FOOT & ANKLE

Comparative Bilateral MTP Cheilectomy

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TECHNOLOGY PLATFORM

CLARIX®CORD 1K Regenerative Matrix is cryopreserved human Amniotic Membrane and Umbilical Cord (hAMUC). Amniox Medical’s proprietary CRYOTEK® preservation process retains the relevant natural structural and biological characteristics of the hAMUC tissue while devitalizing the living cells. CLARIX®CORD 1K Regenerative Matrix is used as a surgical covering, wrap or barrier.

CLINICAL HISTORY

43-year-old, female diagnosed with bilateral hallux rigidus. Patient presented with symptoms including 8/10 pain at the hallux MTP joint, stiffness (range of motion (ROM) 40° dorsiflexion, 10° plantarflexion), crepitance, and pain with shoe wear. Patient failed nonoperative treatment. A cheilectomy was performed on right toe prior to availability of CLARIX®CORD 1K. Following procedure, the right toe was stiff, its natural resting posture was contracted, and formal physical therapy had to be initiated (FIG. 2: LEFT, FIG. 3 ABOVE). Left toe was corrected following availability of CLARIX®CORD 1K Regenerative Matrix.

PROCEDURE

Center the incision over hallux MTP joint, dorsally and medially to Extensor Hallucis Longus (EHL) tendon. Dissect through the subcutaneous plane and perform capsulotomy and synovectomy. Use a rongeur to remove dorsal osteophyte from hallux metatarsal head and proximal phalanx. Use saw to resect dorsal arthritic portion of hallux metatarsal head (usually 25%).

In this case, a CLARIX®CORD 1K 2.5 x 2.5 cm was used as a soft-tissue adhesion barrier. After cheilectomy, apply CLARIX®CORD 1K over the cancellous bed (FIG. 1). Use 2-0 vicryl suture to tack the matrix to the capsule during closure of the capsule (FIG. 1). Complete standard skin closure. Replace surgical dressing in 5 days and begin gentle passive ROM twice daily. Remove suture, order radiographs, assess ROM and institute physical therapy at 10-14 days. Gradually return to activity by 2-4 weeks and remove limitations at 6-8 weeks.

OUTCOME

Following the CLARIX®CORD 1K application, the swelling was dramatically less and ROM was 30 degrees greater in the left toe (FIG. 1, FIG. 2: RIGHT), despite more recent treatment than ungrafted procedure (2 versus 6 weeks postop). Patient testimony confirmed clinical observation that outcome of procedure supplemented with CLARIX®CORD 1K was far superior to contralateral procedure in terms of postoperative pain, swelling and overall success.