

THE SARTORIUS MUSCLE FLAP: AN IMPORTANT ADJUNCT FOR THE TREATMENT OF COMPLICATED FEMORAL WOUNDS INVOLVING VASCULAR GRAFTS

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Introduction: Femoral wound complications involving vascular grafts can result in graft infections requiring graft removal. Muscle flaps can be used to facilitate soft tissue coverage and graft salvage. While frequently requiring the assistance of plastic surgery for flap coverage, the sartorius muscle flap is a straightforward technique easily mastered by vascular and general surgeons. We report a series of sartorius flaps performed by vascular surgeons in the treatment of complicated femoral wounds.

Methods: Sartorius flaps were created by mobilizing the sartorius muscle along its lateral edge to preserve the medial blood supply, dividing it at its insertion to the anterior superior iliac spine, and rotating it medially to cover the femoral neurovascular structures. We reviewed a prospective database to determine the outcomes of sartorius flaps on facilitating wound healing and graft salvage and patency.

Results: From 2005-2008, 20 sartorius flaps were performed. Original operations included femoral endarterectomy with patch repair in 8 patients, aortofemoral graft in 5, axillofemoral graft in 4, and femoral-distal bypass in 3 patients. Indications for flap coverage included wound infection/dehiscence in 8, noninfected hematoma/seroma in 8 and femoral pseudoaneurysms in 4 patients. Prosthetic grafts or patches were present in 16 wounds, the remainder being autogenous. Complete wound healing occurred in 17 patients (85%). Primary wound closure was achieved in 6 patients. Secondary wound closure was achieved in 11 patients with mean healing time of 2.2 months. Two patients died from unrelated causes prior to complete wound healing. One patient required a rectus femoris flap for persistent nonhealing. All vascular reconstructions remained patent at 7.2 months mean follow up, with no grafts requiring removal.

Conclusions: Sartorius muscle flaps are effective at facilitating complicated femoral wound healing while maintaining graft salvage and patency. The technique is easily mastered by general and vascular surgeons for complicated wound management.