OsteoAuger™ Bone Graft Harvesting System

Surgical Technique

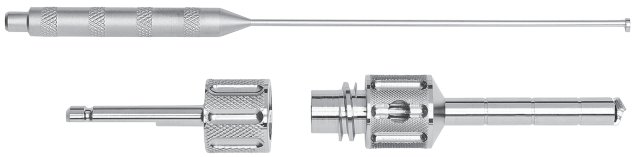
Arthrex®

OsteoAuger™ Bone Graft Harvesting System

Introduction

The OsteoAuger bone graft harvesting system allows surgeons to quickly and effectively obtain morselized autogenous bone with a fully sterile system. Autologous bone naturally contains the patient's own viable cells, thus providing a bone graft with cell, signal, and scaffold that can be placed at the fracture or fusion site.

The OsteoAuger system can be used at common harvesting sites, including the iliac crest, calcaneus, distal and proximal tibia, and distal radius. The system is available in 6 mm, 8 mm, and 10 mm diameters to accommodate the various harvest sites and desired graft volume.



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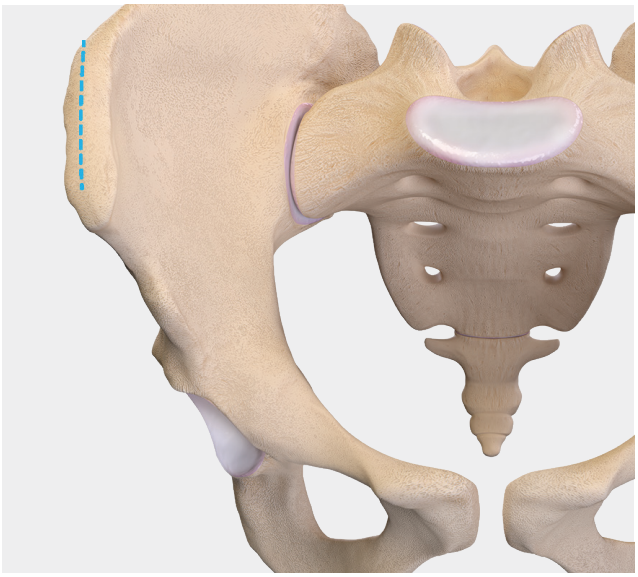
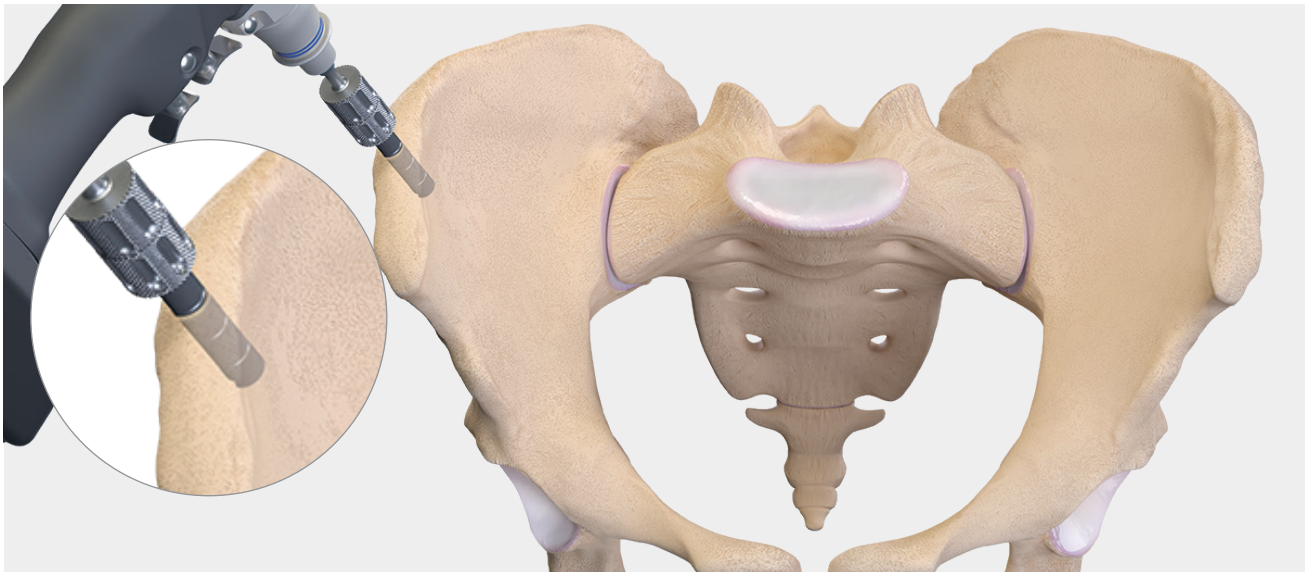
Anterior Iliac Crest Harvesting



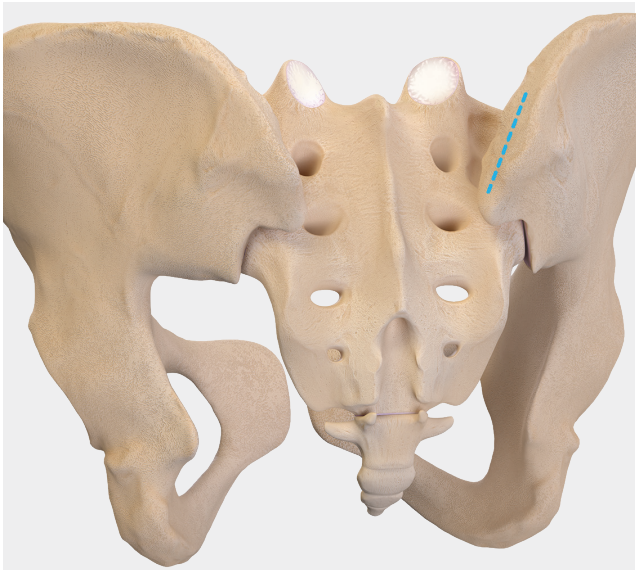
1. Make a skin incision in line with the iliac crest, focusing the incision over the iliac tubercle. Do not stray anterior to the anterior superior iliac spine (ASIS), as the lateral femoral cutaneous nerve course varies.
2. The length of the incision should be slightly longer than the diameter of the selected bone graft harvester.
3. After incising the skin, identify the raphe between the fascia of the external oblique anteriorly and the gluteus medius posteriorly. Incise directly on the iliac wing.
4. Perform a limited subperiosteal dissection over the crest.



1. Retractors can be used to facilitate exposure.
2. Pilot hole creation is not required for the OsteoAuger™ system.
3. Assemble the harvester and AO connection by threading the components together.
4. Place the tip of the bone graft harvester onto the exposed bone at the desired starting point.
5. Angle the harvester 40 degrees medial from the para-sagittal plane in line with the iliac wing.
6. Under power, begin advancing the bone graft harvester into the bone to the desired depth. While reaming and during removal, continue drilling in forward to prevent unthreading the harvester with the AO connection.
7. Additional passes may be made with the bone graft harvester by redirecting the harvester. Up to three additional passes may be made before removal of the harvested bone is needed.
8. Disassemble the harvester by unthreading the trephine and AO connection.

   Note: The proximal end of the bone graft plunger may be inserted into the hole on the harvester to help unscrew the components if additional force is needed.
9. Over a sterile basin, remove the morselized bone graft by inserting the plunger into the distal end of the harvester and pushing the graft out the proximal end.

Posterior Iliac Crest Harvesting

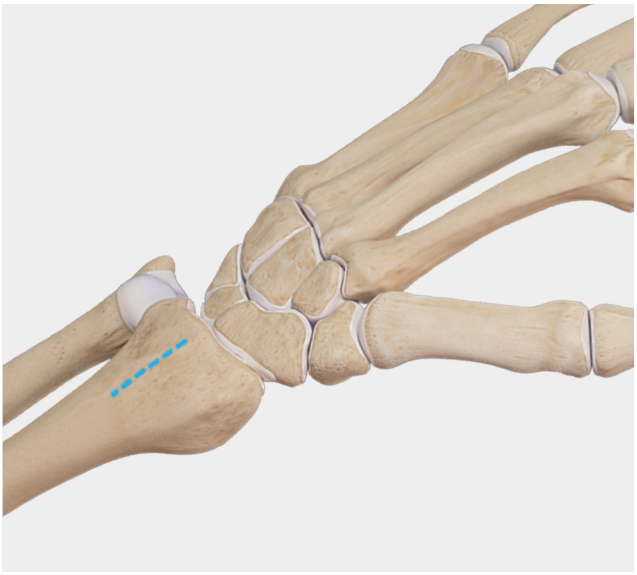


1. A small incision is made over the posterior superior iliac spine (PSIS) in the desired location.
2. The length of the incision should be slightly longer than the diameter of the selected bone graft harvester.
3. Dissection should not extend toward the superior cluneal nerves, which cross approximately 8 cm superolaterally to the PSIS.
4. Perform a limited subperiosteal dissection over the crest.
5. Retractors can be used to facilitate exposure.
6. Pilot hole creation is not required for the OsteoAuger™ system.

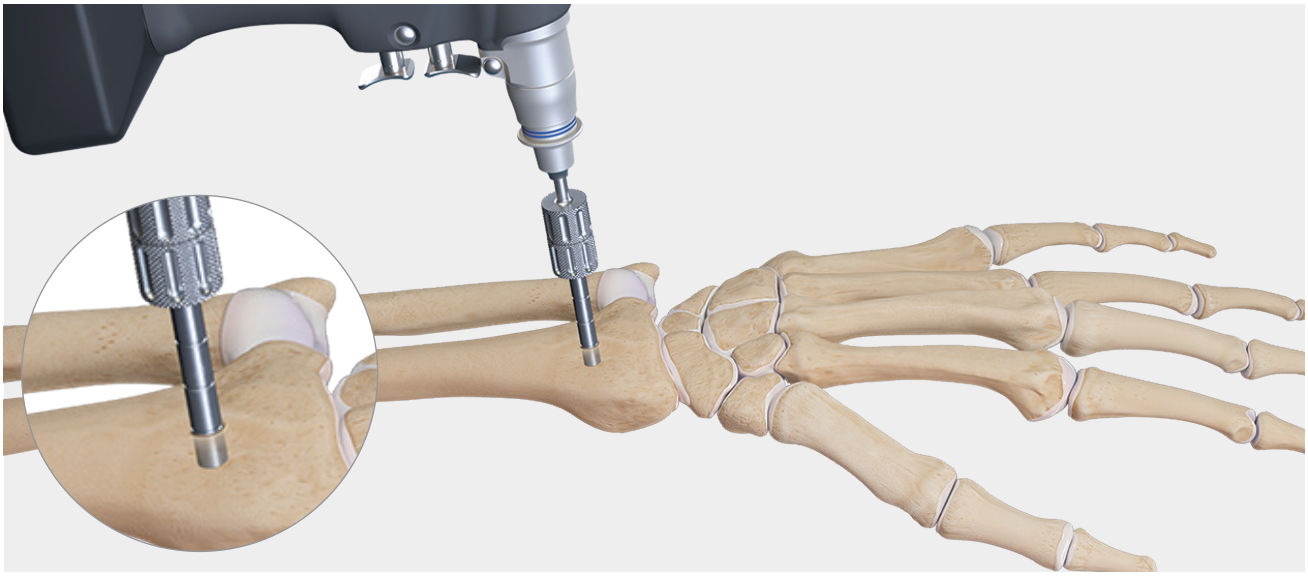
1. Assemble the harvester and AO connection by threading the components together.
2. Place the tip of the bone graft harvester onto the center of the exposed iliac crest, angling about 25° medial to the parasagittal line.
3. Under power, begin advancing the bone graft harvester into the bone to the desired depth. While reaming and during removal, continue drilling in forward to prevent unthreading the harvester with the AO connection.
4. Additional passes may be made with the bone graft harvester by redirecting the cutting drill. Up to three additional passes may be made before removal of the harvested bone is needed.
5. Disassemble the harvester by unthreading the trephine and AO connection.

   Note: The proximal end of the bone graft plunger may be inserted into the hole on the harvester to help unscrew the components if additional force is needed.
6. Over a sterile basin, remove the morselized bone graft by inserting the plunger into the distal end of the harvester and pushing the graft out the proximal end.

Distal Radius Harvesting



1. A tourniquet is recommended to minimize bleeding.
2. A dorsal approach may be used.
3. Make a 3 cm incision between the 3rd and 4th dorsal compartments, proximal to Lister's tubercle.
4. Incise the fascia proximal to the extensor retinaculum.
5. Retraction of soft tissue and surrounding structures is recommended during bone graft harvesting to avoid injury and obtain optimal visualization of the bone.
6. Pilot hole creation is not required for the OsteoAuger™ system.



1. Assemble the harvester and AO connection by threading the components together.
2. Place the tip of the bone graft harvester onto the exposed bone of the desired starting point.
3. Under power, begin advancing the bone graft harvester into the bone to the desired depth, without violating the volar cortex. While reaming and during removal, continue drilling in forward to prevent unthreading the harvester with the AO connection.
4. Additional passes may be made with the bone graft harvester by redirecting the cutting drill. Up to three additional passes may be made before removal of the harvested bone is needed.
5. Disassemble the harvester by unthreading the trephine and AO connection.

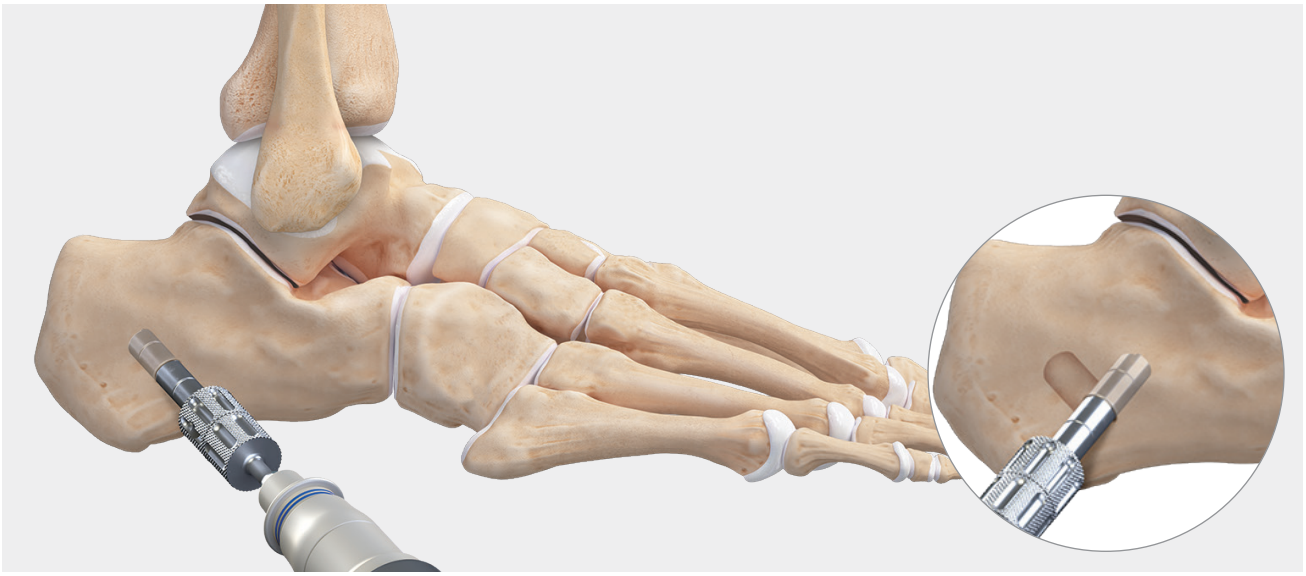
   Note: The proximal end of the bone graft plunger may be inserted into the hole on the harvester to help unscrew the components if additional force is needed.
6. Over a sterile basin, remove the morselized bone graft by inserting the plunger into the distal end of the harvester and pushing the graft out the proximal end.

Calcaneus Harvesting

1. A small incision is made over the lateral aspect of the calcaneus, posterior and inferior to the peroneal tendons and sural nerve.

   Note: Fluoroscopy can be utilized to assist with incision placement.

2. Using blunt dissection, continue the incision all the way down to the lateral wall of the calcaneus.
3. The length of the incision should be slightly longer than the diameter of the selected bone graft harvester.
4. Pilot hole creation is not required for the OsteoAuger™ system.
5. Assemble the harvester and AO connection by threading the components together.



1. Retraction of soft tissue and surrounding structures is recommended during bone graft harvesting to avoid injury and obtain optimal visualization.
2. Place the tip of the bone graft harvester onto the exposed bone at the desired starting point.
3. Under power, begin advancing the bone graft harvester into the bone to the desired depth, without violating the medial cortex. While reaming and during removal, continue drilling in forward to prevent unthreading the harvester with the AO connection.
4. Additional passes may be made with the bone graft harvester by redirecting the cutting drill. Up to three additional passes may be made before removal of the harvested bone is needed.
5. Disassemble the harvester by unthreading the trephine and AO connection.

   Note: The proximal end of the bone graft plunger may be inserted into the hole on the harvester to help unscrew the components if additional force is needed.

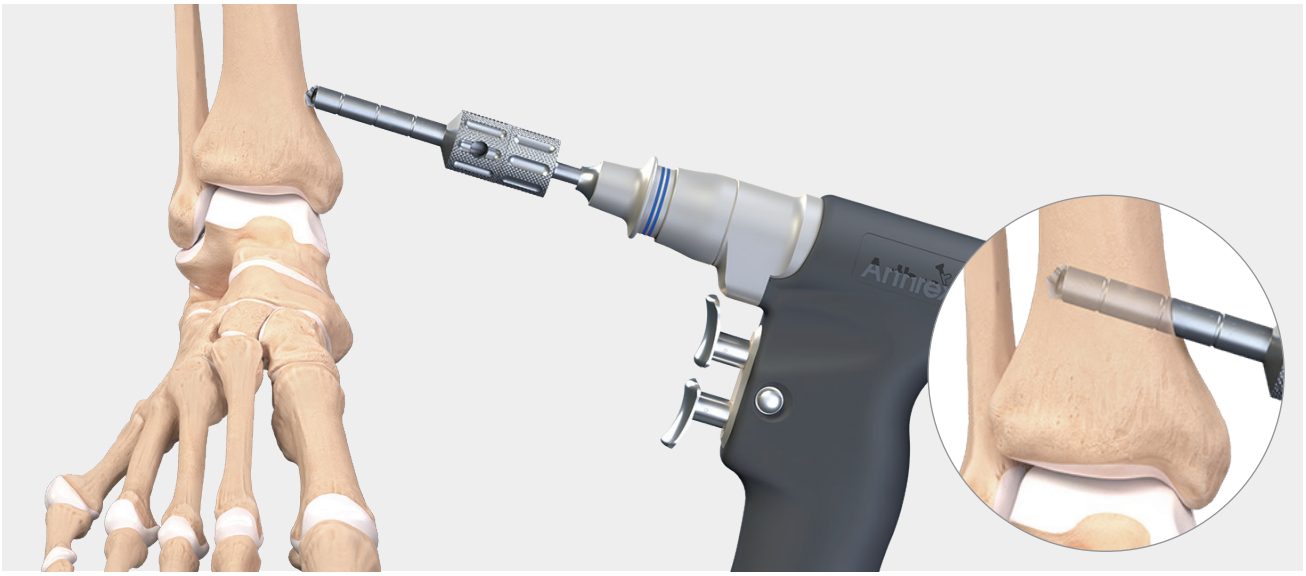
6. Over a sterile basin, remove the morselized bone graft by inserting the plunger into the distal end of the harvester and pushing the graft out the proximal end.

Distal Tibia Harvesting

1. A small incision is made over the medial distal tibia slightly posterior to the midline over the metaphyseal flare to avoid the neurovascular structures.

   Note: Fluoroscopy can be utilized to assist with incision placement.

2. The length of the incision should be slightly longer than the diameter of the selected bone graft harvester.
3. Pilot hole creation is not required for the OsteoAuger™ system.
4. Assemble the harvester and AO connection by threading the components together.



1. Retraction of soft tissue and surrounding structures is recommended during bone graft harvesting to avoid injury and obtain optimal visualization.
2. Place the tip of the bone graft harvester onto the exposed bone of the desired starting point.
3. Under power, begin advancing the bone graft harvester into the bone to the desired depth, without violating the lateral cortex. While reaming and during removal, continue drilling in forward to prevent unthreading the harvester with the AO connection.
4. Additional passes may be made with the bone graft harvester by redirecting the cutting drill. Up to three additional passes may be made before removal of the harvested bone is needed.
5. Disassemble the harvester by unthreading the trephine and AO connection.

   Note: The proximal end of the bone graft plunger may be inserted into the hole on the harvester to help unscrew the components if additional force is needed.

6. Over a sterile basin, remove the morselized bone graft by inserting the plunger into the distal end of the harvester and pushing the graft out the proximal end.

Ordering Information

Product Description	Item Number
OsteoAuger™ Bone Graft Harvesting System, 6 mm	ABS-**8000-06**
OsteoAuger Bone Graft Harvesting System, 8 mm	ABS-**8000-08**
OsteoAuger Bone Graft Harvesting System, 10 mm	ABS-**8000-10**

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This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience, and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level and/or outcomes.

Arthrex Manufacturer, Authorized Representative and Importer information: eIFU - Arthrex

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