Dermatopathology Slide Review Part 118

Paul K. Shitabata, M.D.
Dermatopathology Institute
Torrance, CA
Appropriate differential diagnostic considerations include all except:

A. Spindle cell melanoma
B. Atypical fibroxanthoma
C. Leiomyosarcoma
D. Sarcomatoid carcinoma
E. Myxoid liposarcoma
Answer-Myxoid liposarcoma

• This is an example of a malignant spindle cell neoplasm.
• One section shows a remnant of epidermis with the tumor cells effacing the dermal-epidermal junction
• Additional immunostains were helpful in resolving this diagnosis
Cytokeratin
Diagnosis-Sarcomatoid Carcinoma

- The tumor cells show strong focal positivity for Cytokeratin and diffuse strong positive staining for p63. The latter is often positive in cutaneous squamous cell carcinomas.
- Pertinent negative stains for this tumor included CD68, Smooth muscle actin, S100, HMB-45, MelanA, and CD31.
Sheets of pleomorphic cells

No melanin pigment or glandular structures

Numerous atypical MF
What is the best diagnosis?

A. Blue nevus
B. Combined nevus
C. Nevus of Ota
D. Tattoo
E. Mongolian spot
Tattoo
Coarse Pigment in macro-Phages and dermis

Polarization
May reveal Refractile particles

Lacks Dendritic processes
What additional studies should be ordered for this lesion?
Diagnosis: Splinter with abscess and granulomas

- In this setting, microbiological special stains including an AFB, GMS/PAS for fungus, and tissue Gram stain are helpful to exclude a concomitant infection.
- Splinters are notorious for implanting dematiaceous saprobes leading to chromomycosis or a phaeohyphomycotic cyst.
- In this case, all microbiological special stains were negative.
Splinter-note cell walls

Abscess Cavity With Granuloma and granulation tissue
What additional immunohistochemical stains would be helpful to establish the diagnosis?
Malignant Melanoma, Amelanotic Type
Nesting pattern

Diffuse growth pattern

Minimal to Absent Melanin pigment

Cytologic Pleomorphism
What is the best diagnosis?

A. Cylindroma
B. Nodular hidradenoma
C. Trichoblastoma
D. Nodular basal cell carcinoma
E. Eccrine spiradenoma
Cylindroma
Dermal circumscribed tumor

Jigsaw Puzzle pattern

Cytologically Bland cells