Conservative management of distal leg necrosis in lung transplant recipients

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Critical limb ischemia (CLI) with distal leg necrosis in lung transplant recipients (LTR) is associated with a high risk for systemic infection and sepsis. Optimal management of CLI has not been defined so far in LTR. In immunocompetent individuals with leg necrosis, surgical amputation would be indicated and standard care. We report on the outcome of four conservatively managed LTR with distal leg necrosis due to peripheral arterial disease (PAD) with medial calcification of the distal limb vessels. Time interval from lung transplantation to CLI ranged from four years (n = 1) to more than a decade (n = 3). In all cases a multimodal therapy with heparin, acetylsalicylic acid, iloprost and antibiotic therapy was performed, in addition to a trial of catheter-based revascularization. Surgical amputation of necrosis was not undertaken due to fear of wound healing difficulties under long-term immunosuppression and impaired tissue perfusion. Intensive wound care and selective debridement were performed. Two patients developed progressive gangrene followed by auto-amputation during a follow-up of 43 and 49 months with continued ambulation and two patients died of unrelated causes 9 and 12 months after diagnosis of CLI. In conclusion, we report a conservative treatment strategy for distal leg necrosis in LTR without surgical amputation and recommend this approach based on our experience.