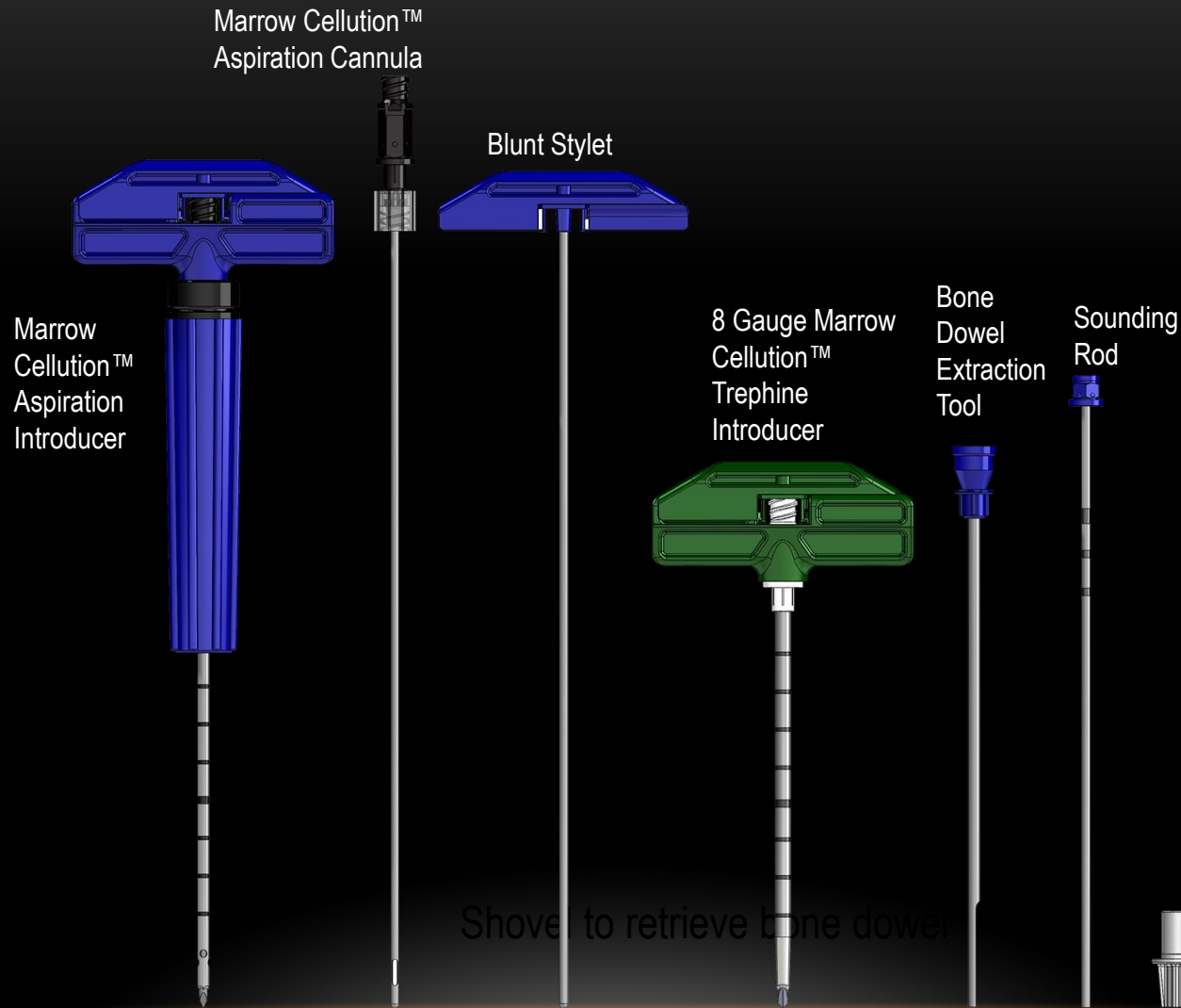


Bone defect of the mandible



Anterior Iliac Crest

MARROW CELLUTION™ BONE GRAFTING COMPONENTS

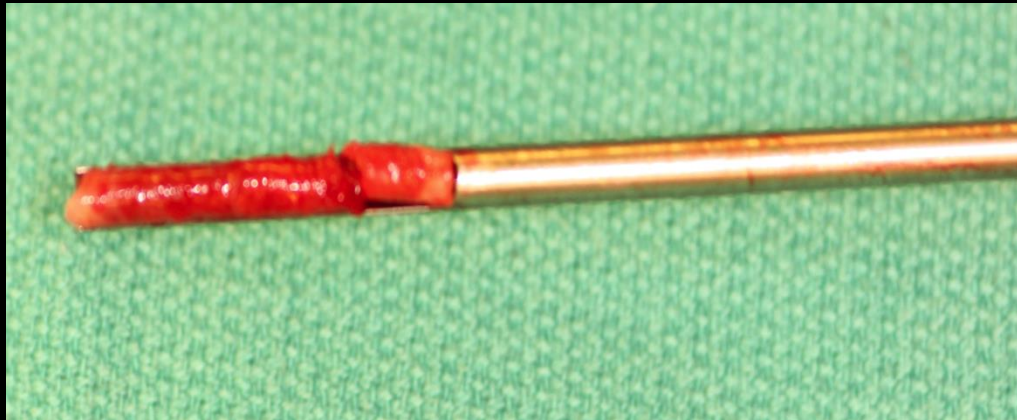


STEP BY STEP INSTRUCTIONS*

- Obtain Adequate BMA for Hydration (please refer to Marrow Cellution™ Aspirate Step by Step guide for instructions).
- Insert 8 Gauge Trephine Needle with Sharp Stylet until anchored in the cortex.
- Remove Sharp Stylet
- Advance cannula into bone marrow space with a gentle clockwise – counterclockwise motion, causing cancellous bone to enter the cannula.
- Insert sounding rod to measure length of bone inside cannula. Remove Sounding Rod and advance further if more volume is desired.
- Once adequate length is determined, insert extraction tool through the handle, pressing firmly with palm to trap the trephine specimen within the extraction tool.
- Remove whole needle with extraction tool still inserted.
- Remove Extraction tool to reveal bone dowel.
- Repeat process if multiple dowels are required.

*Abbreviated instructions. Please refer to package insert for complete instructions for use.

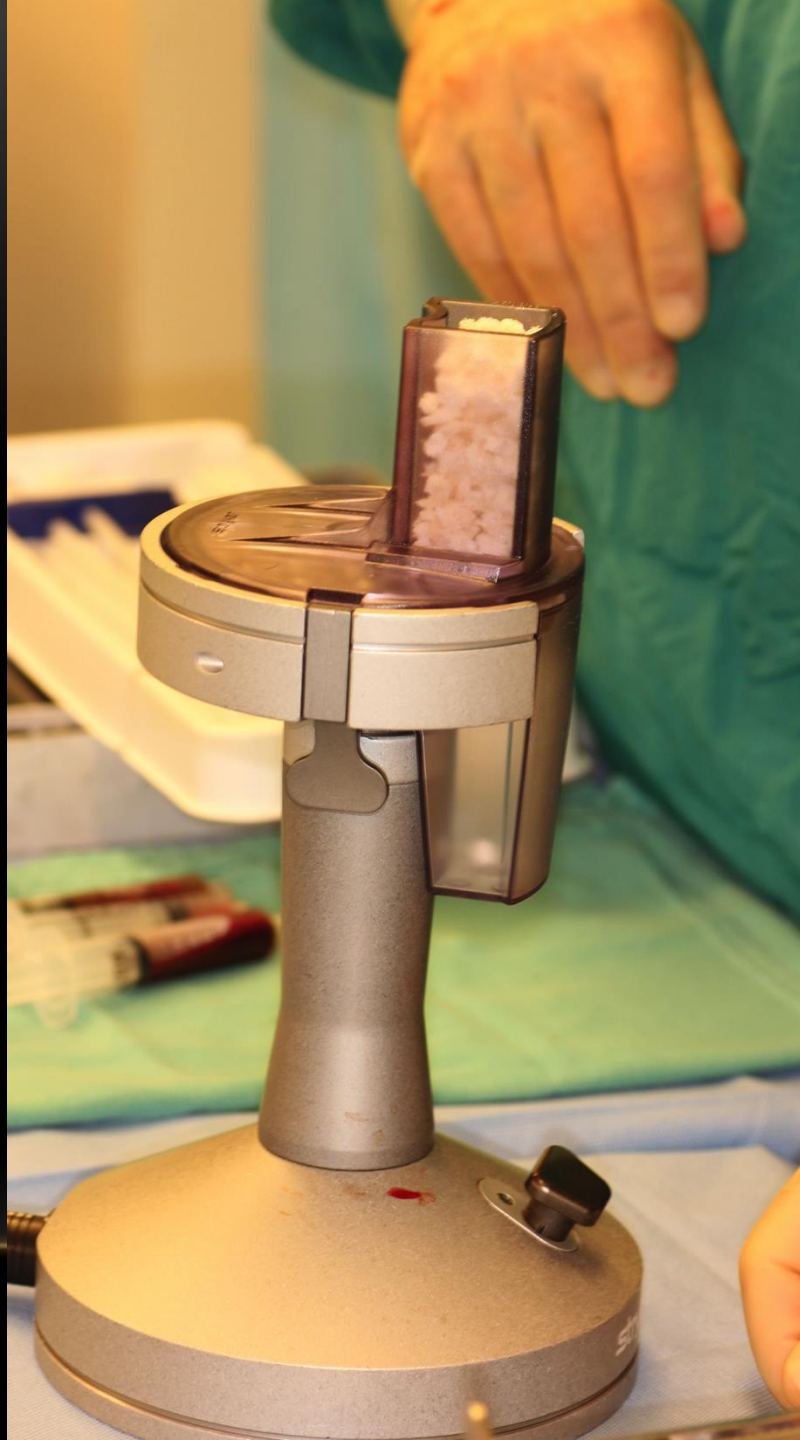
BONE DOWEL IN EXTRACTION TOOL



Bone Dowels



Bone mill to prepare
cancellous graft extender



15 mL CC FDAB

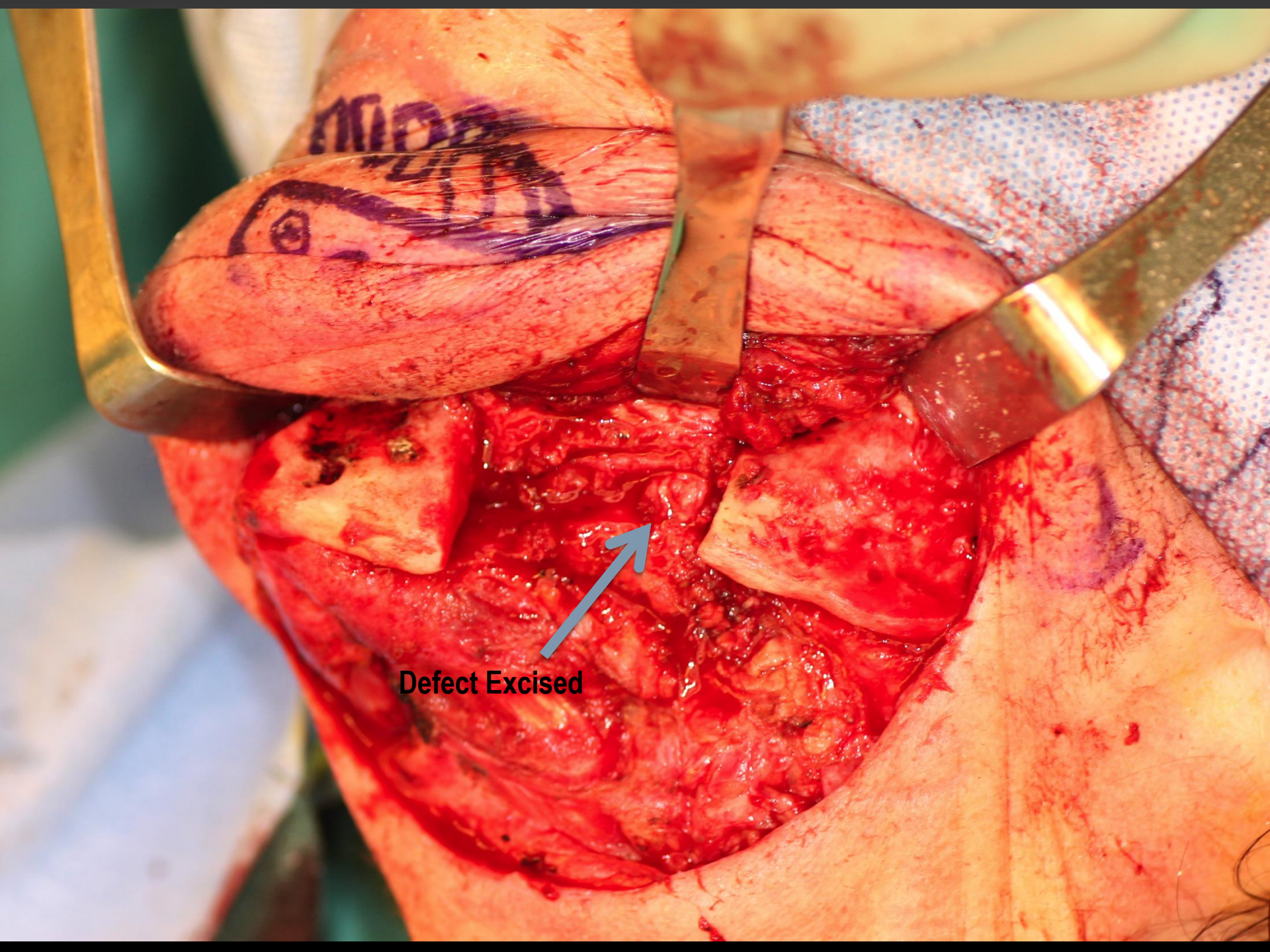
+ 8.4 mg BMP-2

+ 8 BONE CORES

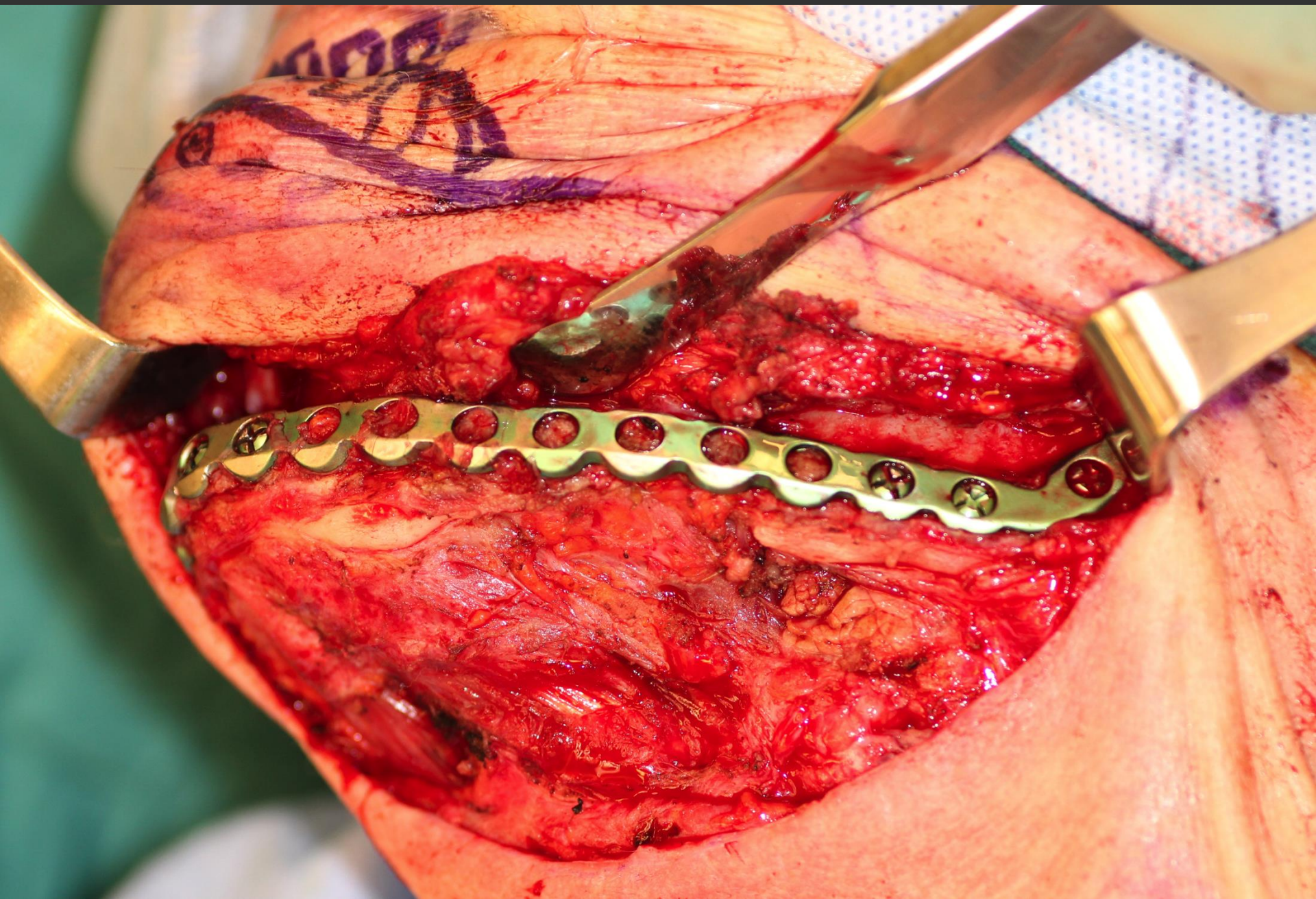
+ 15 BMA



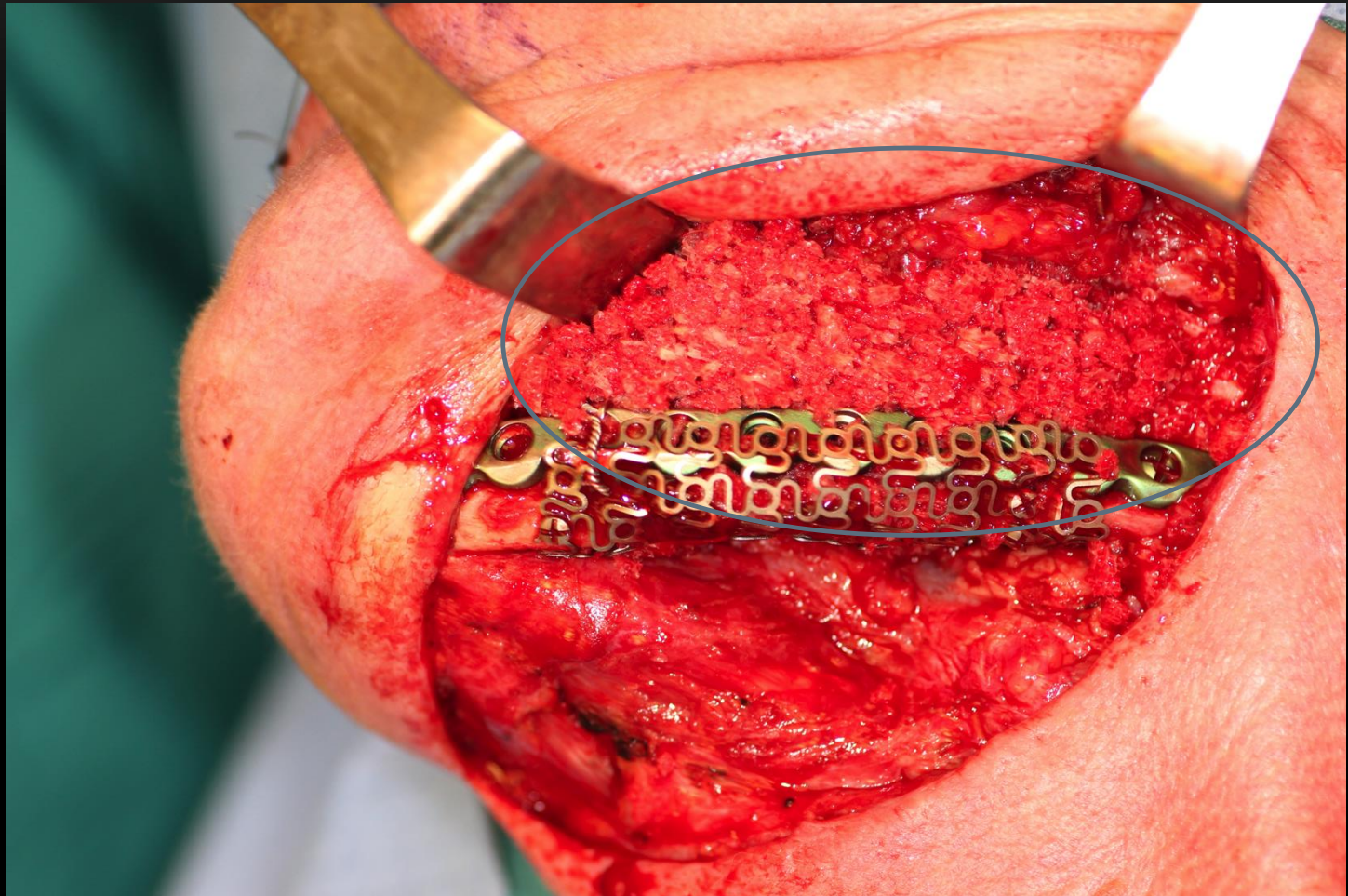
- 15 mL Graft Extender
- 8.4 mg BMP-2
- 8 Bone Dowels
- 15 mL Bone Marrow Aspirate (BMA)



Defect Excised



BONE DEFECT FILLED WITH GRAFT MATERIAL





ONE YEAR FOLLOW UP CT SCAN SHOWS
COMPLETE BONE UNION ABLE TO SUPPORT
IMPLANTATION

