DIABETIC ULCERS V PRESSURE ULCERS
SO, WHAT DO YOU CALL IT?

Arthur Stone, DPM
Mary Sieggreen, MSN,CNS,NP,CVN
Dr. Stone has listed an affiliation with:
Advisory Board Member..FXI, Inc.
Speakers Bureau..Hill-Rom, Inc.

Mary Sieggreen has no conflict of interest

What causes that “Black Hard Tissue” on the heel?

• Pressure Ulcer
• Diabetic Foot Ulcer
• Arterial Ulcer
• Ischemic Ulcer
• Neuropathic Ulcer
What is it?

WHAT IS IT?
“In solving a problem of this sort, the grand thing is to be able to reason backwards. “

Sherlock Holmes  *A Study in Scarlet*

---

**Review**

- **Pressure Ulcer** = wound from pressure
- **Diabetic Foot Ulcer** = wound on diabetic patient
- **Arterial Ulcer** = wound from lack of blood
- **Ischemic Ulcer** = wound with no oxygen
- **Neuropathic Ulcer** = wound from insensate tissue
Pressure Ulcer Definition

Localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction.

National Pressure Advisory Panel

Heel Pressure Ulcers

- Increasingly prevalent
- Second most prominent PU location
- Account for % of ulcers
  - 26% AC
  - 24% LTAC
  - 25% LTC

Salcido. Advances in Skin & Wound Care 2011
PU Prevention

- Agency for HealthCare Research & Quality (AHRQ) recommends:
  - Skin assessment
  - Risk assessment
  - Clear Care Plan

All necessary for pressure ulcer prevention

Diabetic Foot Ulcer
Definition/Classification

Diabetic foot ulcer is full-thickness penetration of the dermis of the foot in a person with diabetes

Classification Systems

- Wagner Classification System
  5 Grades based on depth and tissue involvement

- University of Texas Classification
  Stages: A-D (ischemia, infection),
  Grades: 0-3 (depth)
How to differentiate? DFU or PU?

- Identify the problem
  - Mixed etiology
- Create pathway for intervention
- Documentation
- Regulatory
- Reimbursement

Practitioner Knowledge / Differentiation

- Increased requirement to report PU
- Reporting DFU as PU?
- Confusion

Chadwick *Wounds* 2012
Practitioner Knowledge

- Study confirmed confusion
- Photo of heel wound on pt with Diabetes
- Nurse cohort and Podiatrist cohort
- “How would this wound be managed?”

- Nurses
  - 46% PU
  - 54% DFU

- Podiatrists
  - 15% PU
  - 85% DFU

McIntosh & Ousey 2008

Evidence

- Diabetes
- Pressure
- Arterial insufficiency
Management of diabetic foot ulcers
Debridement, dressings and off-loading

1.2.31 Debridement should only be done by healthcare professionals from the multidisciplinary foot care team, using the technique that best matches their specialist expertise, clinical experience, patient preference, and the site of the ulcer.

1.2.32 When choosing wound dressings, healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use wound dressings with the lowest acquisition cost.

1.2.33 Offer off-loading for patients with diabetic foot ulcers. Healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use the technique with the lowest acquisition cost. NICE clinical guideline 119 – Diabetic foot problems 16

1.2.34 Use pressure-relieving support surfaces and strategies in line with 'Pressure ulcers' (NICE clinical guideline 29) to minimise the risk of pressure ulcers developing.

National Institute for Health and Clinical Excellence

• NICE guidance sets the standards for high quality healthcare

• Guidance for practitioners on best practice for:
  – Diabetic Foot Ulcers
  – Pressure Ulcers

  – www.nice.org.uk
1.2.31 Debridement should only be done by healthcare professionals from the multidisciplinary foot care team, using the technique that best matches their specialist expertise, clinical experience, patient preference, and the site of the ulcer.

1.2.32 When choosing wound dressings, healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use wound dressings with the lowest acquisition cost.

1.2.33 Offer off-loading for patients with diabetic foot ulcers. Healthcare professionals from the multidisciplinary foot care team should take into account their clinical assessment of the wound, patient preference and the clinical circumstances, and should use the technique with the lowest acquisition cost. NICE clinical guideline 119 – Diabetic foot problems 16 Management of diabetic foot ulcers and off-loading.

1.2.34 Use pressure-relieving support surfaces and strategies in line with ‘Pressure ulcers’ (NICE clinical guideline 29) to minimise the risk of pressure ulcers developing.
Diabetic Heel Ulcer in Ambulatory Patient

- **Causative Factors**
  - Loss of protective sensation
  - Excessive pressure

- **Contributory Factors**
  - Peripheral arterial disease
  - Intrinsic wound healing disturbances
  - Obesity
  - Poor vision

- Singh N, Armstrong DG, Lipsky BA. JAMA 2005

Is there a Difference?

- **PU**
  - immobility and constant pressure

- **DFU**
  - multiple etiologies
Case Study

- 59 y o m engineer
  - c/o ½ block claudication
  - PMH
    - IDDM – well managed
    - HTN – well managed
  - PSH – negative
  - Non invasive arterial study
    - Rt iliac stenosis
  - Procedure
    - Arteriogram / rt common iliac bypass

Case Study

- Uneventful hospital course...
Or was it?

QUESTIONS

• 1. How do you identify the problem?
• 2. What is your plan?
Multidisciplinary Team

- Knowledgeable about
  - pressure ulcers
  - diabetic foot ulcers

- Early assessment and intervention

PROPER ASSESSMENT/DOCUMENTATION CRITICAL

- Documentation/diagnosis
  - Home Care (Oasis)
  - Long Term Care (MDS)
  - Hospital (IQR)
  - Rehabilitation (IRF-PAI)

- Each has different reporting requirements
- All meant to improve quality and decrease cost
- And provide an acceptable patient experience
Other Organization’s Position Statements

• Need to Weigh in
  – Multiple impairments (legs/feet) (i.e. PAD, neuropathy)
  – Heel pressure ulcers due to immobility
  – What are the ramifications of a label?
    • Payment
    • Proper treatment

Other Organization’s Position Statements

• Need to Weigh In
  – Vascular organizations
  – Diabetes organizations
  – Wound Care organizations
  – All other interested parties
Reimbursement Issues

Searching for answers

“And it ended by my discovering traces, but very different ones from those which I had expected.”

Memoirs of Sherlock Holmes 1893
As is usually the case…

…more research is needed…

As is usually the case…

for…

“… how dangerous it always is to reason from insufficient data.”

Sherlock Holmes, *The Adventure of the Speckled Band*
Selected References

- AHRQ Pressure Ulcer Toolkit, Available at http://www.ahrq.gov/research/ltc/pressureulcertoolkit/putool5.htm
- Peirce B, Mackey D, McNichol L. Wound Ostomy Continence Nurses Society Guidance on Oasis-C Integumentary items. WOCN. December 2009
- Singh N, Armstrong D, Lipsky BA. Preventing Foot Ulcers in Patients with Diabetes. JAMA. January 12, 2005 293 (6) 217-227
- Shannon M A retrospective Descriptive Study of Nursing Home Residents with Heel Eschar or Blisters. Ostomy Wound Management January 2013;59 (1) 20-27