

Dermpath CORE & Applied Examination Review

1a. The condition pictured can involve multiple organ systems. What is the most common site of extracutaneous involvement?

- A. lung
- B. eye
- C. heart
- D. sinuses
- E. liver

1b. Work-up of patients with this condition should include which of the following? More than one answer may be correct.

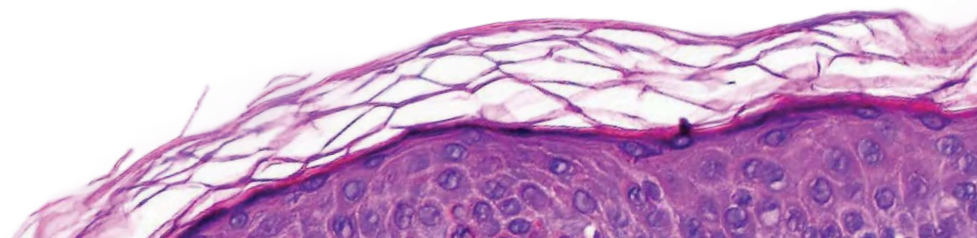
- A. SPEP with immunofixation
- B. UPEP and serum free light chains
- C. Bone marrow biopsy
- D. Quantitative immunoglobulins
- E. Ophthalmology referral

2.

- A. dilated pore of Winer
- B. pilar sheath acanthoma
- C. fibrofolliculoma
- D. trichofolliculoma
- E. cystic panfolliculoma

3.

- A. myxoid DFSP
- B. pleomorphic dermal sarcoma
- C. liposarcoma
- D. spindle cell lipoma
- E. pleomorphic lipoma



4.

- A. macular amyloidosis
- B. lichen simplex chronicus
- C. post-inflammatory pigmentary alteration
- D. lichen amyloidosis
- E. colloid milium

5a.

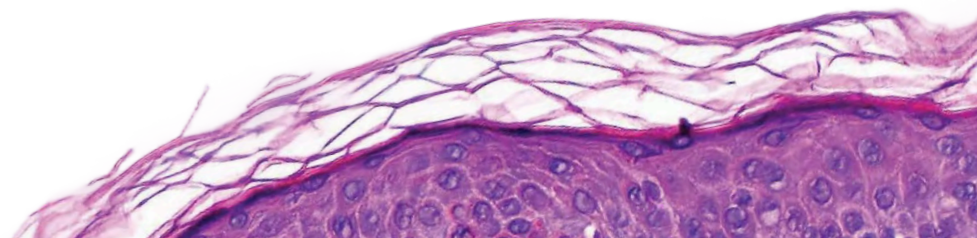
- A. juvenile xanthogranuloma
- B. syphilis
- C. Langerhans cell histiocytosis
- D. mast cell disease
- E. congenital melanocytic nevus

5b. Which of the following immunohistochemical profiles would be most useful in the histologic evaluation of this lesion?

- A. CK20, neurofilament, TTF-1, chromogranin, INSM-1
- B. CD117, tryptase, CD68, CD43
- C. CD3, CD20, bcl-2, bcl-6, CD10, kappa, lambda
- D. CD34, CD31, ERG, HHV8
- E. S100, CD1a, CD207, CD68

6.

- A. temporal arteritis
- B. nodular vasculitis
- C. thrombophlebitis
- D. cholesterol embolism
- E. polyarteritis nodosa



7. The stain pictured in these sections is a:

- A. Fite stain
- B. Mart-1/Melan A immunostain
- C. Treponema pallidum immunostain
- D. PAS stain
- E. Fontana-Masson stain

8. Which of the following regarding the condition pictured is CORRECT:

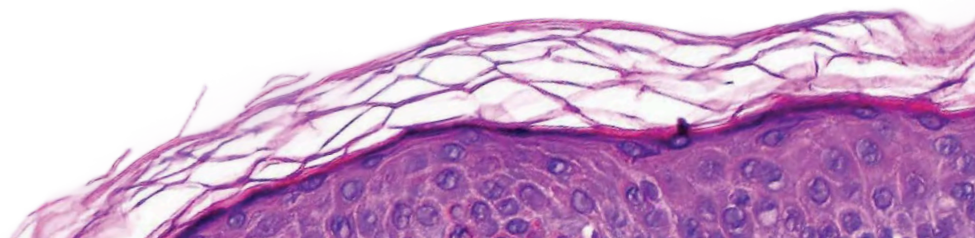
- A. It is transmitted primarily through the bite of infected phlebotomine sandflies.
- B. Prior infection confers lifelong immunity.
- C. The organism causing the condition is an encapsulated yeast.
- D. It is the most prevalent endemic mycosis in North America.
- E. In immunocompetent patients, even mild acute pulmonary disease should be treated.

9a. Patients with these lesions are at increased risk for which of the following?

- A. Breast and thyroid tumors
- B. Pulmonary cysts
- C. Various histologic types of renal tumors
- D. All of the above are correct
- E. Two of the above are correct

9b. Which of the following is an INCORRECT statement regarding patients with these lesions?

- A. They have an autosomal dominantly inherited hamartomatous disorder.
- B. The condition is caused by germline pathogenic variants in the FLCN gene.
- C. The renal tumors the patients develop are typically bilateral, multifocal, and slow growing.
- D. Skin lesions typically appear in the third or fourth decades and increase in size and number with age.
- E. Acrochordons are diagnostic of the condition.



10. Which of the following statements regarding this condition is INCORRECT?

- A. It is a congenital cutaneous hamartoma occurring in less than 1% of neonates.
- B. It occurs most commonly on the scalp and head/neck.
- C. It is a mosaic RASopathy with somatic activating mutations in HRAS or KRAS identified in lesional keratinocytes.
- D. The two most common secondary neoplasms arising in these lesions are basal cell carcinoma and hidradenoma papilliferum.
- E. Extensive or linear lesions may be associated with epidermal nevus syndrome.

11.

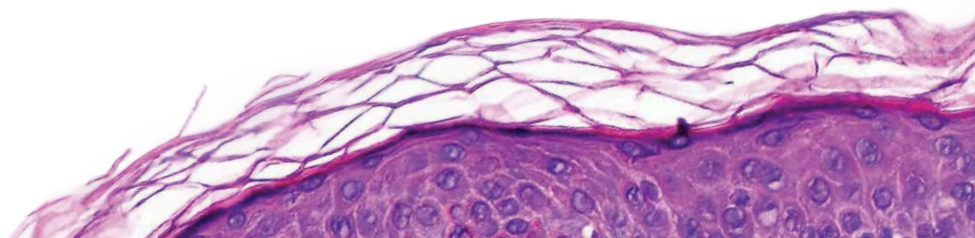
- A. xanthogranuloma
- B. cellular blue nevus
- C. hemosiderotic dermatofibroma
- D. nodular Kaposi sarcoma
- E. Bednar tumor

12a.

- A. factitial panniculitis
- B. nodular vasculitis
- C. lipodermatosclerosis
- D. pancreatic panniculitis
- E. lupus panniculitis

12b. Recommended evaluation of a patient with this condition would include: (More than one answer may be correct)

- A. serum lipase and amylase
- B. CBC and CRP
- C. Liver functions tests, serum calcium, triglycerides
- D. Abdominal imaging
- E. Joint evaluation



12c. What is the most common cause of the condition represented in this slide?

- A. pancreatic neoplasm
- B. diabetes
- C. hypercalcemia
- D. medications
- E. acute or chronic pancreatitis (most commonly alcohol-related)

13. The best stain to confirm the diagnosis in this case would be:

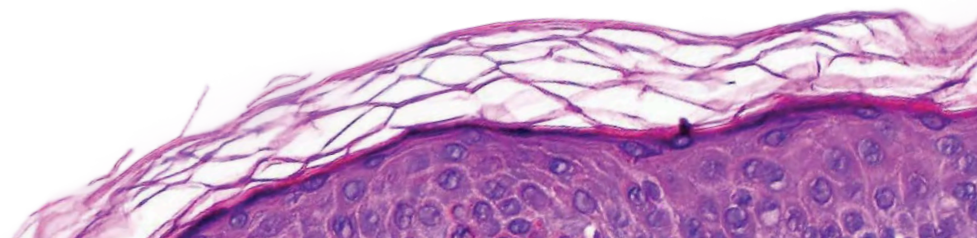
- A. Ziehl-Neelsen
- B. Oil-red O
- C. PAX-8
- D. Adipophilin
- E. Fite

14.

- A. nodular amyloidosis
- B. colloid milium
- C. erythropoietic protoporphyria
- D. nodular solar elastosis
- E. macular amyloidosis

15a.

- A. androgenetic alopecia
- B. trichotilliosis
- C. alopecia areata
- D. lichen planopilaris
- E. discoid lupus erythematosus



15b. A patient with the condition in 15a is more predisposed to also having which of the following:

- A. Hashimoto's thyroiditis
- B. Atopic dermatitis
- C. Vitiligo
- D. Type 1 diabetes
- E. All of the above

16. A 21-year-old male with new onset seizures presents with multiple red telangiectatic papules on the lower trunk, buttocks, thighs, and scrotum. These are increasing in number, and a biopsy of a representative lesion is shown. Which of the following findings would also be expected in this patient?

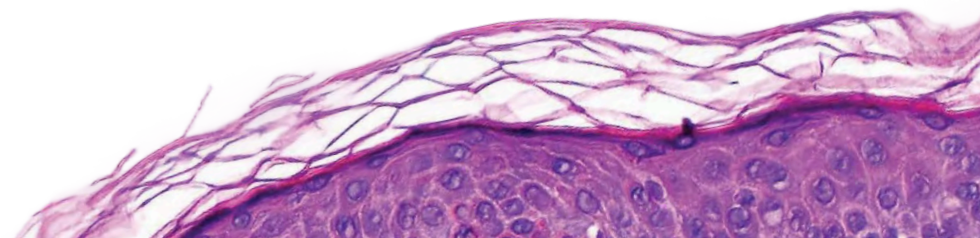
- A. renal insufficiency
- B. whorled corneal opacities
- C. recurrent fevers
- D. Maltese crosses in the urine
- E. all the above

17. The translocation characterizing this neoplasm is demonstrated using which of the following ancillary techniques:

- A. immunohistochemistry
- B. Western blot
- C. flow cytometry
- D. polymerase chain reaction (PCR)
- E. fluorescence in situ hybridization (FISH)

18.

- A. cellular blue nevus
- B. deep penetrating nevus
- C. hemosiderotic dermatofibroma
- D. spindle cell melanoma
- E. Bednar tumor



19.

- A. leishmaniasis
- B. blastomycosis
- C. histoplasmosis
- D. chromomycosis
- E. phaeohyphomycotic cyst

20.

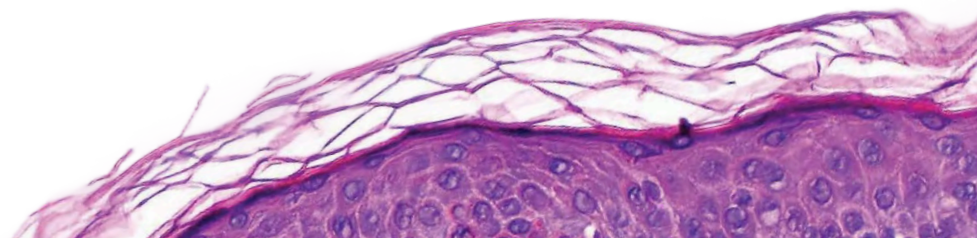
- A. chronic pigmented purpura
- B. thrombotic vasculopathy
- C. leukocytoclastic vasculitis
- D. cholesterol embolus
- E. pityriasis rosea

21.

- A. Langerhans cell histiocytosis
- B. mycosis fungoides
- C. pagetoid Bowen's disease
- D. extramammary Paget's disease
- E. melanoma in-situ

22.

- A. benign lichenoid keratosis
- B. lichenoid drug eruption
- C. lichenoid lupus erythematosus
- D. pityriasis lichenoides chronica
- E. lichen planus



23.

- A. dermatofibrosarcoma protuberans
- B. desmoplastic melanoma
- C. diffuse neurofibroma
- D. scleromyxedema
- E. blue nevus

24. The pictured organism is:

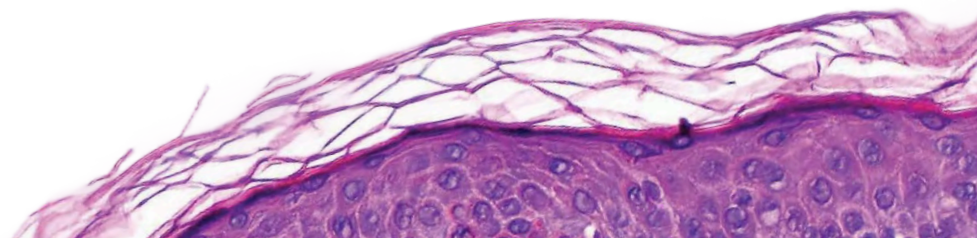
- A. a botfly larva
- B. Lone star tick
- C. a gravid sand flea
- D. onchocerca volvulus
- E. sparganum

25a. A 21-year-old male presents with a 7mm reddish-tan papule on his neck. Which of the following would be most useful in evaluating this lesion?

- A. FISH
- B. PCR
- C. Gene expression profiling
- D. A bap-1 immunostain
- E. Comparative genomic hybridization

25b. Which of the following regarding the bap-1 inactivated tumor predisposition syndrome are correct statements?

- A. Most bap-1 inactivated tumors are the result of sporadic mutations.
- B. In patients with germline bap-1 mutations, the bap-1 inactivated melanocytic tumors generally appear before other malignancies.
- C. All patients with a bap-1 inactivated melanocytic tumor should be referred for genetic counseling and germline testing.
- D. All the above statements are correct.
- E. Two of the above statements are correct.



26.

- A. squamous cell carcinoma
- B. pseudoepitheliomatous hyperplasia overlying a tattoo.
- C. inflamed verruca
- D. keratoacanthoma
- E. hypertrophic lichen planus

27.

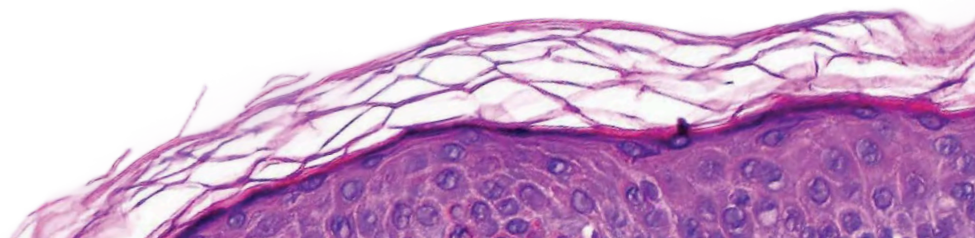
- A. stasis dermatitis
- B. microvenular hemangioma
- C. angiosarcoma
- D. Kaposi sarcoma
- E. diffuse dermal angiomatosis

28.

- A. acantholytic actinic keratosis
- B. pemphigus vulgaris
- C. Hailey-Hailey disease
- D. warty dyskeratoma
- E. transient acantholytic dermatosis

29.

- A. microvenular hemangioma
- B. glomeruloid hemangioma
- C. tufted angioma
- D. Kaposi sarcoma
- E. angiosarcoma



30.

- A. spiradenoma
- B. chondroid syringoma
- C. myofibroma
- D. trichoblastoma
- E. cylindroma

31.

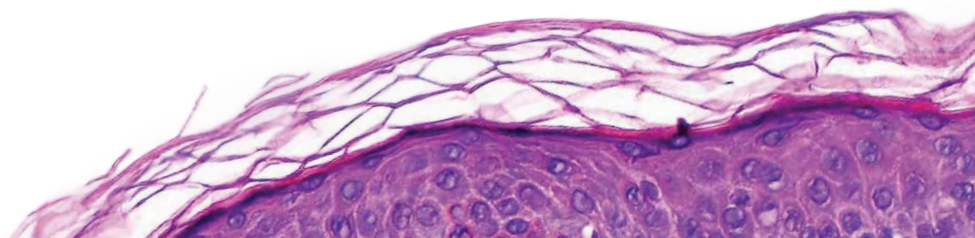
- A. Granulomatous response to ruptured cyst
- B. Hansen's disease
- C. paraffinoma
- D. gel foam
- E. Artecoll reaction

32. Recommended laboratory evaluation for patients with this condition include all EXCEPT:

- A. CBC
- B. Serum immunoglobulins
- C. endocrine panel
- D. comprehensive metabolic panel
- E. CRP

33.

- A. digital papillary adenocarcinoma
- B. syringocystadenoma papilliferum
- C. tubulopapillary cystic adenoma with apocrine differentiation
- D. hidradenoma papilliferum
- E. digital papillary adenoma



34.

- A. seborrheic dermatitis
- B. tinea versicolor
- C. dermatophytosis
- D. candidiasis
- E. psoriasis

35. The best confirmatory stain for this case is:

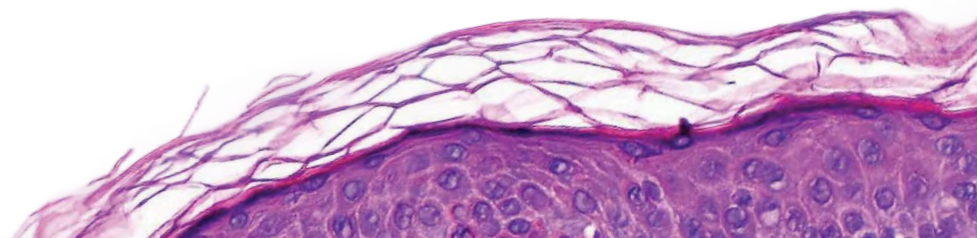
- A. CD79a
- B. CD117
- C. CD1a
- D. CD4
- E. CD68

36.

- A. xanthoma
- B. cryptococcosis
- C. histoplasmosis
- D. balloon cell nevus
- E. xanthogranuloma

37.

- A. barnyard pox
- B. myrmecia wart
- C. nutritional deficiency dermatitis
- D. herpesvirus infection
- E. bullous dermatophytosis



38. Which of the following laboratory tests would you order to monitor disease activity in this patient?

- A. Dsg 1 ELISA
- B. Dsg 3 ELISA
- C. Indirect immunofluorescence
- D. IgA tissue transglutaminase ELISA
- E. none of the above

39.

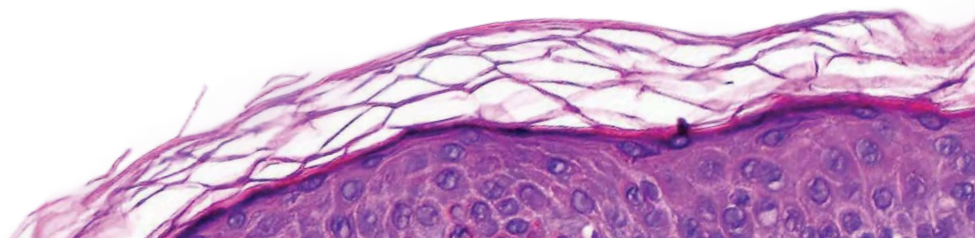
- A. actinic cheilitis
- B. candidiasis
- C. herpesvirus infection
- D. paraneoplastic pemphigus
- E. ulcerative lichen planus

40.

- A. inflammatory linear verrucous epidermal nevus
- B. epidermolytic hyperkeratosis
- C. demodicosis
- D. crusted scabies
- E. verruciform xanthoma

41a.

- A. focal acantholytic dyskeratosis
- B. myrmecia wart
- C. molluscum contagiosum
- D. verruciform xantoma
- E. epidermolytic hyperkeratosis



41b. This reactions pattern may be seen in which of the following conditions:

- A. Bullous congenital ichthyosiform erythroderma
- B. Linear epidermal nevus
- C. Isolated or multiple keratoses
- D. As an incidental finding in histologic sections
- E. All the above

42.

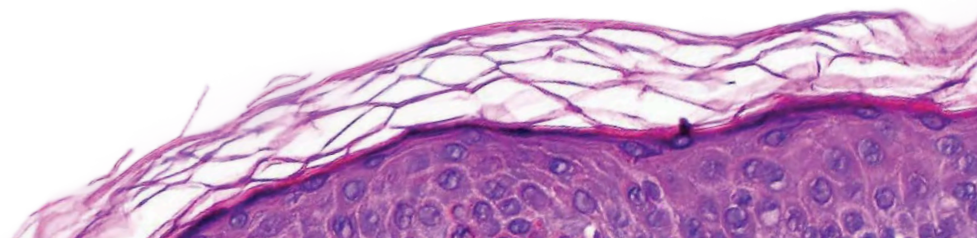
- A. steatocystoma
- B. sebaceous trichofolliculoma
- C. bronchogenic cyst
- D. median raphe cyst
- E. dermoid

43. Which of the following statements regarding this condition is INCORRECT:

- A. The target antigen shows molecular heterogeneity with intracellular and extracellular domains.
- B. ELISA should not be used as a stand-alone diagnostic tool for this condition.
- C. One of the antigens is a member of the plakin family of proteins.
- D. DIF of perilesional biopsies remains the gold standard in diagnosing this condition.
- E. Immunoreactants in this condition are localized to the lamina densa.

44.

- A. well-differentiated squamous cell carcinoma
- B. keratinizing basal cell carcinoma
- C. inverted follicular keratosis
- D. clear cell hidradenoma
- E. desmoplastic trichilemmoma



45. Which of the following statements regarding this condition is INCORRECT:

- A. Histologic confirmation and a history of intestinal disease are necessary for diagnosis even if clinical features are highly suggestive of the diagnosis.
- B. Genital disease precedes the diagnosis of intestinal disease in the majority of children.
- C. Up to 80% of children who present in this manner have underlying intestinal disease.
- D. Targeted history, thorough laboratory evaluation, endoscopy, and MRI as clinically indicated are appropriate and indicated in these patients.
- E. Early management is indicated to avoid the long-term morbidity associated with established genital lymphedema.

46.

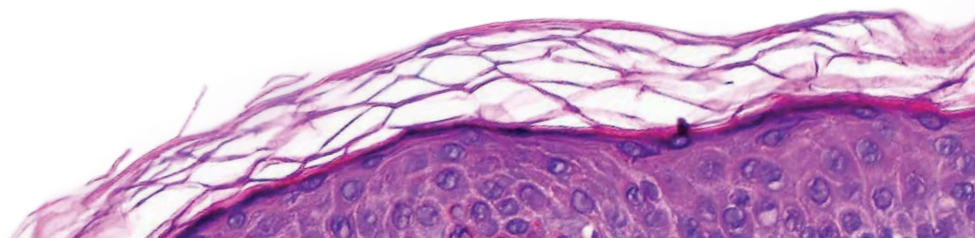
- A. nodular hidradenoma
- B. dermal duct tumor
- C. trichilemmoma
- D. glomus tumor
- E. spiradenoma

47.

- A. desmoplastic trichoepithelioma
- B. microcystic adnexal carcinoma
- C. syringoma
- D. dermal duct tumor
- E. papillary tubular adenoma

48.

- A. deep penetrating nevus
- B. melanoma
- C. combined melanocytic nevus
- D. halo nevus
- E. Spitz nevus



49.

- A. syphilis
- B. erythema multiforme
- C. fixed drug eruption
- D. pityriasis lichenoides et varioliformis acuta
- E. lymphomatoid papulosis, type A

50a.

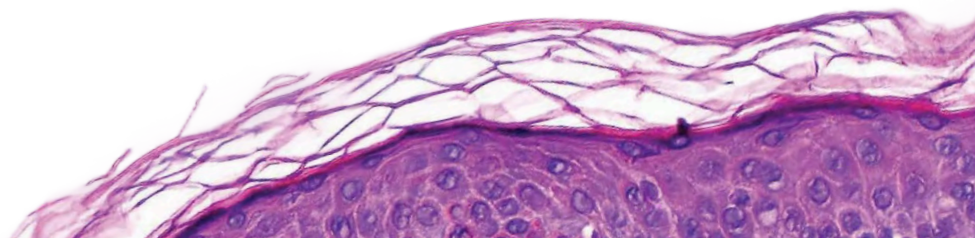
- A. benign lichenoid keratosis
- B. melanoma in-situ
- C. lichenoid drug eruption
- D. pityriasis lichenoides chronica
- E. mycosis fungoides

50b. Which of the following conditions may show identical changes in H&E-stained sections:

- A. lymphomatoid papulosis type B
- B. primary cutaneous CD8+ aggressive epidermotropic cytotoxic T-cell lymphoma
- C. pagetoid reticulosis
- D. adult T-cell leukemia/lymphoma (ATLL)
- E. all of the above

51. A 73-year-old Caucasian male with a history of NMSC presents with a firm, pink nodule on his scalp. The dermal spindle cells are strongly decorated with p63, CK-5/6, CK-AE1/AE3, and high molecular weight cytokeratin. Sox-10, S100, SMA, CD10, and procollagen-1 immunostains are negative. The best diagnosis is:

- A. spindle cell melanoma
- B. atypical fibroxanthoma/PDS
- C. leiomyosarcoma
- D. sarcomatoid squamous cell carcinoma
- E. dermatofibroma



52. The most appropriate laboratory test to order on this patient is:

- A. HgbA1c
- B. SPEP with immunofixation
- C. serum lipid profile
- D. quantiferon gold
- E. hepatitis panel

53. An 84-year-old woman presents with a new onset blistering eruption involving her trunk and extremities. Biopsies for H&E and DIF are obtained. The biopsy for H&E is pictured and DIF of perilesional skin demonstrates linear IgG and C3 at the dermo-epidermal junction in a U-serrated pattern. The best diagnosis is:

- A. bullous pemphigoid
- B. epidermolysis bullosa acquisita
- C. pseudo PCT
- D. bullous lupus erythematosus
- E. cicatricial pemphigoid

54. In reviewing the clinic notes of a new PA that you are supervising, you come across a recent biopsy report that seems discordant with the patient history and the clinical images. Upon reviewing the pathology report more carefully, you see that there was no clinical description of the lesion provided, and the only clinical impression was neoplasm of uncertain behavior. Appropriate next steps include which of the following: (ANY OR ALL MAY BE SELECTED)

- A. Have the PA call the patient with the biopsy results and instructions to follow-up in 3-6 months.
- B. Call the pathologist and/or send them clinical photographs. Ask that deeper sections be cut and examined.
- C. Consider calling the patient back in promptly for a follow-up visit and an additional biopsy or biopsies as clinically indicated.
- D. Emphasize to the PA that the biopsy requisition slips are part of the medical record and admissible in a court of law. Make sure that they understand that they and not the MA are held accountable to make sure that all the clinical information is complete and correct.
- E. Stress to them the need moving forward to make more of an effort to check the requisition slips before submitted to the laboratory to make sure that they reflect accurate and complete clinical information.

