Osteolysis
Procedure Kit

SURGICAL TECHNIQUE

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Osteolysis
PROCEDURE KIT
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Proper surgical procedures and techniques are the responsibility of the medical professional. The following guidelines are furnished for information purposes only. Each surgeon must evaluate the appropriateness of the procedures based on his or her personal medical training and experience.
Prior to use of the system, the surgeon should refer to the product package insert for complete warnings, precautions, indications, contraindications and adverse effects. Package inserts are also available by contacting Wright Medical Technology, Inc.
**SURGICAL TECHNIQUE**

**STEP 1 – ACCESS SITE**

Use the appropriate standard surgical approach (e.g., direct lateral, anterior, posterior lateral) to gain surgical exposure to the acetabulum. | FIGURE 1

Dislocate the femoral head to gain access to the polyethylene liner. | FIGURE 2

**STEP 2 – REMOVE POLYETHYLENE LINER**

Drill with bit

Use the **non-walking drill bit** to drill a pilot hole through the liner, being careful not to drill directly into one of the screw holes or the apical hole. | FIGURE 3
Insert screw
Carefully drive the poly-removal screw through the pilot hole until it reaches the cup (behind the liner). Slowly turn the screw as the liner “walks” up the threads and out of its locking mechanism. | FIGURE 4

STEP 3 – ASSESS COMPONENT STABILITY
A graft material should only be used with a well-fixed cup. The stability of the component is critical to determining whether or not the cup should be left in place or removed as part of the surgical procedure.

Assess the stability of the component using the standard surgical technique. For example, using one (or more) of the following 3 options:
A) Use a curette to scrape the bone/implant rim interface. Ascertain bone apposition to determine if the implant is well-fixed circumferentially. | FIGURE 5
B) Insert a screwdriver or other rigid object (not included) into one of the screw holes and gently “rock” the implant. If motion can be detected, the cup is not well-fixed and removal should be considered. | FIGURE 6
C) Use a bone tamp (not included) to contact the cup rim at several locations around the periphery. If motion can be detected, the cup is not well-fixed and removal should be considered.
STEP 4 – LYSIS DEBRIDEMENT

A thorough debridement to remove the lytic tissue from the defect area will require time and careful, tactile probing of the defect margins. Access the osteolytic defect either through one of the screw holes or through a standard approach superior to the well-fixed implant. | FIGURE 7

WARNING | THIN OR COMPROMISED MEDIAL WALL SHOULD BE AVOIDED WITH INSTRUMENTS.

Use the three tools provided to thoroughly debride the defect area:

- The malleable curette (bendable with the instrument bender, which has multiple options for various degrees of bend) allows debridement of the edges of the cavitary defect, loosening the lytic debris. | FIGURES 8 & 9

- The debris-removal brush can be gently spun, winding the lytic debris around the fibers of the brush. Remove and repeat if needed for more complete removal. | FIGURE 10

- The suction cannula will connect to a standard OR suction, allowing evacuation of the osteolytic debris. | FIGURE 11
STEP 5 – DEFECT CHARACTERIZATION (OPTIONAL)
Characterization and/or measurement of the osteolytic defect can be accomplished by using a non-ionic contrast dye that will facilitate visualization of the dimensions of the lytic defect under fluoroscopy. The dye may also facilitate an understanding of the number of cavitary defects and whether these defects communicate with one another.

Alternately, it is possible to estimate the approximate defect volume by simply injecting saline content into the void and noting the volume used to fill the void. The suction cannula can be used to evacuate the defect upon completion.

STEP 6 - GRAFT DELIVERY
Having debrided the defect area of lytic debris, graft the defect area using the graft of choice.* If using an injectable graft, a long delivery needle has been included for application. Use the included delivery needle (bendable with the instrument bender) to inject the graft material into the defect.

If desired, prior to graft delivery, the screw holes can be blocked using the egress plugs included in the kit to minimize graft material egress. Place the plug onto the distal end of the delivery needle. Gently insert the plug into the screw hole and twist the instrument to disengage it from the plug.

Care should be taken to avoid pressurization of the defect site. | FIGURE 12

WARNING | AVOID EXCESSIVE FORCE WHEN INSERTING PLUG.

FINISHING
Once the graft material has been injected, the plugs should be removed either by pulling the attached strand or by grasping with forceps and the new liner should be inserted.

NOTE | There are five plugs in the kit, and all should be accounted for prior to closing.

Any graft material must be removed from the cup interior to ensure proper seating of the poly liner. Hardened graft material can prevent the liner from seating properly.

* These open voids can be injected with currently available bone void filler products such as PRO-DENSE® Injectable Regenerative Graft, MIIG® High-Strength Injectable Graft, or IGNITE® Injectable Cellular Scaffold.
Osteolysis PROCEDURE KIT

- Non-Walking Drill Bit
- Poly-Removal Screw
- Delivery Needle with Obturator
- Malleable Curette
- Suction Cannula
- Debris-Removal Brush
- Egress Plugs (5)
- Instrument Bender
Disposable Instrument Set

84LK-0000 Osteolysis Procedure Kit
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