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IN THE RECOVERY ROOM MY PATIENT DOES NOT HAVE A DISTAL PULSE IN THE OPERATIVE LEG. WHAT SHOULD I DO?

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Vascular injury after total knee arthroplasty (TKA) is rare (incidence between 0.03 and 0.17%) and the evaluation and management may be unfamiliar to the orthopaedic surgeon.^{1,4} However, a delay in diagnosis and treatment can be disastrous, with morbidity that includes compartment syndrome and associated peroneal nerve palsy, wound healing problems, deep infection, and potential loss of limb; in prior reports, the amputation rate has ranged from 25% to 70%.¹⁻⁴

If discovered in the recovery room, remove all compressive dressings and perform a careful physical exam to identify a dorsalis pedis and/or posterior tibial pulse. If these are not clearly palpable, perform a doppler exam; if distal flow is not identified, a vascular surgery consultation is immediately obtained. It is often difficult to assess signs of arterial occlusion or diminished vascular flow (pallor, poor/absent capillary refill, pain, paresthesias, and paralysis) without fully exposing the extremity. With the more frequent use of regional anesthetic, signs of pain and paresthesias can be attributed to the epidural or masked by the spinal anesthetic leading to a delay in diagnosis.

At our institution, the vascular surgeon will attempt to measure the ankle-brachial index (ABI) to determine the presence and degree of ischemia, and the use of angiogram will be time and setting dependent. If an intraoperative vascular suite is available, the angiogram does not need to be completed prior to returning to the operating room (OR). Similarly, if the ischemia time is prolonged before diagnosis, an angiogram is deferred in order to shorten the time to revascularization.

Intraoperative bleeding complications discovered after tourniquet release are best evaluated with a direct vascular surgery consultation obtained in the OR. Most vascular