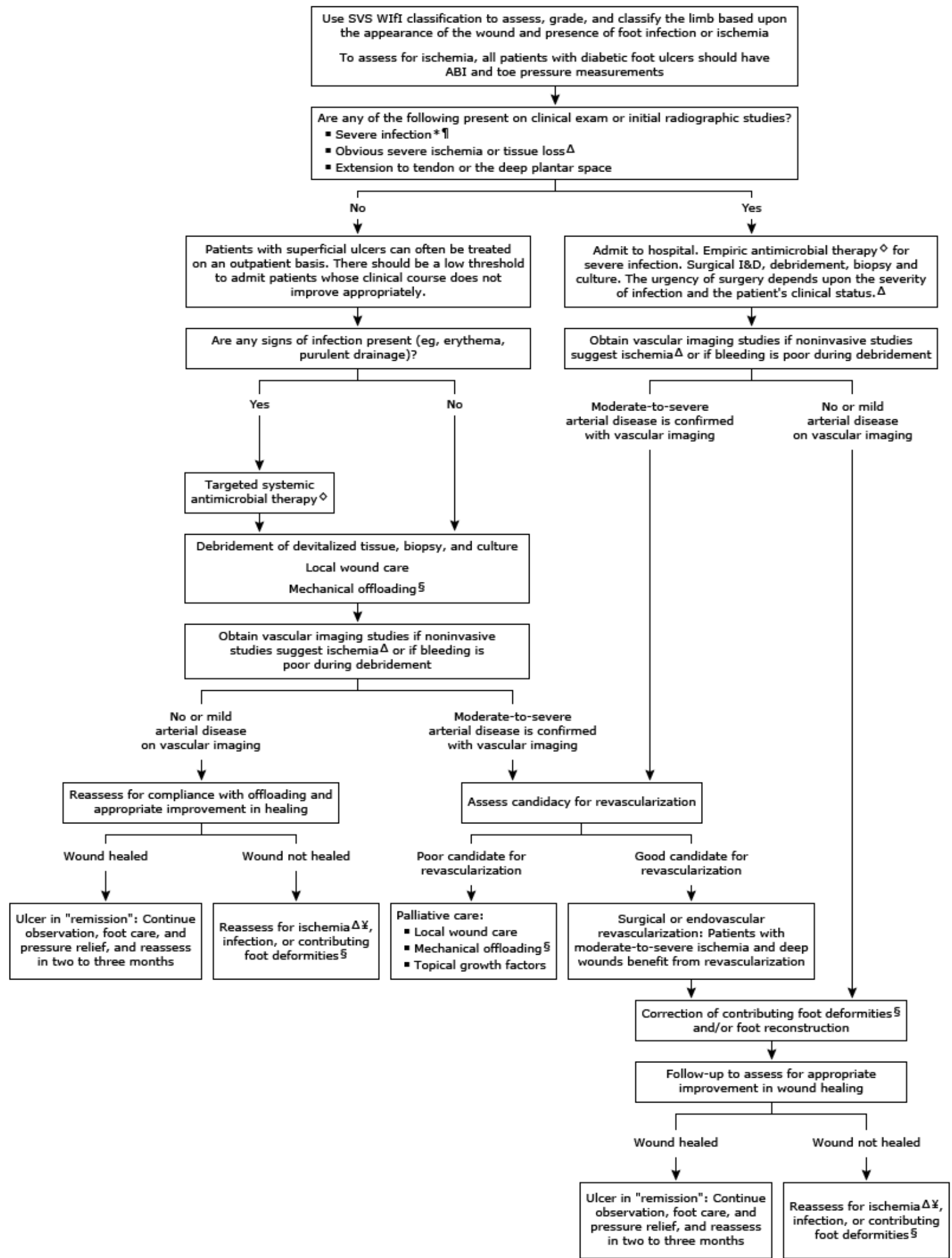


Management of diabetic foot wounds



SVS: Society for Vascular Surgery; WIfI: Wound, Ischemia, and foot Infection; ABI: ankle-brachial index; I&D: incision and drainage; MRI: magnetic resonance imaging; MRSA: methicillin-resistant *Staphylococcus aureus*.

* Signs of severe infection include severe cellulitis, fever, hemodynamic instability, and purulent drainage.

¶ Plain foot radiographs may demonstrate gas in the tissues, osteomyelitis, or the presence of a foreign body. Other foot imaging (eg, MRI) may be needed to identify fluid collections or osteomyelitis not detected on physical exam.

Δ Severe ischemia is manifest on clinical examination as severely diminished or absent pedal pulses, dependent rubor, ABI <0.40, or toe pressure <30 mmHg. Vascular imaging is warranted for those with obvious limb ischemia. Tissue loss can manifest as ischemic ulceration or as wet or dry gangrene. Patients with stable, dry gangrene do not require immediate debridement; vascular imaging and revascularization are preferentially performed before debridement.

◇ For severe infections, broad-spectrum antimicrobial therapy should be initiated and adjusted depending upon the results of tissue culture and sensitivity. For mild-to-moderate infection, antimicrobial therapy should target aerobic gram-positive cocci. For patients with a prior history of MRSA infection or when the local prevalence of MRSA colonization or infection is high, empiric therapy should also be directed against MRSA. The duration of antimicrobial therapy depends upon the severity of infection and organism. Residual infected bone following debridement of necrotic bone may require four to six weeks of treatment or longer.

§ All ulcers subjected to excessive pressure benefit from pressure reduction, which is accomplished with mechanical offloading. Foot deformities include hammertoe, bunion, rocker bottom deformity, and Charcot arthropathy. Optimizing foot biomechanics may include Achilles tendon or gastrocnemius tendon lengthening or tendon transfer procedures, among others.

¥ Some patients with mild ischemia may also require revascularization to achieve wound healing.

References:

1. Mills JL, Conte MS, Armstrong DG, et al. The Society for Vascular Surgery Lower Extremity Threatened Limb Classification System: risk stratification based on wound, ischemia, and foot infection (WIfI). *J Vasc Surg* 2014; 59:220.
2. Hingorani A, LaMuraglia GM, Henke P, et al. The management of diabetic foot: A clinical practice guideline by the Society for Vascular Surgery in collaboration with the American Podiatric Medical Association and the Society for Vascular Medicine. *J Vasc Surg* 2016; 63:35.
3. Lipsky BA, Berendt AR, Cornia PB, et al. 2012 Infectious Diseases Society of America clinical practice guideline for the diagnosis and treatment of diabetic foot infections. *Clin Infect Dis* 2012; 54:e132.