Clinical Fact Sheet	**Quick Assessment of Leg Ulcers**

	VENOUS INSUFFICIENCY (STASIS)	ARTERIAL INSUFFICIENCY	PERIPHERAL NEUROPATHY
HISTORY	• Advanced Age • CHF • Lymphedema • Obesity • Orthopedic Procedures • Pain reduced by elevation • Pregnancy • Previous DVT with Phlebitis • Pulmonary Embolus • Reduced mobility • Sedentary Lifestyle • Traumatic Injury • Vascular Ulcers • Work History	• Arterial Disease • Cardiovascular Disease • Diabetes • Dyslipidemia • Hypertension • Increased pain with activity and/or elevation • Intermittent Claudication • Obesity • Painful Ulcer • Sickle Cell Anemia • Smoking • Vascular procedures/surgeries	• Advanced age • Alcoholism • Chemotherapy • Diabetes • Hansen's Disease • Heredity • HIV, AIDS and related drug therapies • Hypertension • Impaired glucose tolerance • Obesity • Raynaud's Disease, Scleroderma • Smoking • Spinal Cord Injury and neuromuscular diseases
LOCATION	• Malleolus • Medial aspect of leg superior to medial malleolus	• Areas exposed to pressure or repetitive trauma, or rubbing of footwear • Lateral malleolus • Mid tibial • Phalangeal heads • Toe tips or web spaces	• Altered pressure points/sites of painless trauma/repetitive stress • Dorsal and distal toes • Heels • Inter-digital • Metatarsal heads • Mid-foot (dorsal and plantar) • Toe interphalangeal joints

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ASSESSMENT	WOUND • Base: ruddy red; yellow adherent or loose slough; granulation tissue present, undermining or tunneling are uncommon • Depth: usually shallow • Margins: irregular • Exudate: moderate to heavy • Infection: less common SURROUNDING SKIN • Venous dermatitis (erythematic, weeping, scaling, crusting) • Hemosiderosis (brown staining) • Lipodermatosclerosis; Atrophy Blanche • Temperature: normal; warm to touch • Edema: pitting or non-pitting; possible induration and cellulitis • Scarring from previous ulcers, ankle flare, tinea pedis • Infection: Induration, cellulitis, inflamed, tender bulla	WOUND • Base: Pale; granulation rarely present; necrosis, eschar, gangrene (wet or dry) may be present • Depth: may be deep • Margins: edges rolled; punched out, smooth and undermining • Exudate: minimal • Infection: frequent (signs may be subtle) SURROUNDING SKIN • Pallor on elevation • Dependant rubor • Shiny, taut, thin, dry, • Hair loss over lower extremities • Atrophy of subcutaneous tissue • Edema: variable; atypical • Temperature: decreased/cold • Infection: Cellulitis • Necrosis, eschar, gangrene may be present NAILS • Dystrophic	WOUND • Base: pink/pale; necrotic tissue variable; • Depth: variable • Edges well defined • Exudate: usually small to moderate • Wound shape: usually rounded or oblong and found over bony prominence SURROUNDING SKIN • Normal skin tones • Trophic changes • Fissuring or callus formation • Edema: with erythema may indicate high pressure • Temperature: warm NAILS • Onychomycosis; dystrophic nails; paronychia, hypertrophy

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PERFUSION	PAIN • Minimal unless infected or dessicated • Described as throbbing, sharp, itchy, sore, tender, heaviness • Worsens with prolonged dependency	PAIN • Intermittent claudication • Resting; positional; nocturnal • Painful Ulcer • Paresthesias	PAIN • Decreased sensitivity to touch; if present, pain may be superficial, deep, aching, stabbing, dull, sharp, burning or cool; altered sensation not described as "pain" (numbness, warmth, prickling, tingling)
	PERIPHERAL PULSES • Present/palpable	PERIPHERAL PULSES • Absent or diminished	PERIPHERAL PULSES • Palpable/present
	NON-INVASIVE VASCULAR TESTING • Capillary Refill: normal (less than 3 seconds) • ABI to rule out arterial component	NON-INVASIVE VASCULAR TESTING • Capillary refill: Delayed (more than 3 seconds) • ABI <0.9 • TCPO2 <40mmHG • TP >30mm HG	NON-INVASIVE VASCULAR TESTING • Capillary refill: Normal NOTE: LEAD may co-exist with neuropathic disease
	MEASURES TO IMPROVE VENOUS RETURN (Provided vascular studies have ruled out significant arterial disease) • Surgical obliteration of damaged veins • Elevation of legs • Medications • Exercise • Education • Compression therapy to provide at least 30mm Hg compression at ankle[6] **See WOCN Clinical Practice Guideline for Compression Therapy	MEASURES TO IMPROVE TISSUE PERFUSION • Revascularization if possible • Medications to improve RBC transit through narrowed vessels • Lifestyle changes (avoid tobacco, caffeine, restrictive garments, cold temperatures) • Hydration • Measures to prevent trauma to tissues (appropriate foot wear) • Maintain legs in neutral or dependent position • Pressure reduction for heels and toes	MEASURES TO ELIMINATE TRAUMA • Reduction of shear stress and offloading of neuropathic wounds (bedrest, contact casting, orthopedic shoes) • Use of assistive devices to provide support, balance and additional offloading • Appropriate footwear • Tight glucose/glycemic control • Aggressive prevention/treatment of infection (debridement of callus and necrotic tissue; pharmacologic treatment when appropriate) • Revascularizaton if ischemic • Complications: Cellulitis, osteomyelitis, gangrene, Charcot fracture

	VENOUS INSUFFICIENCY (STASIS)	ARTERIAL INSUFFICIENCY	PERIPHERAL NEUROPATHY
TOPICAL THERAPY	• Goals: absorb exudates, maintain moist wound surface	DRY, NON-INFECTED, NECROTIC WOUND • Keep dry INFECTED WOUND/DRY OR MOIST NECROSIS • Referral for potential surgical debridement/antibiotic therapy OPEN WOUND/NON-NECROTIC • Moist wound healing; • Non-occlusive dressings • Aggressive treatment of any infection	• Use dressings that maintain a moist surface, absorb exudates and allow easy visualization • Cautious use of occlusive dressings

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