WOUNDS: How to Distinguish Arterial, Venous and Other Ulcers
Cheryl M Bongiovanni, PhD,RVT,CWS,FACCWS,FASA

Director, Wound Clinics and Vascular Laboratories
Lakeview, Oregon
Dr. Bongiovanni discloses that she has no financial or other personal gain relationship with any medical product manufacturer or distributor.
WOUND TYPES

• ARTERIAL (ISCHEMIC) ULCERS
• VENOUS (VARICOSE, LEG, STASIS) ULCERS
• LYMPHEDEMA (CHRONIC DERMAL DISRUPTION) ULCERS
• PRESSURE (DECUBITUS) ULCERS
• LATE EFFECT OF TRAUMA
• UNCONTROLLED INFECTION
• AUTOIMMUNE ULCERS (PSORIASIS, LUPUS, ETC)
ELEMENTS COMMON TO MOST WOUNDS

• VASCULAR COMPROMISE (ARTERIAL, VENOUS, MICROVASCULAR)

• REDUCED TISSUE OXYGEN CONCENTRATION (T CpO₂)

• METABOLIC COMPROMISE
ARTERIAL ULCERS
Arterial Ulcers, cont.
ARTERIAL ULCERS, cont

- Usually have a “punched out” appearance
- Full thickness defect
- Most often occurs in diabetics
- May be the result of embolic “showering” into the toes
- Can occur anywhere on the extremities
VENOUS ULCERS
VENOUS ULCERS, cont

- Most often accompany varicose veins
- Most often affect distal leg and ankle
- Are usually painful and heavily exudative
- Are often recurrent
- Exhibit varying depths, even within the same ulcer
- Can become huge
LYMPHEDEMA ULCERS
• Are invariably foul and dirty
• Surrounding skin is indurated
• Are heavily exudative
• Can expand to encompass the entire lower leg and top of the foot
• Are usually infected with multiple organisms and yeasts
• Occur most often in association with obesity
PRESSURE ULCERS
PRESSURE ULCERS, continued

• Can occur anywhere following sustained pressure

• Can become life threatening

• Are often extremely foul and infected
AUTOIMMUNE ULCERS
AUTOIMMUNE ULCERS, continued

- Can mimic other ulcer types
- Are often complicated with arterial/venous insufficiencies
- Are common with severe lupus, psoriasis and pemphigoid syndromes
- Are frequently recurrent
ULCERS OF MIXED ETIOLOGY

DIABETIC PLANTAR ULCER

BKA PRESSURE ULCER

DIABETIC/ARTERIAL ULCER

VENOUS/ARTERIAL ULCER
ULCERS OF MIXED ETIOLOGY

PRESSURE/VENOUS ULCER

VENOUS/ARTERIAL ULCER

DIABETIC/PRESSURE ULCER

PRESSURE/VENOUS/ARTERIAL
CONCLUSIONS

• Single-etiology ulcers are uncommon
• We should suspect arterial involvement in any ulcer that is accompanied by diabetes
• Venous leg ulcers often have a pressure component and, in diabetics, an arterial compromise
• Any ulcer may be compromised in the presence of autoimmune diseases
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