Cutaneous Signs Internal Disease

Robert D. Gordon, M.D.
CANCER

SKIN SIGNS OF CANCER NUMEROUS
METASTASIS
• 2-9 % of cancer metastasize to skin
• Advanced disease / poor prognosis
• Some long interval between primary and metastasis - breast / melanoma
• Breast / lung / kidney / stomach / uterus / colon
Cutaneous Metastasis

- Breast / lung / GU – scalp
- Mammary cancer – chest
- Stomach / GI – abdominal wall esp. periumbilical
- GU - lower abdomen / external genitalia
Cutaneous Metastasis

- Subcutaneous or Intradermal nodule(s) – any color
- Chin: Renal
  
  Scalp: lung
• Carcinoma en Cuirasse
• Carcinoma erysipelatoides
Metastatic Melanoma
Cutaneous Metastasis

- Metastatic lesion can be 1st indication
- Lung / ovary / kidney skin usually 1st
Dermatomyositis / Polymyositis and Cancer

- DM associated with CA in 15-50% 40 or older
- Others DM as a form of CTD
- Proximal muscle weakness
- CA any organ- Lungs / GI / Breasts
- Higher rate of mortality
- DM precedes CA – CA found within 1 year
- IF Raynaud’s + usually no underlying CA
Workup

- Hx / P.E
- CBC / LFT/ Guiac / UA / CXR / Sigmoid
- Additional testing based on above
Skin signs of Dermatomyositis

• 1st transient blotchy violaceous macules trunk, exts, face
• Later more extensive, facial edema red to purple - red butterfly – can see fine scale
• Periungual erythema / linear telangiectasia nail fold and cuticle
• Periorbital or lid margins edematous / violaceous-heliotrope
• Hands blotchy violaceous color and interphalangeal
• Gottron’s papules- violaceous flat topped papules DIP jts - pathognomic
Paget’s Disease

- Nipple / areola
- Underlying breast ca
- Presents as eczema – weeping / crusting
- No response to topical steroid
- Ipsilateral breast but check other breast
- > 50 cases in men
Extramammary Paget’s

- Women > men / women usually >50 years old
- Lower abdomen / groin / buttock / genitalia / perianal / upper thighs
- Unilateral / pruritic / eczematous / lichenified
- Misdiagnosed as eczema / tinea / lichen simplex
- Underlying cancer can appear same time or later
- Regional and widespread metastasis can develop
Carcinoid

- Bright red cutaneous flushing
- Flushing lasts 10 – 30 minutes
- Face / neck / upper chest / trunk / extremities
- Associated sx: diarrhea / wheezing / edema
- Location: midgut / lung / ovary / thymus
Glucagonoma Syndrome

• Alpha cell tumor pancreas

• High serum glucagon

• Cutaneous eruption necrolytic migratory erythema
• Patches intense erythema – any shape
• Vesicles / bullae -> denuded and crusting
• All stages – fluctuates
• Abdomen / groin / perineum / thighs / buttocks
• Perioral erythema, crusting, scaling
• Glossitis
• Diabetes / weight loss / venous thrombosis
Erythema Gyratum Repens

- Rash associated with lung, breast, esophagus cancer
- Can be seen with TB, ulcerative colitis
- Distinctive skin manifestations
- Waxy erythematous concentric bands with scaling edge
- Can be figurate, gyrate, annular
- “Wood Grain”
- Men 2:1
- Precedes cancer by months
- Intense itch
Skin Signs Diabetes Mellitus
Diabetic Dermopathy
• Most common skin marker of DM
• Seen in 40% diabetic patients
• Shins – also seen on forearms, ant. thighs, feet
• Seen 10 – 30% women > 30 years old
• 60-65% men > 30 years old
• Trauma can induce
• Some believe correlates with: nephropathy, neuropathy, retinopathy
• Red or reddish brown papules -> atrophic hyperpigmented patches
Necrobiosis Lipoidica Diabeticorum
• Sharply demarcated plaque shiny atrophic surface
• Starts red / reddish brown flat lesion – grows slowly
• 0.5cm to 25cm
• Tend to be oval – several may coalesce
• Border red but reddish brown center turns yellow
• Blood vessels seen in plaque
• NLD precedes onset diabetes 15% pts by 2 yrs
• In 25% appears same time as diagnosis DM
• 60% appears after DM diagnosed within 6 yrs
• Spontaneous resolution 15-20% in 6-12 years
Bullous Diabeticorum

- Rare, spontaneous, noninflammatory blistering condition
- Unknown etiology
- 0.5-2% diabetic patient
- Male to female 2:1
- Crops of bullae – occasionally very large
- Usually heal spontaneously
Diabetic Blisters (Bullosis Diabeticorum)

- Most commonly on the backs of fingers, hands, toes, feet, and sometimes on legs or forearms
- Look like burn blisters\(^1\)
ERUPTIVE XANTHOMA

- Yellow 1-4mm papules with red halo
- Appear suddenly in crops
- Extensor surface arms, legs, buttock
- Elevated triglycerides
Pyoderma Gangrenosum

• Classic presentation: rapidly progressive painful ulcer

• Edematous, boggy, blue, undermined, necrotic border

• Location most often lower extremities – can be anywhere
Pyoderma gangrenosum

- Usually underlying chronic inflammatory or malignant disease
- UC, RA, Crohn’s, chronic hepatitis, monoclonal gammopathy, hematologic and lymphoproliferative disease
- 40 – 50% no underlying cause
- Recurrent in 30%
- Rarely in kids
- 40% arthritis large joints seroneg.
Diagnosis

• Often a diagnosis of exclusion
• Hx, P.E., elliptical biopsy
• Biopsy for histology and culture – bacteria, fungi, atypical mycobacteria
• Lab to id assoc. dis. & R/O diagnoses that mimic
• CBCD, CMP, sed rate, protein elect., CXR, colonoscopy, ANCA, coag. panel, cryoglob., venous and arterial function studies
Treatment

• Wound care specialist
• High dose prednisone
• IV Cyclosporine 3mg / kg daily x7 days then oral
• etc
Porphyria Cutanea Tarda

- Most common type of porphyria
- Lack of hepatic uroporphyrinogen decarboxylase
Cutaneous manifestations of PCT

- Blistering in sun exposed areas
- Increased skin fragility
- Facial hypertrichosis
- Hyperpigmentation
- Sclerodermoid changes
- Dystrophic calcification with ulceration
- Localized sclerosis of scalp
- Milia in previously blistered areas
• ETOH / estrogen, OCP, iron overload (from mutation in the hemochromatosis gene)
• Acquired and familial forms
• Strong association Hep C
• Prevalence of HCV (56%) and mutations (73%) in North American patients with PCT
• 39 pts w/HCV all men and all used ETOH
• 22/31 pts w/o HCV were women and 12 estro
Diagnosis PCT

- Woods light UA pink fluorescence
- 24 hour UA elevated uroporphyrin level
- Uro to coproporphyrin level in UA 4:1
- Assays of fecal, plasma, urinary, red cell porphyrins if other forms of porphyria is in dx
Treatment PCT

• Avoidance of trigger factors (ETOH / estrogen)
• Depletion of FE – phlebotomy
• Chloroquine
• Chloroquine + phlebotomy + avoidance = remission within 3 months
• Physical blocker sunscreen that block UVA – titanium dioxide
Psuedoporphyrhia

- Mimics PCT
- Therapy induced bullous photosensitivity
- Porphyrin levels normal
- Drugs / UVA exposure / CRF/ dialysis
- Drugs : Naproxyn most common
High Risk Behavior / Lifetime Risk

[Image: Cartoon of a tanning bed with a sign that says 'SELECT A CANCER: BASAL CELL, SQUAMOUS, MELANOMA.']
MAYBE NEXT TIME YOU'LL TRY A LITTLE SUNSCREEN...
Unknowns

- Benign or Malignant?
- You make the call
Melanoma

Precursor Risk – Atypical Mole Syndrome