FOOT & ANKLE

Surgical Repair of the Peroneus Brevis Tendon
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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 longitudinal tear of the peroneus brevis tendon. Patient presented with symptoms including lateral retrofibular pain which extended distally toward the 5th metatarsal and associated diffuse edema. No subluxation of the peroneal tendons noted on exam.

PROCEDURE

Map the incision just posterior to the inferior fibula extending distally to the superior aspect of the styloid process of the 5th metatarsal. Dissect through the subcutaneous space and incise the peroneal sheath. Isolate and inspect both the peroneus brevis and peroneus longus for tears. Excise diseased tendon tissue and use suture to tubularize the tendon with intra-substance and external fibers of the tendon. Bury all surgical knots to enhance gliding within the sheath.

In this case, a CLARIX®CORD 1K 4.0 x 3.0 cm AM Matrix was used as a soft-tissue adhesion barrier following primary surgical repair. Slide the CLARIX® Matrix posterior to the tendon, using a Seeburger retractor to aid in the navigation as needed (FIG.1). Secure the CLARIX® Matrix to the anterior lateral aspect of the tendon with suture of choice (FIG.2). Wrap the matrix circumferentially around the tendon and secure to complete tubularization (FIG.3). Trim excess tissue if desired. Re-approximate the retinaculum with either simple interrupted sutures or a vest-over-pants fashion. Re-approximate the subcutaneous tissue and skin closure with suture.

Advise standard post-operative instructions with non-weight bearing (NWB) well-padded posterior plaster mold. Convert to a NWB fiberglass cast at 10 days with encouragement of active and passive range of motion (ROM) in the cast. Apply walking cast at 4 weeks with daily removal for ROM exercises. Initiate physical therapy at 6 weeks, focusing on hindfoot motion, eversion strengthening and proprioception. Expectation of improvement is return to most sporting activities at 4 months and gradual resolution of swelling up to one year.

FIG. 1: APPLICATION

FIG. 2: PRIMARY FIXATION

FIG. 3: PLACEMENT