



American Board of Dermatology

Certification Pathway

SAMPLE ITEMS

BASIC Exam

CORE Exam

APPLIED Exam

Disclaimer: The items included are for demonstration purposes only and are not intended to represent entirely the content, difficulty and scope of the items used on the exams.

Certification Pathway

SAMPLE ITEMS

This 50-item tutorial demonstrates the types of content on the BASIC, CORE, and APPLIED exams.

The BASIC exam tests both knowledge base and application of knowledge, but in a limited scope. The emphasis is on common conditions and less complex situations. For more detail, see [BASIC Exam Content Outline](#).

The CORE modules test more advanced knowledge, for example, knowledge of less common conditions and less commonly used medications, as well as visual diagnosis of clinical and histologic images.

The APPLIED exam focuses on application of knowledge in the context of an individual patient.

The [Content Overview of BASIC, CORE, and APPLIED Exams](#) is a work in progress that provides a general outline of the three examinations. Please note that some overlap in content among the exams can be expected.

The content of this tutorial is copyrighted by ABD. Dermatology residents and faculty are welcome to discuss its contents, but no portion of the tutorial, including images, is to be reproduced or distributed without the express written consent of the ABD.

BASIC EXAM

BASIC EXAM

BASIC EXAM

- (1). Which of the following is the most likely diagnosis?
- (A) Allergic contact dermatitis
 - (B) Cutaneous larva migrans
 - (C) Dermatitis herpetiformis
 - (D) Eruptive xanthomas
 - (E) Inflammatory tinea corporis due to *Trichophyton mentagrophytes*



[click here for a high resolution image](#)

BASIC EXAM

(2). Which of the following is the most likely diagnosis?

- (A) Clear cell acanthoma
- (B) Cutaneous larva migrans
- (C) Granuloma annulare
- (D) Keratoacanthoma
- (E) Porokeratosis of Mibelli



[click here for a high resolution image](#)

BASIC EXAM

(3). Which of the following is the most likely diagnosis?

- (A) Behçets syndrome
- (B) Dermatomyositis
- (C) Erythema elevatum diutinum
- (D) Knuckle pads
- (E) Lichen simplex chronicus



[click here for a high resolution image](#)

BASIC EXAM

(4). Which of the following is the most effective treatment for the patient shown?

- (A) Oral tetracycline
- (B) Topical azelaic acid
- (C) Topical benzoyl peroxide
- (D) Topical clindamycin
- (E) Topical tretinoin



[click here for a high resolution image](#)

BASIC EXAM

- (5). A patient has new-onset fever, transaminase elevation, peripheral eosinophilia, facial edema, and the eruption shown. She has been hospitalized for two weeks for community-acquired pneumonia. Which of the following is the most likely diagnosis?
- (A) Acute, generalized exanthematous pustulosis
 - (B) Drug reaction with eosinophils and systemic symptoms
 - (C) Serum sickness-like reaction
 - (D) Staphylococcal scalded skin syndrome
 - (E) Urticarial vasculitis



[click here for a high resolution image](#)

BASIC EXAM

(6). Which photograph contains the neoplasm that is most concerning for a malignancy?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E
- (F) F



[click here for a high resolution image](#)

BASIC EXAM

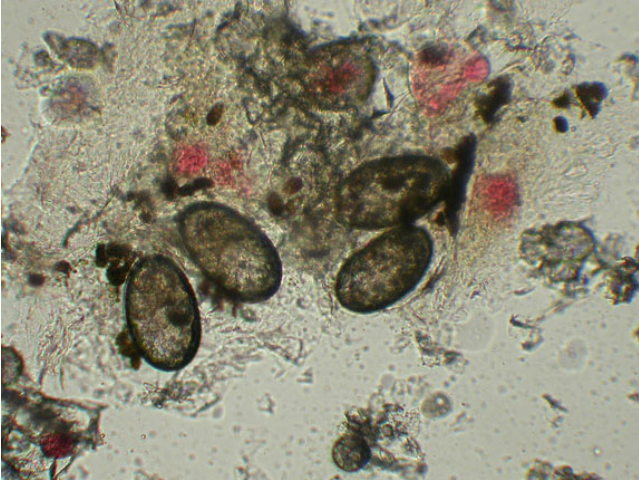
- (7). Which of the following substances is the most likely cause of the skin eruption in this 10-year-old boy?
- (A) Balsam of Peru
 - (B) Epoxy resin
 - (C) Lanolin
 - (D) Nickel
 - (E) *p*-Phenylenediamine



[click here for a high resolution image](#)

BASIC EXAM

- (8). Which of the following agents is most appropriate for the treatment of a 6-month-old infant with these microscopic findings?
- (A) Malathion 0.5% lotion
 - (B) Oral cotrimoxazole
 - (C) Oral ivermectin
 - (D) Permethrin 5% cream
 - (E) Pyrethrin 0.3% lotion



[click here for a high resolution image](#)

BASIC EXAM

(9). Which of the following instruments is shown?

- (A) Blade remover
- (B) Hemostat
- (C) Nail nipper
- (D) Needle holder
- (E) Tissue forceps



[click here for a high resolution image](#)

BASIC EXAM

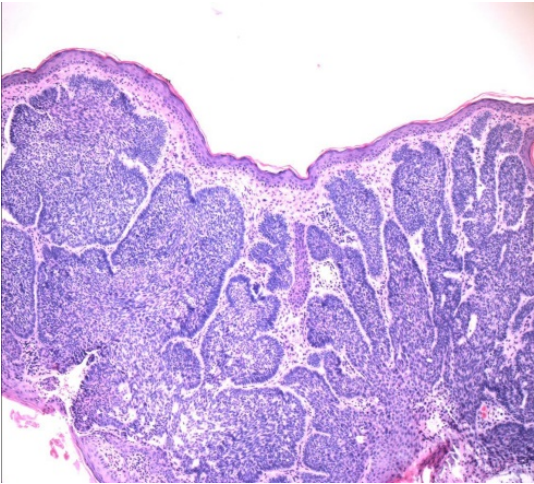
(10). Which of the following suture materials is nonabsorbable?

- (A)** Catgut
- (B)** Polydioxanone (PDS)
- (C)** Polyglactin (Vicryl)
- (D)** Polyglycolic acid (Dexon)
- (E)** Polypropylene (Prolene)

BASIC EXAM

(11). Which of the following is the most likely diagnosis?

- (A) Basal cell carcinoma
- (B) Blue nevus
- (C) Nevus sebaceus
- (D) Sebaceous adenoma
- (E) Syringocystadenoma papilliferum

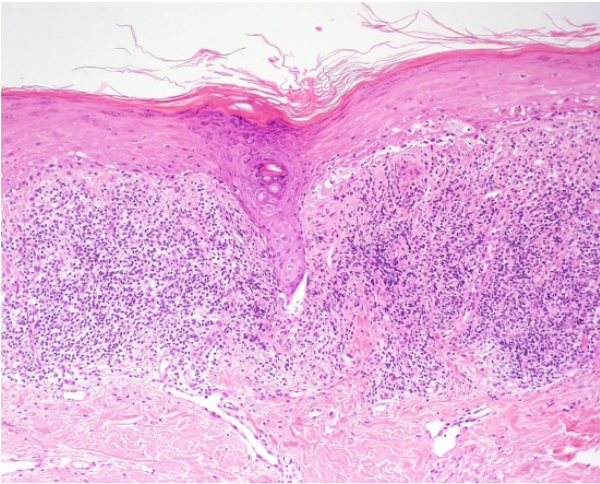


[click here for a high resolution image](#)

BASIC EXAM

(12). Which of the following best describes the histologic pattern shown?

- (A) Granulomatous
- (B) Lichenoid
- (C) Psoriasiform
- (D) Spongiotic
- (E) Vasculopathic



[click here for a high resolution image](#)

BASIC EXAM

A researcher is planning a study to determine whether a dermatologic therapy that is suspected of causing an adverse effect truly causes that effect. Which of the following study designs is most appropriate?

- (A) Case-control
- (B) Case report
- (C) Case series
- (D) Open label pilot
- (E) Patient survey

BASIC EXAM

- (14). Which of the following cells best characterize the innate (as opposed to the acquired) immune response?
- (A) B cells
 - (B) Cytotoxic T cells
 - (C) NK cells
 - (D) T_H1 cells
 - (E) T_H2 cells

BASIC EXAM

(15). Both loricrin and involucrin are found in which of the following?

- (A) Basement membrane zone
- (B) Cell envelopes
- (C) Intermediate filaments
- (D) Keratinosomes
- (E) Nucleus

CORE EXAM

CORE EXAM

CORE EXAM

(16). Secondary erythromelalgia is most commonly associated with which of the following?

- (A)** Dapsone hypersensitivity
- (B)** Hansen disease
- (C)** Polyarteritis nodosa
- (D)** Myeloproliferative disorders
- (E)** Sarcoidosis

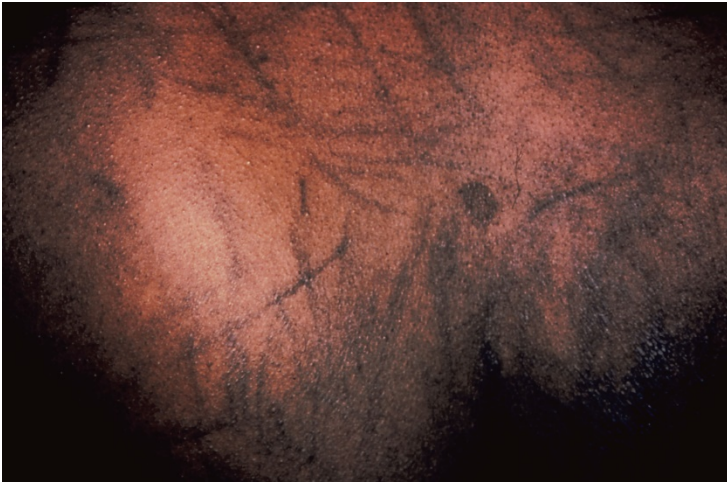
CORE EXAM

- (17). Which of the following antibiotic drugs is most likely to interfere with the efficacy of oral contraceptives?
- (A) Ampicillin
 - (B) Ciprofloxacin
 - (C) Clarithromycin
 - (D) Doxycycline
 - (E) Rifampin

CORE EXAM

(18). These linear streaks on the back are secondary to treatment with which of the following?

- (A) Bleomycin
- (B) Chlorpromazine
- (C) Doxorubicin
- (D) Furocoumarin
- (E) Minocycline



[click here for a high resolution image](#)

CORE EXAM

(19). Which of the following areas is most likely to develop lesions of lupus panniculitis?

- (A)** Hands
- (B)** Neck
- (C)** Posterior calves
- (D)** Shins
- (E)** Upper arms

CORE EXAM

- (20). Which of the following is the mechanism of action of ipilimumab?
- (A) Binding and inactivation of immunoglobulin E
 - (B) Binding of CTLA-4 and blocking of its interaction with CD80/CD86 ligands
 - (C) Competitive antagonism of the smoothened receptor
 - (D) Inhibition of cyclic adenosine monophosphate hydrolysis
 - (E) Interruption of the B-Raf/MEK/ERK pathway

CORE EXAM

(21). Which of the following is the most likely diagnosis in this 4-year-old girl?

- (A) Alopecia areata
- (B) Aplasia cutis congenita
- (C) Nevus sebaceous
- (D) Triangular alopecia
- (E) Trichorhinophalangeal syndrome



[click here for a high resolution image](#)

CORE EXAM

- (22). Compared with dermatomyositis in adults, juvenile dermatomyositis is characterized by which of the following?
- (A) Increased association with malignancy
 - (B) Increased calcinosis cutis
 - (C) Increased photosensitivity
 - (D) Lesser degree of muscle weakness
 - (E) Male predominance

CORE EXAM

(23). Which of the following is the most likely diagnosis of this lesion in an 18-month-old boy born at 32 weeks gestation?

- (A) Cutaneous calcinosis
- (B) Pilomatricoma
- (C) Porokeratotic nevus
- (D) Traumatic neuroma
- (E) Verruca vulgaris



[click here for a high resolution image](#)

CORE EXAM

- A 1-year-old boy with ichthyosis was delivered by cesarean section following an induced, (24). prolonged labor. Physical examination shows cryptorchidism. Which of the following is the most likely diagnosis?
- (A) Ichthyosis vulgaris
 - (B) Lamellar ichthyosis
 - (C) Refsum disease
 - (D) Sjögren-Larsson syndrome
 - (E) X-linked ichthyosis

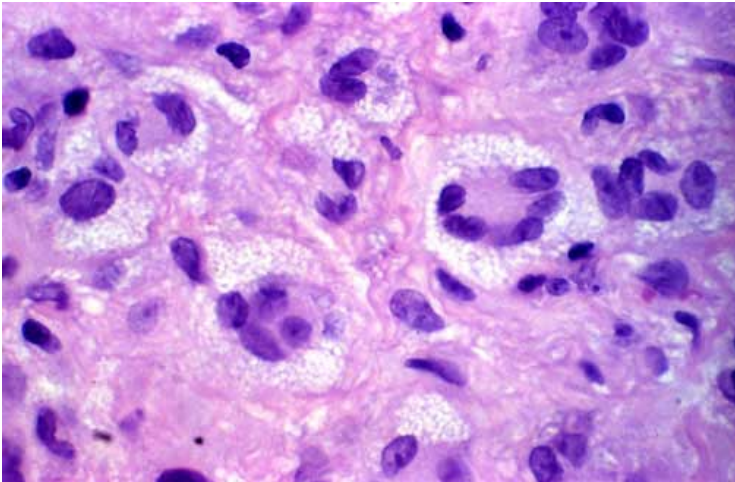
CORE EXAM

- (25). Initiation of acute inflammation in atopic dermatitis is most characteristically associated with which of the following cytokines?
- (A) IFN- γ
 - (B) IL-1 β
 - (C) IL-2
 - (D) IL-4
 - (E) TNF- α

CORE EXAM

(26). These findings are most consistent with which of the following?

- (A) Eruptive xanthoma
- (B) Granular cell tumor
- (C) Multicentric reticulohistiocytosis
- (D) Sebaceous adenoma
- (E) Xanthogranuloma



[click here for a high resolution image](#)

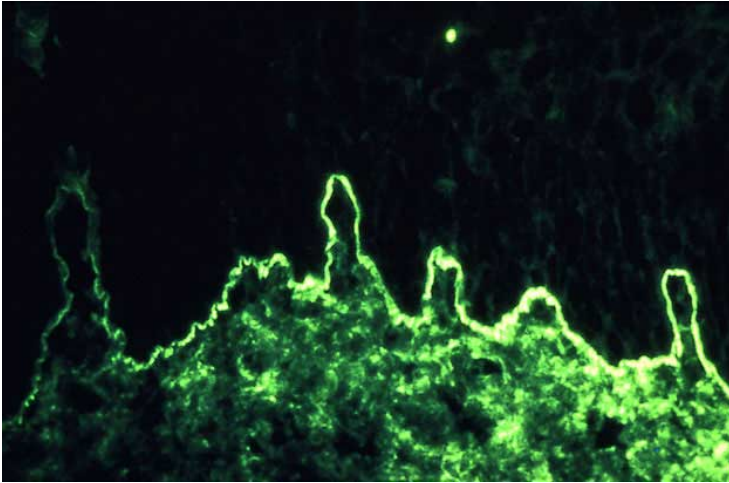
CORE EXAM

- (27). Which of the following histopathologic features is common to both melanoma and Spitz nevus?
- (A) Angiolymphatic invasion
 - (B) Asymmetric architecture of the lesion
 - (C) Maturation of melanocytes at deeper dermal levels
 - (D) Pagetoid spread of melanocytes
 - (E) Tripolar mitotic figures

CORE EXAM

(28). This direct immunofluorescence study uses antihuman IgG antibody. Which of the following is the most likely diagnosis?

- (A) Bullous pemphigoid
- (B) Discoid lupus erythematosus
- (C) Lichen planus
- (D) Pemphigus erythematosus
- (E) Pseudoporphyria

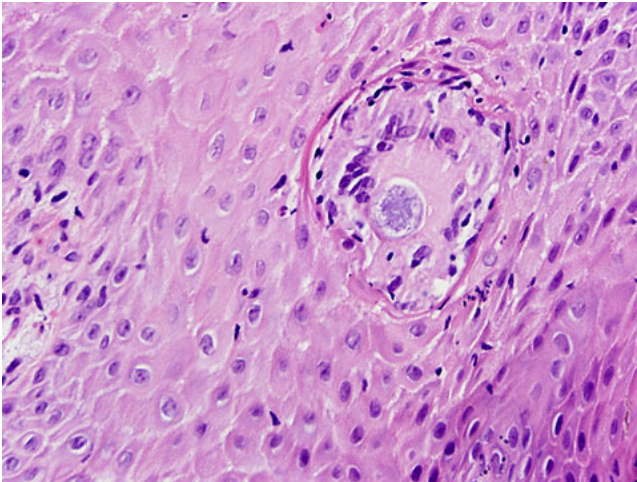


[click here for a high resolution image](#)

CORE EXAM

(29). Which of the following is the most likely diagnosis?

- (A) Blastomycosis
- (B) Coccidioidomycosis
- (C) Cryptococcosis
- (D) Lobomycosis
- (E) Protothecosis



[click here for a high resolution image](#)

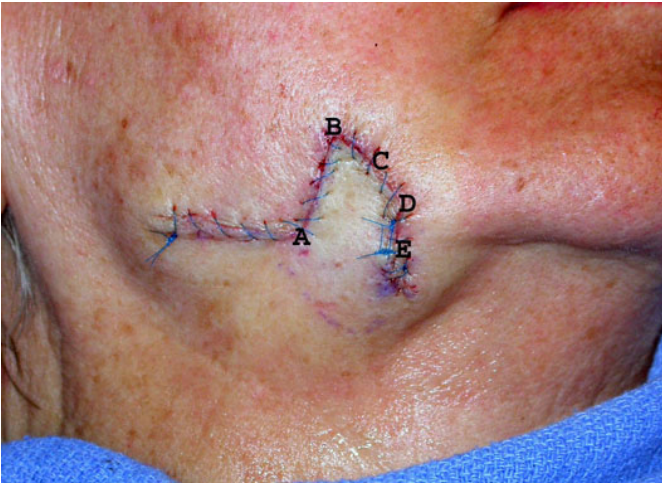
CORE EXAM

- (30). Albinism results from which of the following?
- (A) Increased degradation of melanosomes
 - (B) Decreased tyrosinase activity
 - (C) Decreased synthesis of melanosomes
 - (D) Decreased transfer of melanosomes
 - (E) Abnormal structure of melanosomes

CORE EXAM

(31). The key tension stitch for this flap is located at which of the following labeled sites?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E



[click here for a high resolution image](#)

CORE EXAM

- (32). According to American Heart Association recommendations, which of the following procedures warrants administration of antibiotic prophylaxis in patients at high risk for endocarditis?
- (A) Ablative laser procedure of the face
 - (B) Biopsy of a nail bed
 - (C) Electrodesiccation and curettage on the neck
 - (D) Mohs surgery over the temporal bone
 - (E) Wedge excision on the lip

CORE EXAM

- According to the American Medical Association's current edition of Current Procedural Terminology (CPT), coding a procedure as an excision requires that the procedure have which of the following features?
- (A) Closed using sutures
 - (B) Extends to the subcutis
 - (C) Performed following an initial biopsy
 - (D) Performed using a scalpel
 - (E) Results in histologically clear margins

CORE EXAM

(34). Which of the following is the primary advantage of the suture technique shown?

- (A) Decreased risk of infection
- (B) Decreased wound-edge tension
- (C) Obliteration of dead space
- (D) Prevention of hematoma
- (E) Prevention of seroma



[click here for a high resolution image](#)

CORE EXAM

(35). The temporal branch of the facial nerve supplies which of the following muscles?

- (A)** Occipitalis
- (B)** Orbicularis oris
- (C)** Nasalis
- (D)** Procerus
- (E)** Risorius

APPLIED EXAM

APPLIED EXAM

(36). A 30-year-old woman had excision of a benign lesion on the thigh four days earlier. She now presents with tenderness at the wound site. Which of the following is the most appropriate next step?

- (A) Application of ice packs
- (B) Compression dressing
- (C) Systemic antibiotic therapy
- (D) Topical antibiotic therapy
- (E) Topical corticosteroid therapy

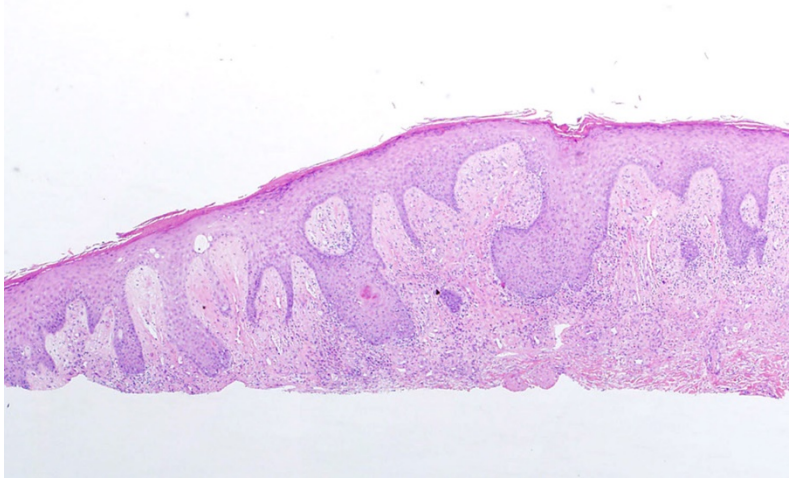


[click here for a high resolution image](#)

APPLIED EXAM

(37). A 63-year-old female underwent Mohs surgery for a squamous cell carcinoma on the left shin 6 months ago, her first skin cancer. She returned to the same surgeon 3 months ago with another squamous cell carcinoma 4 cm lateral to the prior site, and he removed this tumor with Mohs surgery. She recently had a third lesion biopsied and interpreted as squamous cell carcinoma. She presents to you for a second opinion with the presentation noted in image A. You obtain the biopsy slide for review noted in image B. Which ONE of the following is the most acceptable next step?

- (A) Cetuximab
- (B) Intralesional methotrexate
- (C) Mohs surgery
- (D) Obtain PET/CT
- (E) Obtain second opinion on pathology
- (F) Topical 5-FU under occlusion



[click here for a high resolution image](#)

APPLIED EXAM

(38). A 58-year-old woman is being injected with hyaluronic acid into the nasolabial folds. During the injection, blanching of the skin develops, and she reports extreme pain. Which TWO of the following are the most appropriate next steps?

- (A) Apply cold compresses
- (B) Apply topical apraclonidine ophthalmic solution
- (C) Apply topical lidocaine
- (D) Apply topical nitropaste under occlusion
- (E) Apply topical steroids
- (F) Continue injecting, as this is an anticipated reaction
- (G) Inject hyaluronidase into the injection site
- (H) Prescribe a narcotic analgesic and have the patient return the next day
- (I) Switch to a smaller bore needle

APPLIED EXAM

(39). A 94-year-old woman with Alzheimer's disease is referred to you for evaluation of the lesion shown. It has been present for 14 years and is clinically fixed to underlying bone. A recent biopsy reveals an infiltrating basal cell carcinoma. The lesion has not previously been treated. Which ONE of the following is an appropriate therapy to recommend at this time? There may be more than one option that is an acceptable answer. However, only ONE option should be selected.

- (A) 5-fluorouracil
- (B) Acitretin
- (C) Capecitabine
- (D) Cetuximab
- (E) Curettage and electrodesiccation
- (F) Imiquimod
- (G) No treatment
- (H) Photodynamic therapy
- (I) Radiation therapy
- (J) Surgical excision with complete margin assessment



[click here for a high resolution image](#)

APPLIED EXAM

(40). A 25-year-old employee in an engineering research lab develops this intensely pruritic eruption on her hands, which progresses over months to involve her forearms and face. Which of the following is the most appropriate next step in establishing the diagnosis?

- (A) Bacterial culture
- (B) Patch testing
- (C) Potassium hydroxide preparation of skin scrapings
- (D) Scabies preparation of skin scrapings
- (E) Skin biopsy



[click here for a high resolution image](#)

APPLIED EXAM

A 35-year-old woman has been diagnosed with significant plaque psoriasis affecting 20% body surface area, as well as psoriatic arthritis. Which THREE of the following therapies, when used as monotherapy, are most likely to benefit both her skin and her joint disease?

- (A) 6-thioguanine
- (B) Acitretin
- (C) Etanercept
- (D) Hydroxychloroquine
- (E) Hydroxyurea
- (F) Methotrexate
- (G) Rituximab
- (H) Ultraviolet phototherapy with psoralen (PUVA)
- (I) Ustekinumab

APPLIED EXAM

- (42). A 45-year-old man with Crohn disease and uncontrolled diabetes mellitus presents with a 2-week history of this painful, enlarging, solitary 2 cm lesion on the abdomen. Biopsy demonstrates a dense dermal neutrophilic infiltrate; no organisms are seen on special stains. Wound culture for bacterial pathogens is growing coagulase negative staphylococci. Tissue cultures for atypical mycobacteria and fungi are pending. Which of the following would you recommend at this point?
- (A) Cyclosporine at 5 mg/kg/day
 - (B) Doxycycline 100 mg twice a day
 - (C) Intralesional triamcinolone
 - (D) Mupirocin ointment
 - (E) Prednisone 60 mg a day



[click here for a high resolution image](#)

APPLIED EXAM

- (43). A 60-year-old woman presents with a 3-month history of the lesion shown. It has not been treated. Which of the following is the most likely diagnosis?
- (A) Extramammary Paget disease
 - (B) Fixed drug eruption
 - (C) Granuloma inguinale
 - (D) Lichen planus
 - (E) Psoriasis

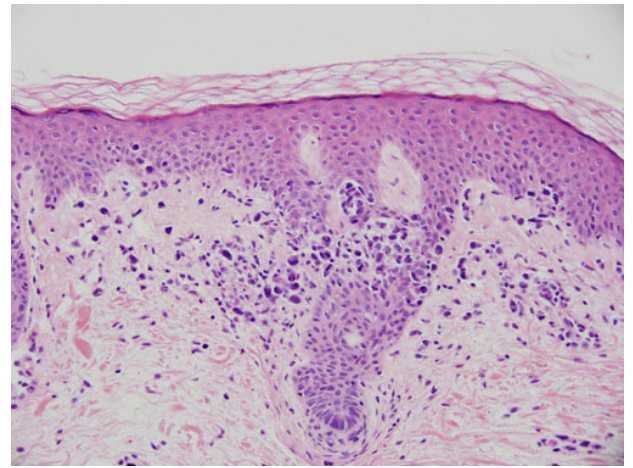


[click here for a high resolution image](#)

APPLIED EXAM

(44). A 52-year-old man who has a 10-year history of a pruritic rash, which improves but does not clear with triamcinolone cream, comes to the office. On physical examination, he has erythematous scaling patches on his chest and buttocks. Biopsy results are shown. Which of the following is the most appropriate therapy to institute at this time?

- (A) Cyclosporine
- (B) Doxycycline
- (C) Gamma interferon
- (D) Narrowband UVB
- (E) Tacrolimus ointment
- (F) Terbinafine

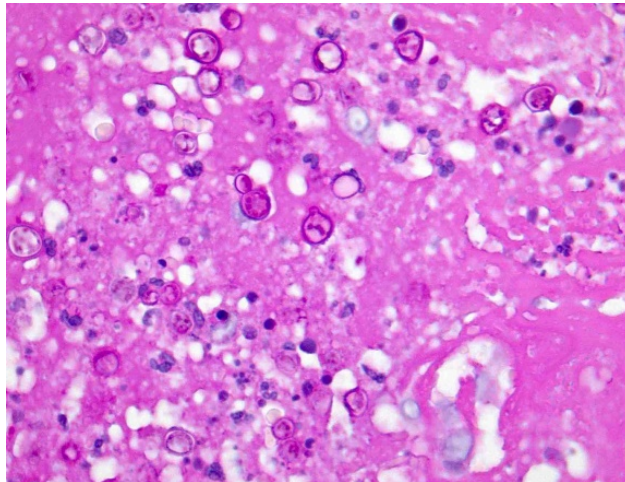
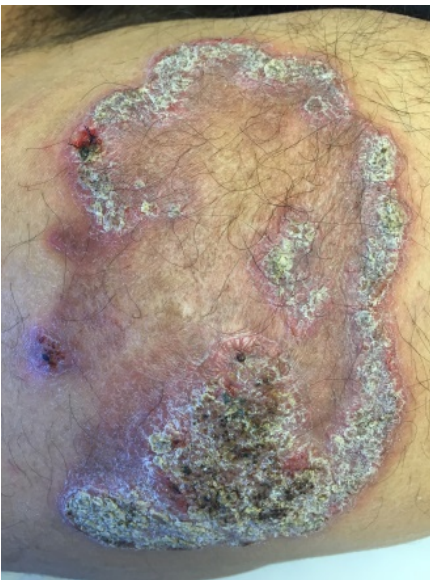


[click here for a high resolution image](#)

APPLIED EXAM

(45). A 26-year-old Hispanic man from Ohio presents with a solitary plaque on his right thigh that has been present and slowly expanding for four years. The plaque is asymptomatic and has not been evaluated or treated in the past. He is otherwise healthy, without systemic symptoms, and is on no medications. The biopsy finding from the lesion is shown. Which of the following is the most appropriate treatment?

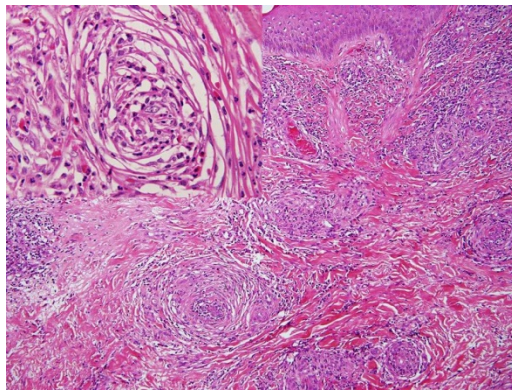
- (A) Oral doxycycline plus rifampin
- (B) Oral foscarnet
- (C) Oral itraconazole
- (D) Oral miltefosine
- (E) Oral terbinafine
- (F) Oral valacyclovir
- (G) Topical mupirocin



[click here for a high resolution image](#)

APPLIED EXAM

- (46). A 26-year-old woman comes to the office for evaluation of nonpainful lesions that initially developed on her toes six months ago and has spread to involve bilateral knees, elbows, and forearms as shown. Pathology of a representative lesion is shown. Which of the following is the most likely diagnosis?
- (A) Atypical mycobacterial infection
 - (B) Cutaneous Crohn disease
 - (C) Erythema elevatum diutinum
 - (D) Kaposi sarcoma
 - (E) Multiple juvenile xanthogranulomas
 - (F) Myofibromatosis
 - (G) Sweet syndrome



[click here for a high resolution image](#)

APPLIED EXAM

- A 14-year-old girl who has had the eruption shown on the medial thighs for the last month is brought to the office. She takes no medications, and a review of systems is negative. A skin biopsy shows a mild perivascular lymphocytic infiltrate with extravasation of red blood cells and hemosiderin deposition. Which of the following laboratory tests is most appropriate as the next step in evaluation?
- (A) Cryoglobulin testing
 - (B) No laboratory testing
 - (C) Plasma vitamin C level
 - (D) Platelet count
 - (E) Rheumatoid factor level
 - (F) T cell subsets via flow cytometry
 - (G) Urinalysis



[click here for a high resolution image](#)

APPLIED EXAM

A 4-year-old boy was first noted to have this lesion at 4 months of age. It occasionally enlarges (48). and then drains. He is referred to dermatology for removal. Which of the following is the most appropriate action?

- (A) Cryotherapy
- (B) Intralesional triamcinolone
- (C) MRI
- (D) Shave biopsy
- (E) Topical tretinoin



[click here for a high resolution image](#)

APPLIED EXAM

- A 9-year-old girl is brought to the office because she has had the extremely pruritic rash shown on her arms and popliteal fossa for the past 2 years. Her parents say that none of the many types of emollients and topical corticosteroids have provided relief. During the interview, they open a bag containing multiple small tubes, including hydrocortisone 1% and 2.5% creams and ointments, desonide 0.05% ointment, and alclometasone 0.05% cream. They say they have
- (49). applied the topical corticosteroids for up to a week at a time with some improvement, but the symptoms recur once the therapy is stopped. The patient is bathed daily with a mild cleanser, and a petroleum-based emollient is applied several times a day. Her diet includes peanuts, eggs, wheat, and milk products. Medical history includes recent diagnosis of attention-deficit/hyperactivity disorder, but she is otherwise healthy. Which ONE of the following options is the most appropriate next step in management? (Select exactly 1 option.)
- (A) Add oral cetirizine
 - (B) Add topical mupirocin 2% ointment
 - (C) Change to a ceramide-based emollient
 - (D) Perform patch testing
 - (E) Perform prick and ImmunoCAP testing
 - (F) Start oral prednisone
 - (G) Use mid-potency topical corticosteroid ointment until clear



[click here for a high resolution image](#)

APPLIED EXAM

(50). An otherwise-healthy, 4-year-old boy who has had hair loss for the last three months is brought to the office. In addition to the characteristic areas shown, similar changes are seen on the occipital scalp. The eyebrows and eyelashes are not affected. He recently started preschool and is active. His parents report no changes in his health. The boy says the hair loss does not bother him. Which ONE of the following is the most appropriate first therapy? There may be more than one option that is an acceptable answer. However, only ONE option should be selected.

- (A) Class II topical corticosteroid
- (B) Contact sensitization with squaric acid
- (C) Intralesional injection of triamcinolone
- (D) Reassurance and observation
- (E) Systemic ruxolitinib
- (F) Systemic prednisone
- (G) Topical anthralin



[click here for a high resolution image](#)

ANSWER KEY

BASIC-TYPE ITEMS

1:

A – Allergic contact dermatitis

This item tests the ability to diagnose allergic contact dermatitis based on lesional morphology. Note the linear configuration of blisters, indicating the possibility of an exogenous cause.

2:

E – Porokeratosis of Mibelli

This item tests the ability to diagnose porokeratosis based on lesional morphology. Note the raised border, representing the coronoid lamella.

3:

B – Dermatomyositis

This item tests the ability to diagnose dermatomyositis based on lesional morphology and location. The flat-topped papules over the knuckles are characteristic of Gottron papules.

4:

E – Topical tretinoin

This item tests the ability to select appropriate therapy for comedonal acne. First-line therapy is treatment with a topical retinoid.

5:

B – DRESS

This item tests the ability to incorporate clinical and laboratory findings to choose the most likely diagnosis. The combination of fever, facial edema, morbilliform eruption, elevated transaminases, and eosinophilia, in a patient who has had recent antibiotic therapy, is most characteristic of DRESS.

6:

C – Digital image of basal cell carcinoma

This item tests the ability to assess risk of malignancy of common growths, based on lesional morphology. The lesions in images A, B, D, E, and F are benign-appearing nevi.

7:

D – Nickel

This item tests the ability to recognize allergic contact dermatitis due to nickel. The location on the lower abdomen is characteristic of contact dermatitis due to nickel in buttons of jeans.

8:

D – Permethrin 5% cream

This item tests the ability to diagnose scabies based on a skin scraping, and to select an appropriate treatment for a young child.

ANSWER KEY

9:

B – Hemostat

This item tests the ability to recognize a commonly used surgical instrument.

10:

E – Polypropylene (Prolene)

This item tests knowledge of fundamental properties of suture material. Of the choices, the only non-absorbable suture is polypropylene.

11:

A – Basal cell carcinoma

This item tests ability to recognize a common skin condition based on its histology. The basaloid dermal tumor, with peripheral palisading and stromal retraction, is characteristic.

12:

B – Lichenoid

This item tests the ability to distinguish among inflammatory reaction patterns histologically. The band-like inflammatory infiltrate under the epidermis, with basal cell epidermal damage, is characteristic of lichenoid pattern.

13:

A – Case-control

This item tests understanding of terminology of study designs. A case-control study compares two groups differing in outcome, but otherwise similar, to evaluate a possible causal relationship between the potential cause and the outcome.

14:

C – NK cells

This item tests understanding of the difference between innate v. adaptive immunity, and the cell types involved in each. B-cells and T-cells are components of the adaptive, or acquired, immune system, whereas NK cells are effectors of innate immunity (as well as participating in adaptive immunity).

15:

B – Cell envelopes

This item tests fundamental knowledge of epidermal molecules and their location. Loricrin and involucrin may be found in the cell envelope.

ANSWER KEY

CORE-TYPE ITEMS

16:

D – Myeloproliferative disorders

This item tests knowledge of a clinically important association between an uncommon dermatologic condition and a potentially life-threatening internal disease. Secondary erythromelalgia is commonly associated with myeloproliferative disorders, and often precedes the diagnosis of the myeloproliferative disorder. The other options are not associated with erythromelalgia.

17:

E – Rifampin

This item tests awareness of a clinically significant drug interaction. Rifampin has been demonstrated to interfere with the efficacy of oral contraceptives.

18:

A – Bleomycin

This item tests knowledge of a distinctive cutaneous side effect of bleomycin, flagellate streaks.

19:

E – Upper arms

This item tests knowledge of the characteristic distribution of lupus panniculitis. The distribution, on the scalp, face, upper trunk, upper arms, and thighs, may be diagnostically helpful in distinguishing lupus panniculitis from other types of panniculitis.

20:

B – Binding of CTLA-4 and blocking of its interaction with CD80/CD86 ligands

This item tests knowledge of the mechanism of action of ipilimumab, a treatment for melanoma.

21:

D – Triangular alopecia

This item tests visual recognition of an uncommon, but not rare, alopecia that typically presents in childhood.

22:

B – Increased calcinosis cutis

This item tests knowledge of the differing clinical phenotypes of childhood v. adult dermatomyositis. Children have a higher incidence of cutaneous calcinosis and vasculopathy. Childhood dermatomyositis is not associated with malignancy risk.

23:

A – Cutaneous calcinosis

This item tests the ability to recognize a common finding in an infant born prematurely, cutaneous calcium deposition from repeated heel sticks.

ANSWER KEY

24:

E – X-linked ichthyosis

This item tests knowledge of clinical findings associated with ichthyoses. Pregnant mothers may experience prolonged labor when delivering an infant with X-linked ichthyosis due to low steroid sulfatase in the placenta. Affected infants may have cryptorchidism.

25:

D – IL-4

This item tests knowledge of the mechanism of disease in atopic dermatitis. Therapy of atopic dermatitis may include pharmacologic blockade of IL-4.

26:

E – Xanthogranuloma

This item tests ability to diagnose xanthogranuloma based on histology. The Touton giant cell is characteristic.

27:

D – Pagetoid spread of melanocytes

This item tests knowledge of the distinctions and similarities between melanoma and Spitz nevus. Pagetoid spread may be seen in both.

28:

A – Bullous pemphigoid

This item tests knowledge of patterns of immunofluorescent staining and ability to recognize patterns histologically. In bullous pemphigoid, there is linear deposition of IgG at the basement membrane zone.

29:

B – Coccidiomycosis

This item tests ability to recognize fungal organisms histologically. The spherule containing endospores is characteristic of coccidiomycosis.

30:

B – Decreased tyrosinase activity

This item tests knowledge of the mechanism of disease in albinism. Absence or deficiency of tyrosinase leads to absence or deficiency of melanin pigment.

31:

A – Location A

This item tests ability to visualize a rhombic flap closure and identify the site of the key tension stitch.

32:

E – Wedge excision on the lip

This item tests knowledge of situations where antibiotic prophylaxis may be appropriate. Antibiotic prophylaxis may be appropriate for oral excisional surgery but is generally not recommended for most dermatologic procedures involving uninfected skin.

ANSWER KEY

33:

B – Extends to the subcutis

This item tests knowledge of the definition of excision for the purpose of coding. An excision is a "full-thickness (through the dermis) removal of a lesion, including margins, and includes simple (non-layered) closure when performed."

34:

B – Decreased wound-edge tension

This item tests ability to recognize a running subcuticular suture and understand its usefulness.

35:

D – Procerus

This item tests knowledge of surgical anatomy of the face.

ANSWER KEY

APPLIED-TYPE ITEMS

36:

C – Systemic antibiotic therapy

This item tests ability to recognize a wound infection and manage appropriately. Tenderness and erythema four days after an excision likely indicate wound infection requiring systemic antibiotic therapy.

37:

E – Obtain second opinion on pathology

This question tests the ability of the examinee to reassess a diagnosis when conflicting information is present and avoid inappropriate therapy. The clinical findings and pathology are consistent with hypertrophic lichen planus. It is appropriate to seek a second opinion on the pathology.

38:

D – Apply nitropaste under occlusion

G – Inject hyaluronidase into the injection site

This item tests the ability to recognize a serious complication requiring immediate action. The clinical findings are suggestive of inadvertent arterial injection of hyaluronic acid. Neutralization of hyaluronic acid and application of vasodilator are indicated.

39:

G – No treatment

I – Radiation therapy

This item tests the ability to select appropriate therapy in the context of the individual patient. The tumor is large and probably extends into bone. Surgical resection would be fairly involved and probably not indicated in this elderly patient with Alzheimer's disease. If the patient is fragile and seems to be near the end of her life, no treatment would be reasonable. If she is healthier, palliation with radiation therapy is also a reasonable option. The remaining treatments are unlikely to be effective.

40:

B – Patch testing

This item tests the ability to generate a realistic differential diagnosis and obtain appropriate additional diagnostic information, when indicated. In this scenario, allergic contact dermatitis should be strongly considered as an explanation for the progression of her skin lesions and patch testing recommended.

41:

C – Etanercept

F – Methotrexate

I – Ustekinumab

This item tests the ability to select therapy appropriately in the context of the individual patient. In this case, she has two conditions that would merit systemic therapy, and several choices for therapy that would likely help both conditions. TNF inhibitors, methotrexate, and ustekinumab may benefit both psoriasis and psoriatic arthritis. Phototherapy and acitretin do not improve psoriatic arthritis and hydroxychloroquine may worsen psoriasis. There are insufficient data to support rituximab, 6-thioguanine, or hydroxyurea for psoriatic arthritis.

ANSWER KEY

42:

C – Intralesional triamcinolone

This item tests the ability to recognize pyoderma gangrenosum and choose appropriate therapy in the context of the patient's comorbidities and extent of disease. His brittle diabetes may worsen with prednisone, and systemic therapy is not necessarily indicated for this isolated lesion at this point. The coagulase negative Staphylococcus is not pathogenic and does not require treatment. Consideration of risks versus benefits most favors intralesional triamcinolone.

43:

A – Extramammary Paget disease

This item tests the ability to generate a realistic differential diagnosis based on physical examination. The lesion shown has a high likelihood of being malignant. Of the options given, extramammary Paget disease is the most realistic diagnosis.

44:

D – Narrowband UVB

This item tests the ability to correlate clinical and histologic findings and choose an appropriate therapy. The clinical and histologic findings together support a diagnosis of early stage cutaneous T cell lymphoma, for which narrowband UVB would be an appropriate therapy.

45:

C – Oral itraconazole

This item tests the ability to correlate clinical and histologic findings and choose an appropriate therapy. The clinical and histologic findings are characteristic of North American blastomycosis. In a patient with indolent disease who is otherwise healthy, treatment with oral itraconazole is appropriate.

46:

C – Erythema elevatum diutinum

This item tests the ability to correlate clinical and histologic findings and choose an appropriate diagnosis. Both the clinical findings and pathology are characteristic of erythema elevatum diutinum.

47:

B – No laboratory testing

This item tests the ability to correlate clinical and histology findings and to know when further evaluation is and is not needed. The clinical and histologic findings are characteristic of a pigmented purpuric eruption, which does not require further evaluation.

48:

C – MRI

This item tests the ability to recognize when further evaluation is needed. The lesion is a midline nasal pit, which may connect with the CNS. Evaluation with MRI is appropriate.

ANSWER KEY

49:

G – Use mid-potency topical corticosteroid ointment until clear

This item tests the ability to recognize classic childhood flexural atopic dermatitis (AD) and to adjust the management plan when it is not responding to therapy. Since this patient has fairly thick eczematous plaques, increasing the strength to a mid-potency topical corticosteroid and treating until the lesions have completely cleared is the most appropriate next step in management. There are several clues in the history (multiple small tubes, “up to a week at a time” treatment) to indicate that the patient has not yet had topical corticosteroid therapy of adequate strength or duration.

50:

A – Class II topical corticosteroid

D – Reassurance and observation

This item tests the ability to choose appropriate therapy in the context of the individual patient. The scenario shows a child with patchy alopecia areata. The overall prognosis for spontaneous regrowth is excellent. Thus, choosing not to treat is acceptable. The first line therapy for alopecia areata in younger children is class II topical steroids. While intralesional steroids are effective, they are typically too painful for younger children and may be more traumatizing than the condition itself. Anthralin or contact sensitization are not first line treatments and may also be traumatizing for a young child. Neither oral prednisone nor ruxolitinib would be appropriate for a young child with limited involvement.