

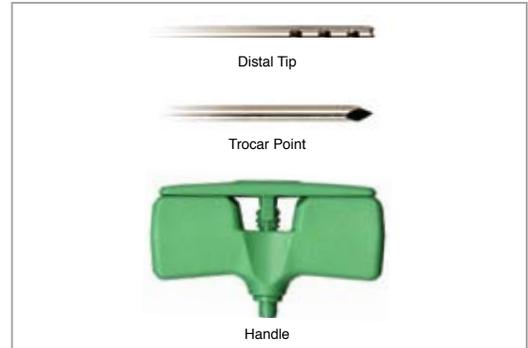
Aspiration of Bone Marrow from the Calcaneus

Surgical Technique

Technique

Step One: Needle and Syringe Preparation

Rinse bone marrow aspirate (BMA) needle (#800-0705) and a 30ml syringe with ACD-A anticoagulant to ensure inner surfaces are coated. Following rinsing, load 30ml syringe with 5ml of ACD-A. This will prevent clotting of bone marrow during aspiration.



Step Two: Needle Insertion

Make a small incision on the lateral side of the ankle, anterior to the insertion of the achilles tendon.



Insert the BMA needle anterior to the achilles tendon and posterior to the sural nerve.



Note: The insertion point may vary based on an individual patient's anatomy.

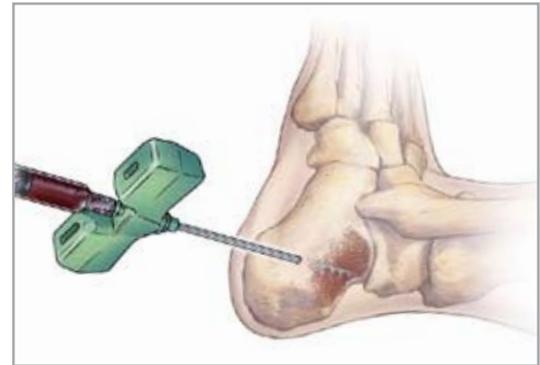
Technique

Step Three: Bone Marrow Aspiration

Using the same insertion point, up to three passes can be made through the calcaneus. For each pass, position the BMA needle at a maximum depth within the cancellous bone. Typical maximum depths are recommended below for each pass through the calcaneus.

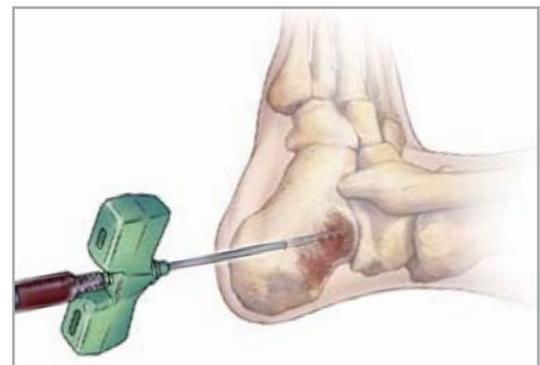


Advance the trocar medial and dorsal to the insertion point. Insert the needle to a maximum depth of 3cm or until resistance from cortical bone on the side opposite the insertion point is met.

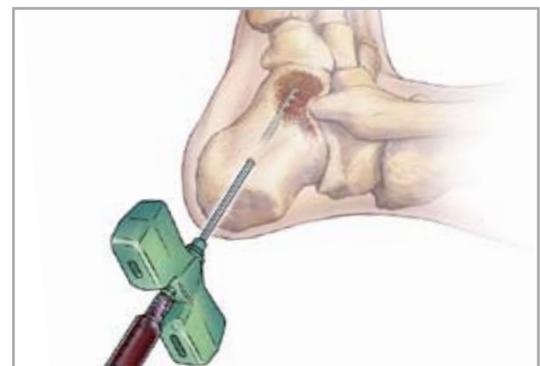


Aspiration: Remove the trocar and connect the anticoagulated syringe to the BMA needle. Aspirate 2-4ml of bone marrow. Withdraw the needle 1cm and repeat the aspiration. Continue this while the end of the BMA needle is positioned in cancellous bone.

Advance the trocar anterior to the first pass towards the sustentaculum talus. Insert the BMA needle to a maximum depth of 5cm or until resistance from cortical bone on the side opposite the insertion point is met. Perform aspiration as described above.



Advance the trocar toward the calcaneocuboid joint. Insert the BMA needle to a maximum depth of 5cm or until resistance from cortical bone on the side opposite the insertion point is met. Perform aspiration as described above.





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GENERAL USE INFORMATION:

- Bone Marrow Transplantation needle.

WARNINGS AND PRECAUTIONS:

- ⊗ This device is designed to be used by a physician.
- Δ These instructions are not meant to define or suggest any medical or surgical technique. The individual practitioner is responsible for the proper procedure and techniques to be used with this device..
- Δ Check if the inner package is unopened and damaged. In case of damaged inner package, do not use the product.
- Δ Check the expiry date and the gauge.
- Δ Possible allergic reactions should be considered.
- Δ After use consider it as waste material.
- Δ Store in a cool and dry place, protect from light .
- Δ Use of the device is restricted only to physician .
- Δ Ethylene Oxide sterilized.

Δ Sterility and integrity guaranteed only if observed with the prescribed conditions.

Δ It must be used only in hospitals.

INSTRUCTIONS FOR USE:

1. After suitable anesthesia is achieved, place the patient in the ventral supine position.
2. Using sterile technique, prepare the skin with antiseptic and drape.
3. Hold the needle with the proximal end in palm and the index finger against the shaft near the tip. This position stabilizes the needle and allows for better control.
4. Introduce the needle through the skin and bring it into contact with the posterior iliac crest.
5. Using gentle, but firm pressure, advance the needle, rotating it in an alternating clockwise/counterclockwise motion. Entrance into the marrow cavity is generally detected by decreased resistance. (All of the side holes at the distal end of the needle must be introduced into the marrow cavity beyond the cortical bone, otherwise air and extra bony soft tissue may appear with the aspirated marrow).
6. Once needle is in place, remove the stylet by rotating the upper section 90°, and pulling straight out.
7. Attach a syringe with a luer taper to the hub of the bone marrow harvest needle using a firm push and twist motion.
8. Apply suction by withdrawing the syringe plunger. Remove the syringe with the harvested marrow.
9. Repeat the harvest procedure until an appropriate amount of marrow is obtained to satisfy the clinical requirement.



Sterile - Non pyrogenic - Disposable
Sterile if unopened and undamaged inner packaged

⊗ NOT FOR USE Δ WARNING

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