Femoral Vein Interposition Graft and Rectus Femoris Muscle Flap for Management of Infected Femoral Endarterectomy

Evan J. Ryer, MD, Anh Pham, MD, James R. Elmore, MD.
Geisinger Medical Center, Danville, PA, USA.

Groin wound complications following femoral artery reconstructions are highly morbid, limb threatening and potentially lethal. Successful techniques to manage this condition include long term antibiotic therapy, serial operative debridements and subsequent muscle flap coverage. Historically, the management of the muscle flaps have been performed by plastic and reconstructive surgeons. In contrast, many vascular surgeons now perform rotational muscle flaps for coverage of complex groin wounds with excellent outcomes. In this video, we present a video of a patient that presents with a herald bleed from an infected femoral artery following iliofemoral endarterectomy with pericardial patch for critical limb ischemia. Emergent femoral vein interposition graft was performed after excision of the infected femoral artery and patch. Rectus femoris muscle flap coverage was immediately performed by the vascular team to cover the graft since there was not gross purulence or necrosis. Advantages of the rectus femoris muscle is that it provides a large donor muscle with a consistent blood and nerve supply. The disadvantage of harvest is some mild loss of strength with knee extension. The rectus femoris muscle flap is a dependable option for the management of complex groin wounds even in the presence of peripheral vascular disease and can be expertly performed by vascular surgeons. We believe that the rectus femoris muscle flap is the flap of choice for a complex groin wound reconstruction highlighted in this video.