Clinical Fact Sheet: Quick Assessment of Leg Ulcers

Venous Insufficiency (Stasis)	Arterial Insufficiency	Diabetic Foot Ulcer (DFU)
History		
• Previous DVT & Varicosities • Reduced mobility • Obesity • Vascular Ulcers • Phlebitis • Traumatic Injury • CHF • Orthopedic procedures • Pain reduced by elevation • Pregnancy • Arthritis • Conditions affecting calf muscle pump • Prolonged standing	• Diabetes • Anemia • Arthritis • Increased pain with activity and/or elevation • CVA • Smoking • Intermittent claudication • Traumatic injury to extremity • Vascular procedures/surgeries • Hypertension • Hyperlipidemia • Arterial Disease • Advanced Age • Obesity • Cardiovascular Disease	• Diabetes • Spinal cord injury • Hansen's Disease • Relief of pain with ambulation • Parasthesia of extremities • Hypertension • Smoking • HIV, AIDS • Chemotherapy
Location		
• Medial aspect of lower leg and ankle • Superior to medial malleolus	• Toe tips or web spaces • Phalangeal heads • Lateral malleolus • Mid tibia • Areas exposed to pressure or repetitive trauma	• Plantar aspect of foot • Metatarsal heads • Heels • Altered pressure points/sites of painless trauma/repetitive stress • Occasionally on dorsal surface • Interdigital
Appearance		
• **Color**: base ruddy • **Surrounding Skin:** erythema (venous dermatitis) and/or brown staining (hemosiderin staining) • **Depth**: usually shallow • **Wound Margins**: irregular • **Exudate**: moderate of heavy • **Edema**: pitting or non-pitting; possible induration and cellulitis • **Skin Temp**: normal; warm to touch • **Tissue**: granulation frequently present; may be covered with fibrinous slough • **Infection**: less common	• **Color**: base of wound, pale/pallor on elevation • **Skin**: shiny, taut, thin, dry, hair loss of lower extremities, atrophy of subcutaneous tissue, dependent rubor in affected extremity • **Depth**: May be deep • **Wound Margins**: even/punched out • **Exudate**: dry/minimal • **Edema**: variable • **Skin Temp**: decreased/cold • **Tissue**: granulation rarely present • **Infection**: frequent (signs may be subtle) • Necrosis, eschar, gangrene may be present	• **Surrounding Skin**: Pale pink, pale red • **Depth**: variable • **Wound Margins**: well defined, fi ssuring and/or callus formation • **Exudate**: variable • **Edema**: cellulitis, erythema and induration common • **Skin Temp**: warm • **Tissue**: Granulation may be present or obscured by callus • Necrotic tissue variable, gangrene uncommon • **Infection**: frequent

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Perfusion		
PAIN PATTERN • Dull, aching, "heavy" • Worsened by dependency • Relieved by elevation PERIPHERAL PULSES • Present/Palpable CAPILLARY REFILL • Normal-less than 3 seconds	PAIN PATTERN • Cramping, throbbing • Worsened by activity and elevation • Relieved by rest and dependency PERIPHERAL PULSES • Absent or diminished posterior tibial and/or dorsalis pedis CAPILLARY REFILL • Delayed — more than 3 seconds • Ankle Brachial Index (ABI) < 0.8	PAIN PATTERN • "Pins and needles," "burning," "electric shock" • Partially relieved by walking PERIPHERAL PULSES • Palpable/Present/May be bounding • ABI may be falsely elevated due to non-compressible vessels CAPILLARY REFILL • Normal
Treatment		
MEASURES TO IMPROVE VENOUS RETURN • Surgical obliteration of damaged veins • Elevation of legs • Compression therapy to provide at least 30mm hg compression @ ankle Options: - Short stretch bandages - Therapeutic support stockings - Unna's boot - Two, three or four layer wrap - Compression pumps TOPICAL THERAPY GOALS: - Absorb exudate - Maintain moist wound surface - Improve dermatitis if present - Reduce edema	MEASURES TO IMPROVE TISSUE PERFUSION • Revascularization if possible • Medications to improve RBC transit through narrowed vessels • Lifestyle changes (no tobacco, no caffeine, no constrictive garments, avoidance of cold) • Hydration • Measures to prevent trauma to tissues (appropriate footwear at ALL times) TOPICAL THERAPY • Dry uninfected necrotic wound: KEEP DRY • Dry infected wound: IMMEDIATE referral for surgical debridement/aggressive antibiotic therapy • Open wound goals - Moist wound healing - Non-occlusive dressings - Non-adherent dressings	MEASURES TO ELIMINATE TRAUMA • Pressure relief for heal ulcers • "Offloading" for plantar ulcers (bedrest or contact casting or orthopedic shoes) • Appropriate footwear • Tight glucose control • Aggressive infection control (debridement of any necrotic tissue, orthopedic consult for exposed bone, antibiotic coverage) TOPICAL THERAPY • Avoid use of occlusive dressings • Dressing to absorb exudate/ keep surface moist • Maintain a dry, stable, non-infected heel eschar • Treat and open DFU with topical and systemic antibiotics