

MOC Questions

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Division of Dermatology
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American Board of Dermatology

The Chicago Dermatological Society has been approved by the ABD to produce self-assessment activities.

Self-assessment activities are intended to be of value to the practicing dermatologist.

The Chicago Dermatological Society is solely responsible for the content.

Question 1:

A 40 year old female patient with signs and symptoms of virilization is diagnosed with steroid cell tumor, NOS. Imaging demonstrated no metastasis. Prior to surgical excision, which of the following is most consistent with her laboratory values:

- A. Elevated testosterone, Normal DHEA-S
- B. Normal testosterone, Elevated DHEA-S
- C. Elevated testosterone, Elevated DHEA-S
- D. Normal testosterone, Normal DHEA-S

Answer 1

Elevated testosterone, Normal DHEA-S

Commentary:

Serum testosterone greater than 200 ng per dL (6.94 nmol per L) is strongly indicative of a virilizing tumor. DHEA-S is elevated in adrenal pathology and is mostly within normal range for steroid cell tumors, NOS

Question 2

A 65-year-old male presents with severe ichthyosis of sudden onset. What is the most likely underlying malignancy?

- A. Non-Hodgkin lymphoma
- B. Hodgkin Lymphoma
- C. Lung cancer
- D. Breast cancer
- E. Multiple myeloma

Answer 2

Non Hodgkin Lymphoma

References:

Word A, Cayce Rachael, Pandya Amit, *Beware of Underlying Malignancy: Acquired Ichthyosis*, Am J Med, 127(3), 2014, 202-4.

Question 3

Which of the following has the worst predicted prognosis?

- A. Lymphomatoid papulosis
- B. Cutaneous lymphoid hyperplasia
- C. Systemic anaplastic large cell lymphoma, ALK-1 positive
- D. Cutaneous anaplastic large cell lymphoma
- E. Systemic anaplastic large cell lymphoma, ALK-1 negative

Answer 3

Systemic anaplastic large cell lymphoma, ALK-1 negative

Question 4

An 8-year-old Native American girl presents with a 8-month history of intensely pruritic papules with occ. hemorrhagic crusts over sun exposed skin. The rash started in summer and improved during fall and winter. Biopsy of the lesion showed hyperkeratosis with orthokeratosis, regular acanthosis, and a dense perivascular lymphocytic infiltrate in the superficial and mid dermis.

Which of the following is the most likely diagnosis?

- A. Scabies
- B. Polymorphous light eruption
- C. Actinic prurigo
- D. Lichen planus
- E. Arthropod bite

Question 4:

Actinic prurigo

Commentary:

Actinic prurigo is an uncommon scarring photodermatosis that primarily in children. It is characterized by intense, chronic pruritus following sun exposure. Biopsy is usually non-specific.

Polymorphous light eruption is the most common cause of photosensitivity with an age of onset usually between 17 and 30 years. Scarring is usually not seen.

Reference:

Grossberg AL. *Update on pediatric photosensitivity disorders*. Curr Opin Pediatr 2013;25:474-79.

Question 5

A 7-year-old girl is diagnosed with actinic prurigo. What is the most effective therapy for actinic prurigo?

- A. Thalidomide
- B. Photoprotection
- C. Hydroxyzine
- D. Prednisone
- E. Ivermectin

Answer 5

Thalidomide

Commentary:

- Photoprotection usually does not control the disease.
- The most effective long term therapy is thalidomide.
- Oral prednisone can be helpful, but frequently fails.
- Hydroxyzine is helpful for pruritus.

Reference:

Valbuena MC, Muvdi S, Lim HW. *Actinic Prurigo*. *Dermatol Clin* 2014;32:335-344.

Question 6

What is the most common cause of trigeminal trophic syndrome?

- A. Varicella zoster virus infection
- B. Surgical ablation of trigeminal nerve
- C. Cerebrovascular accident
- D. Syphilis
- E. Craniotomy

Answer 6

Surgical ablation of the trigeminal nerve

Commentary:

- Surgical ablation of trigeminal nerve is the most common cause
- Gasserian ganglion destruction treats the pain of trigeminal neuralgia
- Approximately 20% of patients will develop TTS after surgery and it is the inciting factor in 75% of reported cases.
- Less common causes of TTS include preceding infection (e.g., varicella zoster virus, herpes simplex virus, syphilis, leprosy), cerebrovascular accident or craniotomy.

Question 7

What is the most commonly affected area in trigeminal trophic syndrome?

- A. Forehead
- B. Nasal tip
- C. Nasal ala
- D. Cheek
- E. Upper lip

Answer 7

Nasal ala

Commentary

- TTS characteristically presents with a crescent-shaped ulceration of the lateral nasal ala.
- Other areas are less commonly affected, including the forehead, cheeks and upper lip.
- The nasal tip is spared because it is innervated by the anterior ethmoidal branch of the nasociliary nerve.

Question 8

A 64 year old male s/p allogeneic renal transplant 6 months prior presents with fever, malaise, and 15 pound weight loss. He has a painful, erythematous nodule with central necrosis on the right upper leg.

Biopsy of the lesion shows a pleomorphic lymphoid infiltrate effacing the normal tissue architecture. Staining shows that the lesion is **CD56+, CD2 and CD7+ with a germline TCR pattern, and diffusely EBER+, CD3 is negative**. What is the most likely diagnosis?

- A. Burkitt's lymphoma
- B. Post-transplant lymphoproliferative disorder, NK/T cell type
- C. Atypical mycobacterial infection
- D. Acute graft rejection
- E. Diffuse large B-cell lymphoma

Answer 8

Post-transplant lymphoproliferative disorder, NK/T cell type (PTLD)

Commentary:

- In a patient with allogeneic transplant, high clinical suspicion is key for diagnosing PTLD.
- Tissue diagnosis is essential
- Burkitt's lymphoma may have a similar presentation with B symptoms and EBER+ tissue staining. Cytogenetic analysis demonstrates a c-MYC gene translocation on chromosome 8 which can usually be detected by routine cytogenetics or FISH.
- In patients on chronic immunosuppression, deep fungal infections should always be on the differential.
- Acute graft rejection may present with similar nonspecific B symptoms, though typically would involve inflammatory infiltration of the transplanted organ.
- Diffuse large B-cell lymphoma has a distinct immunophenotype with positive staining for CD19, CD20, CD22, CD79a and CD45.

Question 9

Confirming the presence of negative birefringent monosodium urate crystals in a biopsy specimen suggestive of gout requires:

- A. Fixation in alcohol
- B. Examination on non-polarized microscopy
- C. Fixation in formalin
- D. High levels of serum uric acid
- E. Paraffin Fixation

Answer 9

Fixation in alcohol

Commentary:

Formalin will resolve the monosodium urate crystals