

Arthroscopic-Assisted Docking Procedure After Bone Transport

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Purpose: Resection of dead bone and fibrous tissue is key to successful docking after bone transport and to treat infected nonunion. However, assessing vitality of the remaining bone is difficult during an open procedure and skin may be fragile.

Methods: With bone ends 7 to 10 mm apart, an arthroscopy is performed with a standard shaver to remove fibrous tissue from the docking area (or nonunion site) and to refresh the bony ends. Fluoroscopy locates the site; needles can be inserted to guide the scope. When releasing water pressure, endosteal bleeding should occur. If not, more shaving is performed. Autologous bone graft can be inserted concomitantly.

Results: Figure 1 demonstrates adequate bleeding from the bone after arthroscopic refreshing.

Conclusion: Arthroscopy of a docking or nonunion site is an elegant, minimally invasive procedure, helpful to resect and evaluate the vitality of bony ends and to percutaneously graft the site, providing a safe, gentle, and efficient docking. During the arthroscopy, the water pressure serves as an internal tourniquet, and as the camera amplifies the picture of the site, an excellent overview is provided.



The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice.