Benign or Malignant
What Does The Path Say?

John Cangelosi, MD
Sagis, PLLC
64 yo male presents with a 3 year history of a slowly growing, 1.5 cm pearly plaque on the left sideburn.
CD4+ Small/Medium Sized Pleomorphic T-cell Lymphoma

- Rare, 2-3% of all primary cutaneous lymphomas
- Solitary plaque or nodule on face, neck, or upper trunk (lower extremity rare)
- Usually asymptomatic
- Favorable prognosis with 5-year survival rate of 60 – 80%
- Solitary skin lesions have an excellent prognosis (surgical excision or radiotherapy)
- Multiple/larger lesions more aggressive
58 yo white male presents with an asymptomatic, 2cm erythematous scaling plaque on the left arm.
Benign Lichenoid Keratosis

- Short duration
- Predilection for face (cheeks and nose), forearm and dorsal hand, upper trunk, and neck
- Predominately Caucasian
- Females > Males
- 4 – 7th decade
44 yo female with rash on right areola.
Her2/Neu
Paget’s Disease of the Nipple

- Almost always associated with carcinoma of the breast
- Dermatosis results from spread of tumor via the lactiferous ducts to the surface epithelium
- Breast carcinoma can be in situ or invasive at time of presentation
- Usually unilateral presentation
45 yo male with growing lesion on left cheek
Folliculotropic Mycosis Fungoides

- Preferential location is head and neck region
- Follicular mucinosis often
- Usually minimal epidermotropism
- More refractory to treatment than classic MF
- Worse survival rates than classic MF (68% at 5 years, 26% at 10 years)
67 yo white male with rash on left middle finger refractory to over the counter topical steroids
Psoriasis

- Familial disease in 1-3% of the population
- Most common on scalp, trunk, buttock, elbows, and knees
- Least common on the face (UV light improves disease)
- Nail dystrophy
- Psoriatic arthritis in 1/3 of patients
46 yo female presents with two pedunculated papules in the right antecubital fossa
Basal Cell Nevus Syndrome

- Autosomal dominant
- Early onset, multiple basal cell carcinomas
- Odontogenic keratocysts, palmoplantar pits, falx cerebri calcifications, medulloblastomas, hydrocephalus, cataracts
- Mutation of chromosome 9 in the PTCH gene
- Should consider biopsy of acrochordon-like lesions in young patients
48 year old male with 8 month history of growing lesion on his left upper back
Amelanotic Melanoma
Amelanotic Melanoma
Mart-1/Ki67
Amelanotic Melanoma

- 5% of melanomas
- Often misdiagnosed (eczema, seborrheic keratosis, Bowen’s disease, basal cell carcinoma, angiofibromas, etc)
- Often leads to poor prognosis when diagnosed late
- Breslow thickness (not Clark Level) and ulceration are the most dominant predictors of survival (same for all melanomas)
- Mitotic rate also plays a role in staging
Melanoma Staging

- **Tis** – In-situ
- **T1a** – Invasive but less than 1.0mm Breslow without ulceration and <1 mitosis/mm²
- **T1b** – Less than 1.0mm Breslow but ulceration and/or >1 mitosis/mm²
- **T2a** – 1.01-2.0mm thick without ulceration
- **T2b** – 1.01-2.0mm thick with ulceration
- **T3a/b** – 2.01-4.0mm thick with/out ulceration
- **T4a/b** – Greater than 4.0mm thick with/out ulceration
62 yo female presents with a 1.3 cm lesion on her left arm
Chromohyphomycosis

- Infection by fungal family Dematiaceae (brown or black fungi)
- Fungi with brown septated hyphae
- Common saprophytic forms found in soil and decomposing vegetation
- Trauma is the gateway for infection
53 year old female with a pruritic perianal rash
Extramammary Paget’s Disease

- Majority of cases represent an in situ malignancy derived from intraepidermal sweat ducts
- Minority of cases represent an epidermotropic metastasis from a distant malignant neoplasm (rectum, bladder, urethra, prostate or endocervix)
- 1/3 of perianal lesions are associated with a rectal adenocarcinoma
- Overall association with an internal malignancy is 15%
38 yo male presents with a firm papule on the left dorsal foot
Mart-1/Ki67
Spitz Nevus

- Benign melanocytic nevi
- 50% occur in children younger than 10yo
- 70% diagnosed during first 2 decades of life
- Differential diagnosis includes atypical Spitz tumor and Spitz-type melanoma
- If older patient, additional molecular tests may be needed
NeoSITE Melanoma Test

- Proprietary fluorescent in-situ hybridization (FISH) test
- Neogenomics Laboratories
- Homozygous loss of 9p21 (spitzoid melanomas)
- Gain of cMYC locus at 8q24 (amelanotic melanoma)
- Gene amplification at CCND1 region on 11q13 and RREB1 region on 6p25
52 yo male presents with a firm red papule on the scalp.
Cutaneous Lymphoid Hyperplasia (CLH)

- AKA “pseudolymphoma”
- B-cell (typical CLH, angiolymphoïd hyperplasia, Kimura’s and Castleman’s diseases)
- T-cell (T-cell CLH, lymphomatoid contact dermatitis, and lymphomatoid drug eruption)
- Both may represent exaggerated reactions to external antigens (bug, tattoo, zoster, trauma)
- T/B cell gene rearrangement studies can help
- Follow for persistence at site or evolution of lesions elsewhere
76 yo female with a pearly papule on left ala.

62 yo male presents with a firm papule on the left nasal ala present for several months.
Desmoplastic Melanoma

- Rare variant of spindle cell melanoma
- Most frequently on sun damaged skin in the elderly
- Uncommon, less than 4% of melanomas
- Different clinical behavior than normal melanomas
- Higher tendency for persistent local growth and less nodal metastasis
- 5 year survival from 70-90%