Unusual Wounds
If it Looks odd, it Probably is!

Unusual vs Atypical
- Malignant vs non-malignant
- Usual wounds that present in unusual ways
- Unusual wounds that present in usual ways

Skin Cancers
- Basal Cell Carcinoma
  - Most common form of skin cancer
  - Responsible for 8/10 non-melanoma skin cancers
  - Most common in sun/UV exposed areas
  - Commonly seen on anterior lower legs
  - Locally invasive
  - Rarely metastasize
  - Excisional biopsy is appropriate treatment

Skin Cancers
- Squamous Cell Carcinoma
  - Invasive primary cutaneous malignancy
  - Also common in sun-exposed areas
  - May develop from precursor actinic keratosis (AK) or can arise de-novo
  - Second most common skin cancer
  - Can metastasize
  - Excisional biopsy with clean margins and base
  - Remember Marjolin's Ulcer
Skin Cancers

- **Malignant Melanoma**
  - Most lethal form of skin cancer
  - Can occur anywhere in the body
  - Multiple variants
  - Prognostic indicators: Breslow’s Depth
  - Staging: Clark’s Levels
  - Proper staging and treatment dependent on histologic examination of entire depth of lesion
  - Excision best left to those with experience

**Comparison: Benign vs Malignant**

**Usual Wounds Presenting in Unusual Ways**
- 62 yr old male with seizure disorder.
- Apparent unwitnessed seizure at home with prolonged unconscious post-ictal period on floor.
- Described lying on his side with pain on medial aspects of both knees when he awoke.
- Stage 2 Pressure Injuries

**DFU on Unusual Plantar Surface**
- 82 yr old female with chronically malformed (inverted and dorsiflexed) ankle and foot.
- Fully ambulatory but walking on the side of her foot.
- TCC applied with neutralization of inversion and ankle to 90 degrees.
Plantar Heel DFU on 510 lb Patient

- 40 year old female with 1 year history of plantar heel.
- Unable to offload with ambulation due to weight and balance issues.
- TCC reinforced with extra material, reapplied weekly for 10 weeks.
- Concomitant referral to Bariatrics

Diabetic Neuropathic Finger Ulceration

- 82 yr old female, longstanding diabetic.
- Dense neuropathy of hands and fingers.
- Recurrent ulcerations due to burns from pots and pans in oven and on stovetop.
- Wound care was easy
- Difficulty is in protecting her hands

Hydradenitis Suppurativa
Unusual Wounds Presenting in Usual Ways

- **Cutaneous Vasculitis**
  - Skin is most common organ affected
  - Inflammatory process affecting vessel wall
  - Resultant hemorrhage, destruction and ischemia
  - Dermal small vessels and sub-cut muscular vessels most commonly affected
  - Can be benign self-limited process or part of more extensive systemic process


**Histopathology**

- Histopath and symptoms all based on vessel size

Histopathology of Cutaneous Vasculitis - 2012 Revised International Chapel Hill Consensus Conference Nomenclature of Vasculitides

J. C. Jennette, R. J. Falk, et al.

**Signs and Symptoms**

- Painful palpable purpura
- Local tissue hypoxia
- Infiltrated erythema
- Nodular erythema
- Ulcers
- Digital gangrene

**Diagnosis**

- Biopsy purpuric lesions within 48 hrs
- Biopsy deep nodular lesions within 72 hrs
- Punch biopsy specimen should extend to the subcutis in most palpable purpuric lesions or most tender reddish or nodular lesions
- Can be helpful to send 2 specimens; one for light microscopy and one for direct immunofluorescence

**Treatment**

- Systemic corticosteroids
- Chemotherapeutic agents
- Analgesics
- Moist protective wound care for open lesions
- Referral to PCP, immunology or rheumatology for appropriate workup
Hypersensitivity (Leukocytoclastic) Vasculitis
• Common association with infection, chemical or drug exposure
• Most common cutaneous vasculitis
• Painful palpable purpura

Psychiatric/Factitious Disorders
• Various self-mutilation disorders
• Lesions in various stages of healing
• Well circumscribed borders
• Areas accessible and reachable with hands
• Usually sparing back

Erythema Multiforme Major

Unusual Wounds that are... Unusual
AKA "The Chronicles of Caritas"

Off the Beaten Path

Erysipelas
Acroangiodermatitis

M.A.S.D.

Mysterious Huge Bulla

Ischemic Ulcer – Abdominal Pannus

Necrobiosis Lipoidicum Diabeticorum
AKA: NLD
Inline Superficial Venous Reflux

Staph Pustules – Common under Compression

Custom Ankle High Compression

Customized Atraumatic Allevyn

Medical Device Related Pressure Injury

Obesity

- > 1/3 US Adults (CDC 2015)
- Adipocytes grouped into lobules, each with vascular pedicle and each cell with fine meshed capillary network
- Vascularity does not increase with adiposity
- Resultant poor oxygenation, impaired angiogenesis and low-grade inflammation
- Decreased adiponectin levels leads to further impaired angiogenesis and fibroblast proliferation
Smoking Impedes Healing By:

- Local vasoconstriction and hypoxia
- ↑ CO delivery to wound
- Endothelial and vasomotor dysfunction
- Accelerated atherosclerosis
- ↑ platelet activation
- ↓ collagen synthesis
- ↑ risk of post-op wound infection and rupture


Thank You!