

Supplementary material has been published as submitted. It has not been copyedited, or typeset by Acta Dermato-Venereologica

Supplemental Appendix:

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A: Pages 2-3 Stages in prompt development

B: Pages 4-108 – Questions generated by ChatGPT-4

A: Stages in developing the prompt:

We arrived at the final prompt through a systematic process of trial and error. Initially, we asked for a basic question to be generated based on the text, and then progressively refined the complexity and clinical relevance of the prompts. We started by requesting questions of increasing difficulty, then moved to specify clinical scenarios that required a deeper understanding, such as making diagnostic associations and addressing histological or therapeutic implications. Eventually, we refined the prompt to also include questions that required two stages of clinical reasoning, where the correct answer depended on first recognizing the diagnosis and then applying that knowledge to answer the secondary question. This iterative approach ensured that the final prompts were sophisticated and clinically challenging, reflecting the high standards of the board exams.

The stages were as follows:

1. Generate a question from the following paragraph
2. that was way too easy. ask 10 much harder questions regarding the Word document I uploaded
3. ask 10 much harder complex questions regarding the Word document I uploaded
4. based on the Word document I uploaded write 10 multiple choice numbered questions which are clinical in a way that the doctor should know what the diagnosis is to be able to answer the question
5. based on the Word document I uploaded write 10 multiple choice numbered questions which are complicated and sophisticated clinically in a way that the doctor should think and make associations to be able to answer the question
6. can you write 10 clinical multiple choice numbered questions based on the document I provided that require two stages of thinking? for example.. a clinical case but the question will be "What would you see on histology? or "What would be the treatment recommended". in this way, the physician must know what the diagnosis is to know how to answer the question.
7. let's try again. take the first question you wrote "A 50-year-old patient presents with headache, jaw claudication, and visual disturbances. If temporal arteritis is diagnosed, what histological feature is most characteristic". that was a good question but don't give the diagnosis of temporal arthritis. leave that empty and the question should be "A 50-year-old patient presents with headache, jaw claudication, and visual disturbances., what histological feature is most characteristic". in this way, the physician should know that the diagnosis is temporal arthritis and then be able to answer the question regarding histology. do you understand what I mean?

Final prompt:

“Based only on the Word document I uploaded, ask extremely hard complicated, and very diverse questions including regular and clinical questions and a two-step thought process and provide the answer after every question and write at what page in the document I uploaded I can find the answer. If the question requires a two-step thought process where the physician must first deduce the diagnosis from the clinical presentation before answering the specific question, don't mention the diagnosis in the questions and add the diagnosis to the answer in a separate line. The questions should be multiple choice numbered questions.”

B: Questions generated by ChatGPT-4

Biopsy techniques

Suitable questions included the following: 2, 3, 4, 5, 6, 9, 11, 12, 14, 15, 17, 18, 20

Question Number 1:

In cutaneous surgery, when performing a shave biopsy, what is the most common error made by beginners?

- A) Inadequate hemostasis
- B) Removing too much subcutaneous fat
- C) Removing only keratotic debris or the upper portion of the epidermis
- D) Incorrect blade angulation

Answer: C) Removing only keratotic debris or the upper portion of the epidermis

Question Number 2:

Which type of forceps minimizes tissue crushing during specimen handling in shave biopsies?

- A) Smooth forceps
- B) Ridged forceps
- C) Toothed forceps
- D) Curved forceps

Answer: C) Toothed forceps

Question Number 3:

For a punch biopsy, what is the most suitable instrument diameter for sampling processes within the mid to deep dermis?

- A) 1 mm
- B) 2 mm
- C) 3 to 4 mm
- D) 6 mm

Answer: C) 3 to 4 mm

Question Number 4:

What is the ideal depth of a saucerization biopsy?

- A) Epidermis only
- B) Superficial dermis
- C) Mid reticular dermis
- D) Subcutaneous fat

Answer: C) Mid reticular dermis

Question Number 5:

In an optimal punch biopsy on the face, what type of suture material is generally used for closure?

- A) 4-0 Nylon
- B) 5-0 or 6-0 Nylon
- C) 3-0 Silk
- D) 2-0 Catgut

Answer: B) 5-0 or 6-0 Nylon

Question Number 6:

What is the primary advantage of using a round punch biopsy instrument to produce an oval-shaped defect?

- A) Faster healing
- B) Avoidance of "dog-ear" formation
- C) Easier specimen handling
- D) Reduced need for suturing

Answer: B) Avoidance of "dog-ear" formation

Question Number 7:

What is the primary goal of an incisional or wedge biopsy for large lesions?

- A) To obtain a specimen entirely of lesional tissue
- B) To provide a comparison of involved versus uninvolved skin
- C) To minimize scarring
- D) To avoid deep tissue sampling

Answer: B) To provide a comparison of involved versus uninvolved skin

Question Number 8:

What is the main purpose of an excisional biopsy?

- A) To sample the epidermis for superficial lesions
- B) To remove entire lesions for histopathologic examination
- C) To perform a diagnostic test for inflammatory skin diseases
- D) To obtain a superficial skin sample for cosmetic reasons

Answer: B) To remove entire lesions for histopathologic examination

Question Number 9:

In the management of cutaneous cones ("dog-ears") following excision, what technique is used to repair standing cones?

- A) Rule of halves
- B) Linear closure

- C) Z-plasty
- D) Flap closure

Answer: A) Rule of halves

Question Number 10:

Which complication is most likely to occur from a poorly undermined wound closure?

- A) Hemorrhage
- B) Infection
- C) Scar spreading
- D) Necrosis

Answer: C) Scar spreading

Question Number 11: Which biopsy technique is most appropriate for obtaining a specimen that includes both the epidermis and the superficial dermis, and is commonly used for diagnosing superficial carcinomas?

- a) Curettage
- b) Punch biopsy
- c) Shave biopsy
- d) Incisional biopsy

Answer: c) Shave biopsy

Question Number 12: In the context of biopsy techniques, what is the primary purpose of curettage?

- a) To remove deep subcutaneous tissue
- b) To obtain a specimen for histologic examination of superficial epidermal lesions
- c) To extract large-sized tumors
- d) For cosmetic removal of skin lesions without the need for histologic examination

Answer: b) To obtain a specimen for histologic examination of superficial epidermal lesions

Question Number 13: Which biopsy method is particularly effective for pedunculated lesions and involves using scissors to separate the lesion from its base?

- a) Snip or Scissors biopsy
- b) Punch biopsy
- c) Shave biopsy
- d) Saucerization biopsy

Answer: a) Snip or Scissors biopsy

Question Number 14: When considering the depth of the specimen required for accurate diagnosis, which biopsy technique is preferred for a subcutaneous nodule like panniculitis?

- a) Curettage
- b) Punch biopsy
- c) Shave biopsy
- d) Excisional biopsy

Answer: b) Punch biopsy

Question Number 15: In biopsy site selection for tumor biopsies, which area of the lesion is typically preferred?

- a) The center of the lesion
- b) The thickest portion of the lesion, avoiding necrotic tissue
- c) The periphery of the lesion
- d) Any area with visible discoloration

Answer: b) The thickest portion of the lesion, avoiding necrotic tissue

Question Number 16: Saucerization biopsy is distinct from shave biopsy in that it:

- a) Only includes the epidermis
- b) Is shallower in depth
- c) Involves a deeper specimen including the reticular dermis
- d) Is solely used for benign lesions

Answer: c) Involves a deeper specimen including the reticular dermis

Question Number 17: What is the primary reason for performing a punch biopsy in dermatologic procedures?

- a) To remove entire lesions for cosmetic reasons
- b) To obtain a cylindrical specimen that can include epidermis, dermis, and subcutaneous fat
- c) For immediate closure of large wounds
- d) To apply for superficial epidermal lesions only

Answer: b) To obtain a cylindrical specimen that can include epidermis, dermis, and subcutaneous fat

Question Number 18: When considering incisional biopsy, which of the following is most accurate?

- a) It is used mainly for epidermal lesions
- b) It involves removing a large part of a lesion, often reaching subcutaneous fat or fascia
- c) It is a superficial technique used for thin lesions
- d) It is primarily employed for the removal of benign lesions

Answer: b) It involves removing a large part of a lesion, often reaching subcutaneous fat or fascia

Question Number 19: For lesions with atypical features, which biopsy method is recommended to increase diagnostic accuracy?

- a) Shave biopsy
- b) Punch biopsy
- c) Saucerization biopsy
- d) Snip biopsy

Answer: c) Saucerization biopsy

Question Number 20: Which of the following is an appropriate biopsy technique for lesions that primarily affect the collagen and elastic fibers within the dermis?

- a) Curettage
- b) Saucerization biopsy
- c) Shave biopsy
- d) Longitudinally sectioned wedge biopsies

Answer: d) Longitudinally sectioned wedge biopsies

CBCL

Suitable questions: 1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 14, 16, 19, 20, 23, 25, 27, 28, 30

Question number 1:

Which of the following is NOT a primary cutaneous B-cell lymphoma (pCBCL) as classified by WHO-EORTC 2005 and WHO 2008/2016?

- a) Primary cutaneous follicle center lymphoma
- b) Primary cutaneous marginal zone B-cell lymphoma
- c) Intravascular diffuse large B-cell lymphoma
- d) Primary cutaneous B lymphoblastic lymphoma/leukemia

Answer:

- d) Primary cutaneous B lymphoblastic lymphoma/leukemia

Diagnosis: Primary cutaneous B lymphoblastic lymphoma/leukemia is not classified as a primary cutaneous B-cell lymphoma.

Question number 2:

A patient presents with solitary or grouped pink- to plum-colored papules on the trunk. Histology shows a follicular, mixed, or diffuse infiltrate of centrocytes and centroblasts. Which immunophenotypic marker is MOST likely to be positive in this case?

- a) CD5
- b) CD10
- c) CD23
- d) CD30

Answer:

- b) CD10

Diagnosis: Primary cutaneous follicle center lymphoma.

Question number 3:

In primary cutaneous diffuse large B-cell lymphoma, leg type (DLBCLLT), which of the following genetic alterations is associated with a worse prognosis?

- a) BCL-6 rearrangement
- b) CDKN2A deletion
- c) MYC amplification
- d) TP53 mutation

Answer:

- b) CDKN2A deletion

Diagnosis: Primary cutaneous diffuse large B-cell lymphoma, leg type (DLBCLLT).

Question number 4:

Which of the following is a characteristic clinical feature of primary cutaneous marginal zone B-cell lymphoma (PCMZL)?

- a) Rapid growth and ulceration of lesions

- b) Presence of B symptoms such as fever and night sweats
- c) Recurrent pink-violet to red-brown papules, plaques, and nodules
- d) Predominant involvement of the face and scalp

Answer:

- c) Recurrent pink-violet to red-brown papules, plaques, and nodules

Diagnosis: Primary cutaneous marginal zone B-cell lymphoma (PCMZL).

Question number 5:

A patient presents with erythematous to red-brown nodules on the distal aspect of one leg.

Biopsy shows large round cells positive for Bcl-2, MUM-1, and FOXP1. What is the most likely diagnosis?

- a) Intravascular diffuse large B-cell lymphoma
- b) Primary cutaneous follicle center lymphoma
- c) Primary cutaneous diffuse large B-cell lymphoma, leg type
- d) Cutaneous marginal zone B-cell lymphoma

Answer:

- c) Primary cutaneous diffuse large B-cell lymphoma, leg type

Diagnosis: Primary cutaneous diffuse large B-cell lymphoma, leg type (DLBCLLT).

Question number 6:

Which of the following staging investigations is NOT typically required in primary cutaneous marginal zone B-cell lymphoma?

- a) Complete blood count with differential
- b) Whole-body PET/CT scan
- c) Bone marrow biopsy
- d) Flow cytometry of peripheral blood

Answer:

- c) Bone marrow biopsy

Note: Bone marrow biopsy is not typically required in primary cutaneous marginal zone B-cell lymphoma.

Question number 7:

Intravascular diffuse large B-cell lymphoma (IVDLBCL) is characterized by:

- a) Predominant skin involvement with no systemic disease
- b) Large B lymphocytes within blood vessels
- c) Frequent involvement of the scalp and face
- d) Strong positivity for CD30

Answer:

- b) Large B lymphocytes within blood vessels

Diagnosis: Intravascular diffuse large B-cell lymphoma (IVDLBCL).

Question number 8:

Which subtype of pCBCL is associated with the presence of *Borrelia* spp. DNA in endemic areas?

- a) Primary cutaneous diffuse large B-cell lymphoma, leg type
- b) Intravascular diffuse large B-cell lymphoma
- c) Primary cutaneous marginal zone B-cell lymphoma
- d) Primary cutaneous follicle center lymphoma

Answer:

- c) Primary cutaneous marginal zone B-cell lymphoma

Diagnosis: Primary cutaneous marginal zone B-cell lymphoma (PCMZL).

Question number 9:

For a patient with primary cutaneous follicle center lymphoma, which of the following is a common clinical presentation?

- a) Solitary or grouped erythematous tumors on the head and neck
- b) Multiple nodules and plaques predominantly on the lower legs
- c) Indurated erythematous patches on the trunk and thighs
- d) Rapidly growing ulcerated lesions on the scalp

Answer:

- a) Solitary or grouped erythematous tumors on the head and neck

Diagnosis: Primary cutaneous follicle center lymphoma.

Question number 10:

Which immunophenotypic marker is typically negative in the neoplastic follicles of primary cutaneous follicle center lymphoma?

- a) CD20
- b) Bcl-6
- c) Bcl-2
- d) CD79a

Answer:

- c) Bcl-2

Diagnosis: Primary cutaneous follicle center lymphoma.

Question number 11:

A 55-year-old patient presents with a solitary, slowly enlarging, erythematous nodule on the lower leg. Histopathological examination reveals a dense, diffuse infiltrate in the dermis, primarily consisting of large round cells with prominent nucleoli. Which immunophenotypic marker is most likely to be positive in this neoplasm?

- A) CD10
- B) CD20
- C) CD5
- D) Cyclin D1

Answer:

B) CD20

Diagnosis: Primary Cutaneous Diffuse Large B-Cell Lymphoma, Leg Type (DLBCLLT)

Question number 12:

In the evaluation of a cutaneous B-cell lymphoma, which of the following is considered a key diagnostic feature of primary cutaneous marginal zone B-cell lymphoma (PCMZL)?

- A) Presence of Pautrier microabscesses
- B) Monoclonal expression of immunoglobulin light chains
- C) Epidermotropism of neoplastic cells
- D) Rearrangement of IGH and MALT1 genes

Answer:

B) Monoclonal expression of immunoglobulin light chains

Question number 13:

A biopsy from a skin lesion shows an atypical lymphoid infiltrate with small- to medium-sized cells with indented nuclei and abundant pale cytoplasm. The cells are positive for CD20 and CD79a but negative for CD5 and CD10. This immunophenotype is indicative of which of the following?

- A) Follicle center lymphoma
- B) Mantle cell lymphoma
- C) Marginal zone lymphoma
- D) Lymphoplasmacytic lymphoma

Answer:

C) Marginal zone lymphoma

Question number 14:

In primary cutaneous follicle center lymphoma (PCFCL), which immunohistochemical marker is typically negative in neoplastic cells?

- A) CD20
- B) CD79a
- C) Bcl-6
- D) MUM-1

Answer:

D) MUM-1

Question number 15:

A patient with a skin lesion biopsy showing large atypical lymphocytes filling dilated blood vessels within the dermis is most likely to be diagnosed with which condition?

- A) Intravascular diffuse large B-cell lymphoma

- B) Angiosarcoma
- C) Kaposi sarcoma
- D) Intralymphatic histiocytosis

Answer:

- A) Intravascular diffuse large B-cell lymphoma

Question number 16:

Which genetic translocation is commonly associated with primary cutaneous marginal zone B-cell lymphoma (PCMZL)?

- A) t(11;14)(q13;q32)
- B) t(14;18)(q32;q21)
- C) t(11;18)(q21;q21)
- D) t(8;14)(q24;q32)

Answer:

- C) t(11;18)(q21;q21)

Question number 17:

In the differential diagnosis of primary cutaneous diffuse large B-cell lymphoma, leg type (DLBCLLT), which marker is typically expressed by neoplastic cells?

- A) CD10
- B) CD5
- C) Bcl-2
- D) Cyclin D1

Answer:

- C) Bcl-2

Question number 18:

In primary cutaneous follicle center lymphoma (PCFCL), which characteristic histopathological pattern is typically observed?

- A) "Starry sky" pattern
- B) "Mosaic-stone" pattern
- C) Follicular pattern
- D) Lymphoplasmacytic infiltration

Answer:

- C) Follicular pattern

Question number 19:

The presence of what feature in cutaneous B-cell lymphomas is indicative of secondary cutaneous involvement from nodal lymphoma?

- A) EBER-1 positivity
- B) Strong MUM-1 expression
- C) Clear-cut positivity for Bcl-2 within neoplastic follicles

D) Epidermotropism

Answer:

C) Clear-cut positivity for Bcl-2 within neoplastic follicles

Question number 20:

Which of the following immunophenotypic features is characteristic of precursor B lymphoblastic lymphoma/leukemia involving the skin?

A) CD20 negativity and CD34 positivity

B) CD10 positivity and TdT positivity

C) Bcl-6 positivity and CD5 negativity

D) CD23 positivity and CD43 positivity

Answer:

B) CD10 positivity and TdT positivity

Question number 21: A patient presents with solitary well-circumscribed lesions suspected of primary cutaneous B-cell lymphoma (pCBCL). What is the treatment of choice according to the author?

A) Systemic chemotherapy

B) Radiotherapy with wide margins

C) Surgical excision with narrow margins

D) Intralesional triamcinolone injection

Answer: C) Surgical excision with narrow margins

Diagnosis: Primary Cutaneous Marginal Zone Lymphoma (PCMZL)

Question number 22: For a patient diagnosed with Crosti's lymphoma, characterized by erythematous nodules and patches surrounding the tumor, what is the recommended margin for radiotherapy?

A) 3-5 cm

B) 10-20 cm

C) 5-10 cm

D) 1-2 cm

Answer: B) 10-20 cm

Question number 23: In cases of Borrelia-associated pCBCL, what is a recommended initial treatment approach, especially in European countries endemic for Borrelia infections?

A) Systemic chemotherapy

B) Radiotherapy

C) Systemic antibiotics

D) Surgical excision

Answer: C) Systemic antibiotics

Question number 24: Which therapeutic modality has shown a complete response in approximately 50% of low-grade pCBCL patients with multiple lesions at different body sites?

- A) Anti-CD20 monoclonal antibody therapy
- B) Systemic chemotherapy
- C) Interferon-a-2a therapy
- D) Surgical excision

Answer: C) Interferon-a-2a therapy

Question number 25: What is the primary treatment for patients with primary cutaneous follicle center lymphoma (PCFCL) diffuse type with disseminated lesions?

- A) Surgical excision
- B) Intralesional interferon
- C) Systemic chemotherapy plus rituximab
- D) Local radiotherapy

Answer: C) Systemic chemotherapy plus rituximab

Question number 26: For low-grade pCBCLs treated successfully with systemic antibiotics, which associated condition's treatment does this approach conceptually resemble?

- A) Hodgkin's lymphoma
- B) MALT lymphomas of the stomach related to H. pylori
- C) T-cell lymphoma
- D) Mycosis fungoides

Answer: B) MALT lymphomas of the stomach related to H. pylori

Question number 27: In the treatment of indolent pCBCL, what is the consideration for intralesional administration of anti-CD20 monoclonal antibody?

- A) Multiple disseminated skin lesions
- B) Solitary well-circumscribed lesions
- C) Lesions unresponsive to systemic antibiotics
- D) Extensive systemic involvement

Answer: B) Solitary well-circumscribed lesions

Question number 28: When treating patients with DLBCL, what is the standard of care regimen?

- A) Rituximab alone
- B) Cyclophosphamide, doxorubicin, vincristine, and prednisone (CHOP) plus rituximab
- C) Interferon-a-2a therapy
- D) Systemic antibiotics

Answer: B) Cyclophosphamide, doxorubicin, vincristine, and prednisone (CHOP) plus rituximab

Question number 29: Which of the following is a key clinical feature of primary cutaneous marginal zone B-cell lymphoma (PCMZL) with plasma cell differentiation?

- A) Presence of multinucleated plasma cells
- B) Negative CD20 expression
- C) Positive CD38 and CD138 expression
- D) Absence of Russell bodies

Answer: C) Positive CD38 and CD138 expression

Question number 30: What is the differential diagnosis for cutaneous Waldenstrom macroglobulinemia, and how is it differentiated?

- A) PCMZL - distinguished by clinical presentation
- B) Cutaneous plasmacytoma - distinguished by direct immunofluorescence
- C) Cutaneous T-cell lymphoma - distinguished by histologic features
- D) Cutaneous B-cell lymphoma - distinguished by serum protein electrophoresis

Answer: B) Cutaneous plasmacytoma - distinguished by direct immunofluorescence

CTCL

Suitable questions included the following: 3, 4, 5, 6, 7, 9, 10, 18, 19, 20, 21, 23, 24, 25, 29, 30

Question Number 1:

Which of the following clinical features is least likely to be associated with early patch stage Mycosis Fungoides (MF)?

- A) Erythematous, finely scaling lesions
- B) Patches with significant atrophy
- C) Presence of large cell transformation
- D) Mild pruritus

Answer: C) Presence of large cell transformation

Diagnosis: Mycosis Fungoides (early patch stage)

Question Number 2:

In the evaluation of a patient suspected of having Cutaneous T-cell Lymphoma (CTCL), which biopsy technique is preferred for diagnosis?

- A) Shave biopsy
- B) Deep punch biopsy
- C) Curettage
- D) Surface swab

Answer: B) Deep punch biopsy

Question Number 3:

Which immunophenotypical feature is most characteristic of the neoplastic T cells in Sézary Syndrome?

- A) CD4+ CD45RO- CDS+
- B) CD4+ CD45RO+ CDS-
- C) CD4- CD45RO+ CDS+
- D) CD4- CD45RO- CDS-

Answer: B) CD4+ CD45RO+ CDS-

Diagnosis: Sézary Syndrome

Question Number 4:

What is the primary role of T-cell receptor gene rearrangement analysis in the diagnosis of CTCL?

- A) To identify specific chromosomal translocations
- B) To confirm the presence of clonal T-cell populations
- C) To differentiate between CTCL and B-cell lymphomas
- D) To identify the specific subtype of CTCL

Answer: B) To confirm the presence of clonal T-cell populations

Question Number 5:

Which histologic feature is highly characteristic of plaque stage Mycosis Fungoides but observed in only a minority of cases?

- A) Acanthosis
- B) Presence of Pautrier microabscesses
- C) Spongiosis
- D) Lichenoid infiltrates

Answer: B) Presence of Pautrier microabscesses

Diagnosis: Mycosis Fungoides (plaque stage)

Question Number 6:

Regarding the epidemiology of Mycosis Fungoides (MF), which statement is most accurate?

- A) MF predominantly affects young adults.
- B) There is a female predominance in MF cases.
- C) The median age at diagnosis is typically between 55-60 years.
- D) MF is more common in children than in adults.

Answer: C) The median age at diagnosis is typically between 55-60 years.

Question Number 7:

In the context of Cutaneous T-cell Lymphoma, the loss of which T-cell-associated antigen by neoplastic T cells is considered an important additional diagnostic criterion?

- A) CD2
- B) CD7
- C) CD19
- D) CD56

Answer: B) CD7

Question Number 8:

Which subtype of Mycosis Fungoides is characterized by infiltrated plaques and eruptive nodules often with ulceration, and a CD8+ TIA-1+ granzyme B+ phenotype?

- A) Folliculotropic MF
- B) Pagetoid reticulosis
- C) Granulomatous slack skin
- D) Primary cutaneous CD8-positive aggressive epidermotropic cytotoxic T-cell lymphoma

Answer: D) Primary cutaneous CD8-positive aggressive epidermotropic cytotoxic T-cell lymphoma

Diagnosis: Primary cutaneous CD8-positive aggressive epidermotropic cytotoxic T-cell lymphoma

Question Number 9:

Which type of CTCL is most likely to present with a solitary plaque or tumor, without prior or concurrent patches and plaques, and a phenotype that does not show aberrant expression?

- A) Mycosis fungoides
- B) Sézary syndrome
- C) Primary cutaneous CD4-positive small/medium T-cell lymphoproliferative disorder
- D) Lymphomatoid papulosis

Answer: C) Primary cutaneous CD4-positive small/medium T-cell lymphoproliferative disorder

Diagnosis: Primary cutaneous CD4-positive small/medium T-cell lymphoproliferative disorder

Question Number 10:

In Mycosis Fungoides, which factor is most closely associated with the risk of developing extracutaneous disease?

- A) Age of onset
- B) Gender of the patient
- C) Extent and type of skin lesions
- D) Presence of specific genetic aberrations

Answer: C) Extent and type of skin lesions

Diagnosis: Mycosis Fungoides

Question Number 11:

In a patient with erythrodermic cutaneous T-cell lymphoma (CTCL), which treatment combination is recommended when extracorporeal photopheresis (ECP) is ineffective?

- A) High-dose methotrexate
- B) Multi-agent chemotherapy (e.g., CHOP)
- C) Low-dose chlorambucil and prednisone
- D) Brentuximab vedotin

Answer: C) Low-dose chlorambucil and prednisone

Question Number 12:

A 55-year-old male presents with a solitary, slowly progressive, hyperkeratotic patch on the leg. Histology shows intraepidermal proliferation of neoplastic T cells. Which variant of CTCL is most likely?

- A) Mycosis fungoides
- B) Sezary syndrome
- C) Pagetoid reticulosis
- D) Granulomatous slack skin

Answer: C) Pagetoid reticulosis

Diagnosis: Pagetoid reticulosis is characterized by localized patches or plaques with intraepidermal proliferation of neoplastic T cells, typically presenting as solitary, slow-growing lesions on the extremities.

Question Number 13:

In the management of stage IA mycosis fungoides, which treatment is considered first-line?

- A) Systemic chemotherapy
- B) Total skin electron beam (TSEB) therapy
- C) Topical corticosteroids
- D) Allogeneic stem cell transplantation

Answer: C) Topical corticosteroids

Question Number 14:

A patient with CTCL exhibits extensive patches and thin plaques. What percentage of complete remissions is reported with mechlorethamine therapy in early-stage disease?

- A) 20-40%
- B) 60-80%
- C) 90-100%
- D) 10-30%

Answer: B) 60-80%

Question Number 15:

For a patient with stage IIB mycosis fungoides, which treatment option is most appropriate for skin tumors?

- A) Narrowband UVB therapy
- B) PUVA or HN2 + Radiotherapy
- C) Extracorporeal photopheresis
- D) Intralesional corticosteroids

Answer: B) PUVA or HN2 + Radiotherapy

Question Number 16:

Which of the following is a characteristic feature of folliculotropic mycosis fungoides (MF)?

- A) Generalized erythema
- B) Epidermotropic infiltrates
- C) Folliculotropic infiltrates often sparing the epidermis
- D) Predominant mucin production

Answer: C) Folliculotropic infiltrates often sparing the epidermis

Question Number 17:

In the treatment of Sezary syndrome, what is the role of systemic chemotherapy?

- A) First-line treatment for all stages
- B) Reserved for advanced disease unresponsive to other therapies
- C) Not recommended due to high toxicity

D) Used only in combination with skin-directed therapies

Answer: B) Reserved for advanced disease unresponsive to other therapies

Question Number 18:

Which statement best describes the prognosis for patients with early-stage (IA) mycosis fungoides?

A) Poor, with high mortality rates

B) Comparable to the general population

C) Dependent on the rapid progression to advanced stages

D) Generally good, but with frequent systemic involvement

Answer: B) Comparable to the general population

Question Number 19:

What is the primary histopathological feature distinguishing pagetoid reticulosis from other variants of CTCL?

A) Dermal infiltrate of small lymphocytes

B) Intraepidermal proliferation of neoplastic T cells

C) Extensive mucin deposition

D) Granulomatous infiltrate with multinucleated giant cells

Answer: B) Intraepidermal proliferation of neoplastic T cells

Question Number 20:

In the context of primary cutaneous anaplastic large cell lymphoma (C-ALCL), what is the typical expression pattern of the tumor cells?

A) CD30-negative, CD56-positive

B) CD30-positive, ALK-positive

C) CD30-positive, EMA-negative

D) CD30-negative, CD3-positive

Answer: C) CD30-positive, EMA-negative

Question Number 21:

In Lymphomatoid Papulosis (LyP) Type A, which of the following histological features is most characteristic?

A) Epidermotropism with superficial perivascular infiltrates

B) Marked epidermotropism of atypical small to medium-sized CD8+ pleomorphic T cells

C) Wedge-shaped infiltrate with large atypical CD30+ T cells

D) Diffuse infiltrates of large CD30+ T cells with few inflammatory cells

Answer: C) Wedge-shaped infiltrate with large atypical CD30+ T cells

Diagnosis: LyP Type A

Question Number 22:

Which treatment is considered most effective for cosmetically disturbing lesions in Lymphomatoid Papulosis (LyP)?

- A) Systemic chemotherapy
- B) Low-dose oral methotrexate
- C) PUVA therapy
- D) Topical corticosteroids

Answer: B) Low-dose oral methotrexate

Question Number 23:

In Subcutaneous Panniculitis-like T-cell Lymphoma (SPTCL), what is the typical immunophenotype of the neoplastic T cells?

- A) CD3+ CD4+ CD8-
- B) CD3+ CD4- CD8+
- C) CD3+ CD4- CD8-
- D) CD3- CD4+ CD8+

Answer: B) CD3+ CD4- CD8+

Diagnosis: SPTCL

Question Number 24:

Which of the following is a common clinical feature of Subcutaneous Panniculitis-like T-cell Lymphoma (SPTCL)?

- A) Epidermal involvement
- B) Formation of multiple nodules or deeply seated plaques
- C) Predominant facial involvement
- D) Hemophagocytic syndrome in the majority of patients

Answer: B) Formation of multiple nodules or deeply seated plaques

Diagnosis: SPTCL

Question Number 25:

For primary cutaneous gamma/delta T-cell lymphoma (PCGD-TCL), what is the most common site of lesion presentation?

- A) Scalp
- B) Trunk and extremities
- C) Face
- D) Mucosal areas

Answer: B) Trunk and extremities

Diagnosis: PCGD-TCL

Question Number 26:

What is the typical survival rate for patients with Subcutaneous Panniculitis-like T-cell Lymphoma (SPTCL) without hemophagocytic syndrome?

- A) Less than 10%
- B) 20-40%
- C) 60-80%
- D) Over 80%

Answer: D) Over 80%

Diagnosis: SPTCL

Question Number 27:

In the context of Lymphomatoid Papulosis, which histological subtype is characterized by a diffuse infiltrate of large CD30+ T cells with relatively few inflammatory cells?

- A) Type A
- B) Type B
- C) Type C
- D) Type D

Answer: C) Type C

Diagnosis: LyP Type C

Question Number 28:

Which immunohistochemical marker is typically negative in Subcutaneous Panniculitis-like T-cell Lymphoma (SPTCL)?

- A) CD4
- B) CD8
- C) CD30
- D) CD56

Answer: C) CD30

Diagnosis: SPTCL

Question Number 29:

What is the primary differential diagnosis for Lymphomatoid Papulosis Type E?

- A) Hodgkin Lymphoma
- B) Mycosis Fungoides
- C) Extranodal NK/T-cell Lymphoma
- D) Cutaneous Anaplastic Large Cell Lymphoma

Answer: C) Extranodal NK/T-cell Lymphoma

Diagnosis: LyP Type E

Question Number 30:

In the management of Lymphomatoid Papulosis, which treatment option is generally ineffective?

- A) Oral methotrexate
- B) Systemic corticosteroids
- C) Radiotherapy
- D) PUVA therapy

Answer: B) Systemic corticosteroids

HPV

Suitable questions included the following: 1, 2, 3, 6, 7, 11, 13, 14, 15, 19, 22, 26, 31

Question Number 1:

Which HPV type is most frequently associated with common warts in children?

- A) HPV-1
- B) HPV-16
- C) HPV-6
- D) HPV-18

Answer: A) HPV-1

Question Number 2:

The majority of genital warts are caused by which HPV types?

- A) HPV-16 and HPV-18
- B) HPV-1 and HPV-2
- C) HPV-6 and HPV-11
- D) HPV-31 and HPV-33

Answer: C) HPV-6 and HPV-11

Question Number 3:

What is the primary target for HPV infection in the skin?

- A) Squamous epithelial cells
- B) Melanocytes
- C) Basal keratinocytes
- D) Langerhans cells

Answer: C) Basal keratinocytes

Question Number 4:

HPV primarily targets which layer of the skin for initiating an infection?

- A) Dermis
- B) Stratum corneum
- C) Basal cell layer
- D) Stratum granulosum

Answer: C) Basal cell layer

Question Number 5:

How are HPV types primarily classified into different genera?

- A) Based on their clinical manifestations

- B) Based on their DNA sequence similarities
 - C) Based on their geographic distribution
 - D) Based on their response to treatment
- Answer: B) Based on their DNA sequence similarities

Question Number 6:

Which two genera of papillomaviruses encompass almost all known HPV types?

- A) α and β
- B) γ and δ
- C) μ and ν
- D) ζ and η

Answer: A) α and β

Question Number 7:

What is the major structural protein of the HPV capsid?

- A) E1
- B) E6
- C) L1
- D) L2

Answer: C) L1

Question Number 8:

HPV genomes are typically how many kilobases in length?

- A) About 2 kilobases
- B) About 8 kilobases
- C) About 20 kilobases
- D) About 40 kilobases

Answer: B) About 8 kilobases

Question Number 9:

Where is the papillomavirus life cycle completed?

- A) In basal epithelial cells
- B) In fully differentiated squamous epithelia
- C) In glandular epithelia
- D) In melanocytes

Answer: B) In fully differentiated squamous epithelia

Question Number 10:

In which layer of the skin does the amplification of HPV DNA occur during its life cycle?

- A) Basal cell layer
- B) Stratum corneum
- C) Stratum granulosum
- D) Superficial epithelial layers

Answer: D) Superficial epithelial layers

Question Number 11:

What type of immune response is primarily responsible for controlling HPV infections?

- A) Humoral immunity
- B) Cell-mediated immunity
- C) Innate immunity
- D) Passive immunity

Answer: B) Cell-mediated immunity

Question Number 12:

HPV infections are often persistent due to their ability to:

- A) Evade immune surveillance
- B) Rapidly mutate
- C) Resist antiviral medications
- D) Infect deep tissue layers

Answer: A) Evade immune surveillance

Question Number 13:

Which HPV types are most frequently found in cervical cancers?

- A) HPV-1 and HPV-2
- B) HPV-3 and HPV-10
- C) HPV-6 and HPV-11
- D) HPV-16 and HPV-18

Answer: D) HPV-16 and HPV-18

Question Number 14:

What is a common event in the progression of HPV-associated cervical lesions to invasive cancer?

- A) Loss of E1 and E2 expression

- B) Overexpression of L1 and L2 proteins
 - C) Increased replication of the viral genome
 - D) Decreased expression of E6 and E7 genes
- Answer: A) Loss of E1 and E2 expression

Question Number 15:

Which HPV types are typically associated with common warts?

- A) HPV-6 and HPV-11
- B) HPV-16 and HPV-18
- C) HPV-1, HPV-2, HPV-4, HPV-27, and HPV-57
- D) HPV-31 and HPV-33

Answer: C) HPV-1, HPV-2, HPV-4, HPV-27, and HPV-57

Question Number 16:

Which type of warts are characterized by thick endophytic papules on the palms and soles?

- A) Common warts
- B) Filiform warts
- C) Palmar and plantar warts
- D) Flat warts

Answer: C) Palmar and plantar warts

Question Number 17:

What is the primary method of genital HPV transmission?

- A) Blood transfusion
- B) Vertical transmission
- C) Sexual contact
- D) Indirect contact through contaminated surfaces

Answer: C) Sexual contact

Question Number 18:

HPV types most often implicated in high-grade intraepithelial neoplasias include:

- A) HPV-1 and HPV-2
- B) HPV-6 and HPV-11
- C) HPV-16, HPV-18, and HPV-31
- D) HPV-5 and HPV-8

Answer: C) HPV-16, HPV-18, and HPV-31

Question Number 19:

Which of the following histopathological features is most characteristic of a lesion caused by human papillomavirus (HPV)?

- A)Acantholysis
- B)Spongiosis
- C)Koilocytosis
- D)Lichenoid tissue reaction

Answer: C. Koilocytosis.

Question Number 20:

In HPV-infected epithelial cells, the presence of what cytoplasmic feature is indicative of productive infection?

- A)Multinucleation
- B)Cytoplasmic vacuoles
- C)Eosinophilic inclusions
- D)Hypergranulosis

Answer: B. Cytoplasmic vacuoles.

Question Number 21:

When considering the differential diagnosis of genital warts, which of the following conditions should also be included in the evaluation?

- A)Psoriasis
- B)Lichen planus
- C)Molluscum contagiosum
- D)Atopic dermatitis

Answer: C. Molluscum contagiosum.

Question Number 22:

In the differential diagnosis of cutaneous warts, which histological feature can help distinguish verrucae from other types of papillomas?

- A)Parakeratosis
- B)Granular layer thickening
- C)Acanthosis
- D)Koilocytotic atypia

Answer: D. Koilocytotic atypia.

Question Number 23:

What is the preferred first-line treatment for extensive anogenital warts according to the grading of recommendations?

- A)Cryotherapy
- B)Topical imiquimod
- C)Surgical excision
- D)Electrocautery

Answer: B. Topical imiquimod.

Question Number 24:

According to current guidelines, which factor is most important in determining the treatment modality for anogenital warts?

- A. Lesion size
- B. Patient's immunological status
- C. Lesion number
- D. Lesion location

Answer: A. Lesion size.

Question Number 25:

Which of the following is considered a standard systemic therapy for severe cases of HPV infection?

- A. Oral acyclovir
- B. Systemic retinoids
- C. Intravenous immunoglobulin
- D. Oral methotrexate

Answer: B. Systemic retinoids.

Question Number 26:

In the therapy of HPV, what is the mechanism of action of topical imiquimod?

- A. DNA replication inhibition
- B. Immunomodulation
- C. Direct virucidal activity
- D. Inhibition of cellular proliferation

Answer: B. Immunomodulation.

Question Number 27:

Which treatment modality is most effective for common warts located on non-acral skin?

- A. Salicylic acid
- B. Cryotherapy
- C. Laser therapy
- D. Topical retinoids

Answer: A. Salicylic acid.

Question Number 28:

For recalcitrant common warts, which of the following is an emerging treatment option?

- A. Photodynamic therapy
- B. Oral cimetidine
- C. Bleomycin injections
- D. Topical 5-fluorouracil

Answer: C. Bleomycin injections.

Question Number 29:

What is the most effective treatment for large, keratinized anogenital warts?

- A. Podophyllin resin
- B. Trichloroacetic acid
- C. Surgical excision
- D. Electrocautery

Answer: C. Surgical excision.

Question Number 30:

In the management of anogenital warts, which approach is recommended for immunocompromised patients?

- A. Topical 5-fluorouracil
- B. Immunotherapy
- C. Aggressive surgical intervention
- D. High-dose oral antivirals

Answer: B. Immunotherapy.

Question Number 31:

Which HPV vaccine is most effective in preventing cervical cancer caused by HPV types 16 and 18?

- A. Cervarix
- B. Gardasil
- C. Gardasil 9

D. Nonavalent HPV vaccine

Answer: C. Gardasil 9.

Question Number 32:

The quadrivalent HPV vaccine is primarily used to prevent which of the following conditions?

A. Genital warts

B. Cervical dysplasia

C. Oropharyngeal cancer

D. All of the above

Answer: D. All of the above.

Alopecia

Suitable questions included the following: 2, 3, 5, 7, 9, 17, 18, 24, 25, 27, 28, 30, 33, 35, 36, 39

Question Number 1:

A 35-year-old male presents with symmetric hair loss on the crown and vertex, progressing over the past five years. What is the most appropriate initial treatment?

- A) Oral finasteride
- B) Topical minoxidil
- C) Intralesional corticosteroids
- D) Oral spironolactone

Answer: B) Topical minoxidil

Diagnosis: Androgenetic Alopecia (AGA)

Question Number 2:

A patient reports increased hair shedding with hair "coming out by the roots." If this has been occurring for more than 6 months, what is the most likely diagnosis?

- A) Acute Telogen Effluvium
- B) Chronic Telogen Effluvium
- C) Anagen Effluvium
- D) Alopecia Areata

Answer: B) Chronic Telogen Effluvium

Question Number 3:

In the assessment of Female Pattern Hair Loss (FPHL), which scale is used to classify the severity based on the widening of the central part line?

- A) Ludwig Scale
- B) Hamilton-Norwood Scale
- C) Sinclair Scale
- D) Savin Scale

Answer: C) Sinclair Scale

Question Number 4:

A 40-year-old woman presents with hair thinning and a family history of similar pattern baldness in female relatives. What pathophysiological mechanism is primarily implicated in her condition?

- A) Autoimmune destruction of hair follicles
- B) Structural hair shaft abnormalities
- C) Miniaturization of hair follicles
- D) Scarring and destruction of hair follicles

Answer: C) Miniaturization of hair follicles

Diagnosis: Female Pattern Hair Loss (FPHL)

Question Number 5:

A patient presents with a patchy hair loss pattern and a positive pull test. What is the first-line diagnostic test to confirm the suspected condition?

- A) Wood's lamp examination
- B) Fungal culture
- C) Scalp biopsy
- D) Trichoscopy

Answer: D) Trichoscopy

Diagnosis: Alopecia Areata

Question Number 6:

A 25-year-old male with no significant past medical history presents with sudden onset of hair loss in clumps. Laboratory tests show low serum iron and ferritin levels. Which type of alopecia is most consistent with these findings?

- A) Androgenetic Alopecia
- B) Telogen Effluvium
- C) Alopecia Areata
- D) Trichotillomania

Answer: B) Telogen Effluvium

Question Number 7:

In evaluating a patient with suspected Androgenetic Alopecia, which enzyme activity is increased in scalp biopsy specimens from balding areas?

- A) Aromatase
- B) 17β -HSD
- C) 5α -reductase
- D) Hydroxysteroid dehydrogenase

Answer: C) 5α -reductase

Question Number 8:

A patient presents with hair loss and a history of high fever three months ago. The hair pull test reveals more than six hairs per pull. What is the most likely diagnosis?

- A) Chronic Telogen Effluvium
- B) Acute Telogen Effluvium
- C) Anagen Effluvium
- D) Alopecia Areata

Answer: B) Acute Telogen Effluvium

Question Number 9:

A 45-year-old female presents with central thinning of the crown. The clinical history and examination suggest a diagnosis of FPHL. Which of the following findings would be most consistent with this diagnosis on scalp biopsy?

- A) Peribulbar mononuclear cell infiltrate
- B) Miniaturization of hair follicles
- C) Increased telogen count
- D) Concentric lamellar fibroplasia

Answer: B) Miniaturization of hair follicles

Question Number 10:

In a patient with Male Pattern Hair Loss (MPHL), which of the following treatment options has been shown to halt hair loss in the majority of patients and induce partial hair regrowth in a significant proportion?

- A) Topical minoxidil
- B) Oral finasteride
- C) Intralesional corticosteroids
- D) Oral spironolactone

Answer: B) Oral finasteride

Question Number 11:

A 35-year-old female presents with diffuse hair thinning over the scalp, particularly noticeable over the past six months. She reports significant stress at work and recently underwent major surgery. A gentle hair pull test yields more than six hairs. Which of the following is the most likely diagnosis?

- A) Androgenetic alopecia
- B) Telogen effluvium
- C) Alopecia areata
- D) Tinea capitis

Answer: B) Telogen effluvium

Diagnosis: Telogen effluvium is characterized by increased shedding of normal telogen hairs in response to a physiological or pathologic change in health status, often triggered by stress or surgery.

Question Number 12:

A histopathological examination of a scalp biopsy from a patient with hair loss shows perifollicular chronic inflammation, primarily lymphocytic, with loss of sebaceous glands and total follicular destruction in advanced stages. Which condition does this most likely represent?

- A) Lichen planopilaris
- B) Acne keloidalis
- C) Discoid lupus erythematosus
- D) Folliculitis decalvans

Answer: B) Acne keloidalis

Diagnosis: The histopathological features described are characteristic of acne keloidalis, which includes perifollicular chronic inflammation and loss of sebaceous glands leading to total follicular destruction.

Question Number 13:

In a patient with alopecia areata, which of the following laboratory findings is typically observed?

- A) Elevated serum iron
- B) Decreased thyroid-stimulating hormone (TSH)
- C) Normal complete blood count (CBC)
- D) Increased erythrocyte sedimentation rate (ESR)

Answer: C) Normal complete blood count (CBC)

Diagnosis: Alopecia areata is usually not associated with specific laboratory abnormalities, and a normal complete blood count is typically observed.

Question Number 14:

A patient presents with sudden, patchy hair loss on the scalp without visible scarring. Trichoscopy shows yellow dots, short vellus hairs, and exclamation mark hairs. Which condition is most likely?

- A) Trichotillomania
- B) Alopecia areata
- C) Androgenetic alopecia
- D) Tinea capitis

Answer: B) Alopecia areata

Diagnosis: The trichoscopic findings of yellow dots, short vellus hairs, and exclamation mark hairs are characteristic of alopecia areata.

Question Number 15:

A 45-year-old male with a history of rheumatoid arthritis presents with a sharply demarcated, red, scaly plaque on the scalp causing hair loss. Which of the following is the most likely diagnosis?

- A) Psoriasis
- B) Discoid lupus erythematosus
- C) Seborrheic dermatitis
- D) Lichen planus

Answer: A) Psoriasis

Diagnosis: The clinical presentation of a sharply demarcated, red, scaly plaque with associated hair loss is indicative of scalp psoriasis, often seen in patients with autoimmune conditions like rheumatoid arthritis.

Question Number 16:

A patient with long-standing androgenetic alopecia is considering treatment options. Which medication is most likely to stimulate hair growth in this condition?

- A) Oral isotretinoin
- B) Topical minoxidil
- C) Oral acitretin
- D) Topical ketoconazole

Answer: B) Topical minoxidil

Diagnosis: In androgenetic alopecia, topical minoxidil is known for its efficacy in stimulating hair growth.

Question Number 17:

A 30-year-old woman presents with hair loss and a positive pull test. On examination, there is widening of the central part of the scalp with preservation of the frontal hairline. Which is the most appropriate initial step in management?

- A) Biopsy of the scalp
- B) Topical minoxidil application
- C) Oral finasteride therapy
- D) Serologic testing for lupus erythematosus

Answer: B) Topical minoxidil application

Diagnosis: The clinical presentation suggests female pattern hair loss (androgenetic alopecia), where topical minoxidil is the initial treatment of choice.

Question Number 18:

A patient presents with scarring alopecia and histopathology shows lichenoid tissue reaction interface dermatitis with follicular plugging. Which condition does this most likely represent?

- A) Folliculitis decalvans
- B) Lichen planopilaris
- C) Discoid lupus erythematosus
- D) Central centrifugal cicatricial alopecia

Answer: C) Discoid lupus erythematosus

Diagnosis: The histopathology described is characteristic of discoid lupus erythematosus, indicated by lichenoid tissue reaction and follicular plugging.

Question Number 19:

A patient with a history of severe atopic dermatitis presents with well-demarcated areas of nonscarring alopecia on the scalp. Trichoscopy reveals broken hairs, black dots, and coiled hairs. What is the most likely diagnosis?

- A) Alopecia areata
- B) Trichotillomania
- C) Tinea capitis
- D) Androgenetic alopecia

Answer: B) Trichotillomania

Diagnosis: Trichoscopy findings of broken hairs, black dots, and coiled hairs in the setting of well-demarcated areas of nonscarring alopecia are suggestive of trichotillomania.

Question Number 20:

A 55-year-old male presents with progressive, painful, purulent scalp lesions and scarring alopecia over several months. Which of the following is the most likely diagnosis?

- A) Folliculitis decalvans
- B) Seborrheic dermatitis
- C) Lichen planopilaris
- D) Discoid lupus erythematosus

Answer: A) Folliculitis decalvans

Diagnosis: The clinical presentation of progressive, painful, purulent scalp lesions with scarring alopecia is indicative of folliculitis decalvans.

Question Number 21:

A 35-year-old female presents with a large area of alopecia with a sharp border and hairs of different lengths. There are broken hairs, crusted erosions, and a few pustules. Which of the following is the most likely diagnosis?

- A. Alopecia areata
- B. Tinea capitis

C. Trichotillomania

D. Telogen effluvium

Answer: C. Trichotillomania

Diagnosis: Trichotillomania

Question Number 22:

A patient with discoid lupus erythematosus (DLE) is being treated for scalp involvement. Which of the following treatments is usually effective for this condition?

A. Oral isotretinoin

B. Topical minoxidil

C. Oral antimalarial drugs and corticosteroids

D. Photodynamic therapy

Answer: C. Oral antimalarial drugs and corticosteroids

Question Number 23:

A patient presents with progressive hair loss along the anterior hairline and eyebrows.

Histopathologic features are similar to lichen planopilaris. What is the most likely diagnosis?

A. Androgenetic alopecia

B. Central centrifugal cicatricial alopecia

C. Frontal fibrosing alopecia

D. Seborrheic dermatitis

Answer: C. Frontal fibrosing alopecia

Diagnosis: Frontal fibrosing alopecia

Question Number 24:

In a case of central centrifugal cicatricial alopecia (CCCA), which histologic feature is commonly observed in the early phase of the disease?

A. Premature desquamation of the inner root sheath

B. Increased number of telogen follicles

C. Peribulbar lymphocytic infiltrate

D. Follicular miniaturization

Answer: A. Premature desquamation of the inner root sheath

Question Number 25:

In lichen planopilaris (LPP), which of the following clinical features is most commonly observed?

A. Non-scarring diffuse alopecia

- B. Scattered foci of partial hair loss with perifollicular erythema
 - C. Rapidly progressive total alopecia
 - D. Hair loss in a distinct pattern resembling male pattern baldness
- Answer: B. Scattered foci of partial hair loss with perifollicular erythema

Question Number 26:

A biopsy from a patient with suspected cicatricial alopecia shows dense perifollicular inflammation, predominantly neutrophilic, with partial epithelial destruction. Which condition does this histopathological finding most likely indicate?

- A. Alopecia areata
- B. Folliculitis decalvans
- C. Trichotillomania
- D. Telogen effluvium

Answer: B. Folliculitis decalvans

Diagnosis: Folliculitis decalvans

Question Number 27:

Which of the following findings is most indicative of trichotillomania on trichoscopy?

- A. Yellow dots and short vellus hairs
- B. Black dots and broken hairs
- C. Exclamation point hairs and tapering hairs
- D. Irregularly broken hairs and black dots

Answer: D. Irregularly broken hairs and black dots

Question Number 28:

For a patient with dissecting cellulitis of the scalp, which of the following is considered an effective treatment?

- A. Oral rifampin and clindamycin
- B. Topical ketoconazole
- C. Systemic glucocorticoids
- D. Photodynamic therapy

Answer: A. Oral rifampin and clindamycin

Question Number 29:

In cases of alopecia areata, which of the following treatments has the highest likelihood of inducing hair regrowth?

- A. Systemic corticosteroids
- B. Anthralin cream
- C. Intralesional corticosteroids
- D. Oral finasteride

Answer: C. Intralesional corticosteroids

Question Number 30:

Which genetic mutation is associated with congenital atrichia with papules?

- A. Keratin 71
- B. Hairless (zinc finger transcription factor)
- C. Ectodysplasin A
- D. Desmoglein 4

Answer: B. Hairless (zinc finger transcription factor)

Question Number 31:

In a patient presenting with irregularly shaped areas of scarring alopecia along the midline of the scalp, trichoscopy reveals yellow structureless areas, yellow dots, and dystrophic hair shafts. The most likely diagnosis is:

- A) Lichen planopilaris
- B) Dissecting cellulitis
- C) Folliculitis decalvans
- D) Tinea capitis

Answer:

- B) Dissecting cellulitis

Diagnosis: Dissecting cellulitis of the scalp

Question Number 32:

A patient with a history of progressive hair loss and a diagnosis of "burnt-out" cicatricial alopecia is most likely to show which of the following histologic patterns on biopsy?

- A) Dense lymphocytic infiltrate around the hair follicles
- B) Neutrophilic infiltration in the upper portion of follicles
- C) Sampling of an older inactive portion of the lesion
- D) Extensive fibrosis and absence of hair follicles

Answer:

- C) Sampling of an older inactive portion of the lesion

Diagnosis: "Burnt-out" or "end-stage" cicatricial alopecia

Question Number 33:

Brocq's alopecia is best described as:

- A) A distinct disease entity with unique histopathological features
- B) A clinical pattern of end-stage cicatricial alopecia, often seen in lichen planopilaris
- C) A non-scarring alopecia with a genetic basis
- D) An acute, highly inflammatory form of hair loss

Answer:

B) A clinical pattern of end-stage cicatricial alopecia, often seen in lichen planopilaris

Question Number 34:

In the context of Brocq's alopecia, the expected histologic findings are most consistent with:

- A) Active lichenoid tissue reaction
- B) "Burnt-out" cicatricial alopecia
- C) Features typical of acute telogen effluvium
- D) Neutrophilic scarring alopecia

Answer:

B) "Burnt-out" cicatricial alopecia

Question Number 35:

Folliculitis decalvans is often characterized by which of the following histological features?

- A) Dense perifollicular inflammation of the upper portion of follicles
- B) Miniaturization of hair follicles without inflammation
- C) Granulomatous inflammation around hair follicles
- D) Predominance of plasma cells in the infiltrate

Answer:

A) Dense perifollicular inflammation of the upper portion of follicles

Question Number 36:

The clinical pattern of "tufted folliculitis" is most commonly associated with:

- A) Central centrifugal cicatricial alopecia (CCCA)
- B) Lichen planopilaris
- C) Tinea capitis
- D) Discoid lupus erythematosus

Answer:

A) Central centrifugal cicatricial alopecia (CCCA)

Question Number 37:

The term 'tufted folliculitis' is characterized by:

- A) Multiple hairs arising from a single follicular orifice
- B) Inflammation leading to destruction of hair follicles
- C) Non-scarring alopecia with reversible hair loss
- D) Autoimmune destruction of hair follicles

Answer:

A) Multiple hairs arising from a single follicular orifice

Question Number 38:

Traction alopecia, when it reaches an end-stage, is characterized by:

- A) Dense lymphocytic infiltrate around follicles
- B) Features of acute trichotillomania
- C) Features of "burnt-out" cicatricial alopecia
- D) Predominantly neutrophilic inflammation

Answer:

- C) Features of "burnt-out" cicatricial alopecia

Question Number 39:

Monilethrix is best characterized by hair shafts with:

- A) Uniform elliptical nodes of normal thickness and intermittent abnormal constrictions
- B) Twisting of the hair shaft on its own axis
- C) Large irregularly spaced bubbles that expand and thin the hair cortex
- D) Periodic clusters of abnormal air-filled cavities

Answer:

- A) Uniform elliptical nodes of normal thickness and intermittent abnormal constrictions

Question Number 40:

Pili torti is characterized by:

- A) Hair shafts that are flattened and twisted on their own axis
- B) Intermittent nodes and constrictions along the hair shaft
- C) A golf tee-shaped end of the hair shaft
- D) Alternating light and dark bands under polarizing light

Answer:

- A) Hair shafts that are flattened and twisted on their own axis

Dermatologic Manifestations in Patients with Systemic Disease

Suitable questions included the following: 2, 7, 9, 10, 11, 14, 16, 21, 25, 30

Question Number 1:

A 45-year-old patient presents with erythematous papules and plaques on the extensor extremities. Histopathology reveals a dense neutrophilic infiltrate without significant epidermal involvement. What is the most likely diagnosis?

- A) Sweet syndrome
- B) Pyoderma gangrenosum
- C) Rheumatoid neutrophilic dermatitis
- D) Erythema elevatum diutinum

Answer: C) Rheumatoid neutrophilic dermatitis

Diagnosis: Rheumatoid Arthritis

Question Number 2:

Which dermatological condition is characterized by necrolytic migratory erythema, often misdiagnosed as intertrigo or seborrheic dermatitis, and is a hallmark of a specific systemic disease?

- A) Acrodermatitis enteropathica
- B) Pellagra
- C) Glucagonoma syndrome
- D) Zinc deficiency

Answer: C) Glucagonoma syndrome

Diagnosis: Glucagonoma Syndrome

Question Number 3:

A patient with rheumatoid arthritis develops erythema induratum and papules in a reticular pattern over swollen joints. Histopathology reveals intravascular histiocytosis. This condition is most likely:

- A) Intravascular/intralymphatic histiocytosis
- B) Rheumatoid vasculitis
- C) Erythema elevatum diutinum
- D) Rheumatoid neutrophilic dermatitis

Answer: A) Intravascular/intralymphatic histiocytosis

Question Number 4:

Which of the following skin manifestations is a key feature of Bazex syndrome (acrokeratosis paraneoplastica)?

- A) Erythema gyratum repens
- B) Acral psoriasiform plaques
- C) Necrolytic migratory erythema
- D) Acquired hypertrichosis lanuginosa

Answer: B) Acral psoriasiform plaques

Diagnosis: Bazex Syndrome (Acrokeratosis Paraneoplastica)

Question Number 5:

In the context of Sjögren syndrome, which cutaneous manifestation is often debated as either unique to the syndrome or a form of subacute cutaneous lupus erythematosus?

- A) Erythema annulare
- B) Erythema multiforme
- C) Annular erythema
- D) Heliotrope rash

Answer: C) Annular erythema

Diagnosis: Sjögren Syndrome

Question number 6:

A patient presents with erosive disease of the mucous membranes and erythema multiforme-like lesions. The most likely associated systemic condition is:

- A) Chronic lymphocytic leukemia
- B) Non-Hodgkin lymphoma
- C) Castleman disease
- D) Both B and C are equally likely

Answer: D) Both B and C are equally likely

Diagnosis: Paraneoplastic Pemphigus

Question number 7:

Which of the following conditions is strongly associated with Bazex syndrome (acrokeratosis paraneoplastica)?

- A) Gastric carcinoma
- B) Pancreatic carcinoma
- C) Upper aerodigestive tract malignancy
- D) Colorectal carcinoma

Answer: C) Upper aerodigestive tract malignancy

Question number 8:

A patient with rheumatoid arthritis develops tender red nodules on the lower legs, histologically characterized as neutrophilic lobular panniculitis. This presentation is most indicative of:

- A) Erythema nodosum
- B) Rheumatoid nodules
- C) Rheumatoid neutrophilic dermatitis
- D) Erythema elevatum diutinum

Answer: B) Rheumatoid nodules

Question number 9:

Paraneoplastic pemphigus is most commonly associated with which of the following underlying conditions?

- A) Bronchial carcinoma
- B) Non-Hodgkin lymphoma
- C) Gastric carcinoma
- D) Pancreatic carcinoma

Answer: B) Non-Hodgkin lymphoma

Diagnosis: Paraneoplastic Pemphigus

Question number 10:

Glucagonoma syndrome is characterized by all of the following EXCEPT:

- A) Weight loss
- B) Necrolytic migratory erythema
- C) Hyperpigmentation
- D) Diabetes mellitus

Answer: C) Hyperpigmentation

Diagnosis: Glucagonoma Syndrome

Question number 11:

Which of the following skin manifestations is most commonly associated with insulin resistance in both adults and children?

- a) Acral erythema
- b) Carotenoderma
- c) Acanthosis nigricans
- d) Diabetic bullae

Answer: c) Acanthosis nigricans

Diagnosis: Insulin Resistance

Question number 12:

A patient presents with tense, non-inflammatory bullae on the lower extremities. This finding is most characteristic of which diabetes-related dermatosis?

- a) Necrobiosis lipoidica
- b) Diabetic dermopathy
- c) Diabetic bullae (bullosis diabeticorum)
- d) Eruptive xanthomas

Answer: c) Diabetic bullae (bullosis diabeticorum)

Question number 13:

In diabetic cheiroarthropathy, what is the primary underlying pathophysiological mechanism?

- a) Ischemia due to vascular disease
- b) Increased glycosylation of collagen in the skin
- c) Microvascular angiopathy
- d) Compensatory hyperemia

Answer: b) Increased glycosylation of collagen in the skin

Question number 14:

Brown atrophic macules on the legs are a hallmark of which dermatologic condition often seen in patients with diabetes mellitus?

- a) Diabetic dermopathy
- b) Necrobiosis lipoidica
- c) Acral dry gangrene
- d) Hemochromatosis

Answer: a) Diabetic dermopathy

Question number 15:

Erythematous annular lesions composed of papules, observed in a diabetic patient, suggest which of the following conditions?

- a) Granuloma annulare
- b) Diabetic dermopathy
- c) Necrobiosis lipoidica
- d) Diabetic bullae

Answer: a) Granuloma annulare

Question number 16:

Red-yellow papules that develop over weeks to months in patients with poorly controlled diabetes mellitus are indicative of which condition?

- a) Eruptive xanthomas
- b) Acral erythema
- c) Diabetic cheiroarthropathy

d) Diabetic dermopathy

Answer: a) Eruptive xanthomas

Question number 17:

Which dermatological manifestation in diabetes mellitus is characterized by yellow atrophic patches, primarily on the shins, with a red-brown rim indicating activity?

a) Diabetic dermopathy

b) Necrobiosis lipoidica

c) Diabetic bullae

d) Eruptive xanthomas

Answer: b) Necrobiosis lipoidica

Question number 18:

Non-painful ulcerations at sites of pressure, most commonly on the foot, in diabetic patients, are a clinical feature of:

a) Diabetic dermopathy

b) Neuropathic leg ulcers

c) Necrobiosis lipoidica

d) Diabetic bullae

Answer: b) Neuropathic leg ulcers

Question number 19:

In a diabetic patient, keratotic papules primarily on the extremities, often occurring in African-American patients with chronic kidney disease on dialysis, are characteristic of:

a) Acral dry gangrene

b) Perforating disorders

c) Diabetic dermopathy

d) Necrobiosis lipoidica

Answer: b) Perforating disorders

Question number 20:

Chronic flushed appearance of the face, neck, and upper extremities, improved by dietary diabetic control, is known as:

a) Rubeosis

b) Carotenoderma

c) Acanthosis nigricans

d) Scleredema

Answer: a) Rubeosis

Question number 21:

Which of the following cutaneous findings is typically associated with Birt-Hogg-Dubé syndrome?

- A) Facial angiofibromas
- B) Classic triad of fibrofolliculomas, trichodiscomas, and acrochordons
- C) Palpable purpura
- D) Widespread necrosis and detachment of the skin

Answer: B) Classic triad of fibrofolliculomas, trichodiscomas, and acrochordons

Question number 22:

In a patient diagnosed with Hereditary Hemorrhagic Telangiectasia, which of the following is the most common pulmonary manifestation?

- A) Pulmonary arteriovenous malformations (AVMs)
- B) Chronic obstructive pulmonary disease
- C) Interstitial lung disease
- D) Bronchiectasis

Answer: A) Pulmonary arteriovenous malformations (AVMs)

Question number 23:

Which dermatologic condition is most commonly associated with Yellow Nail Syndrome?

- A) Pseudoporphyria
- B) Thickened, slow-growing, excessively curved yellow-to-green nails
- C) Beefy red ears sparing the lobes
- D) Acquired perforating dermatosis

Answer: B) Thickened, slow-growing, excessively curved yellow-to-green nails

Question number 24:

For a patient with systemic sclerosis, which pulmonary complication is more commonly seen in the diffuse cutaneous form (DcSSc)?

- A) Interstitial lung disease (ILD)
- B) Pulmonary artery hypertension
- C) Chronic bronchitis
- D) Pleural effusions

Answer: A) Interstitial lung disease (ILD)

Question number 25:

In a patient with Kawasaki disease, which of the following cutaneous findings is typically observed?

- A) Glossitis and cheilitis
- B) Sclerodermoid changes
- C) Erythema marginatum
- D) Oral and genital aphthae

Answer: A) Glossitis and cheilitis

Question number 26:

Which skin manifestation is commonly seen in Granulomatosis with Polyangiitis (Wegener Granulomatosis)?

- A) Vasculitic lesions such as palpable purpura
- B) Multiple cutaneous leiomyomas
- C) Red-violet to dark purple plaques
- D) Hypoplasia of the nails

Answer: A) Vasculitic lesions such as palpable purpura

Question number 27:

Fabry disease is characterized by which of the following dermatological features?

- A) Angiokeratoma corporis diffusum
- B) Pinch purpura
- C) Cutaneous leiomyomas
- D) Triangular lunulae

Answer: A) Angiokeratoma corporis diffusum

Question number 28:

In patients with systemic lupus erythematosus (SLE), which renal abnormality is most commonly observed?

- A) Glomerulonephritis – focal, membranous, or proliferative
- B) Renal hamartomas
- C) Renal cell carcinoma
- D) Nephrogenic systemic fibrosis

Answer: A) Glomerulonephritis – focal, membranous, or proliferative

Question number 29:

Which of the following is a typical cutaneous manifestation of Sarcoidosis?

- A) Papules, nodules, plaques
- B) Segmental infantile hemangioma
- C) Beefy red ears sparing the lobes
- D) Palpable purpura

Answer: A) Papules, nodules, plaques

Question number 30:

Dermatomyositis is often associated with which pulmonary condition?

- A) Interstitial lung disease (ILD)
- B) Pulmonary arteriovenous malformations
- C) High-output cardiac failure
- D) Pulmonary artery hypertension

Answer: A) Interstitial lung disease (ILD)

Mycobacteria

Suitable questions included the following: 7, 8, 11, 12, 21, 25, 28, 30

Question number 1:

Which of the following immunologic markers is predominantly seen in tuberculoid leprosy?

- A) Th2 cytokine pattern
- B) Th1 cytokine pattern
- C) Both Th1 and Th2 cytokine patterns
- D) Neither Th1 nor Th2 cytokine patterns

Answer: B) Th1 cytokine pattern.

Diagnosis: Tuberculoid leprosy.

Question number 2:

In leprosy, which nerve test is likely to show a delayed or absent response in tuberculoid lesions due to impaired sympathetic nerve fibers?

- A) Mitsuda test
- B) Pilocarpine test
- C) Histamine test
- D) Quinizarin test

Answer: C) Histamine test.

Question number 3:

Which type of leprosy is characterized by the formation of nodules at the site of intradermal injection of heat-killed *M. leprae*, indicating a specific cell-mediated response?

- A) Lepromatous leprosy
- B) Indeterminate leprosy
- C) Tuberculoid leprosy
- D) Borderline leprosy

Answer: C) Tuberculoid leprosy.

Diagnosis: Positive response in lepromin (Mitsuda) test.

Question number 4:

Which clinical form of leprosy is most likely to present with diffuse infiltration, leonine facies, and madarosis?

- A) Tuberculoid leprosy
 - B) Lepromatous leprosy
 - C) Borderline leprosy
 - D) Indeterminate leprosy
- Answer: B) Lepromatous leprosy.
Diagnosis: Lepromatous leprosy.

Question number 5:

A patient presents with hypopigmented, anesthetic plaques. Which of the following is a potential complication of this condition?

- A) Progressive multifocal leukoencephalopathy
 - B) Peripheral neuropathy
 - C) Chronic venous insufficiency
 - D) Acute renal failure
- Answer: B) Peripheral neuropathy.
Diagnosis: Tuberculoid leprosy.

Question number 6:

In which form of leprosy are granulomatous nodular infiltrates following the course of a nerve most likely to be observed histopathologically?

- A) Lepromatous leprosy
 - B) Tuberculoid leprosy
 - C) Borderline leprosy
 - D) Indeterminate leprosy
- Answer: B) Tuberculoid leprosy.
Diagnosis: Tuberculoid leprosy.

Question number 7:

Which cytokines are predominantly produced in the Th2 response associated with lepromatous leprosy?

- A) IL-2 and IFN- γ
- B) IL-4 and IL-10
- C) TNF- α and IL-6
- D) IL-1 and IL-12

Answer: B) IL-4 and IL-10.

Diagnosis: Lepromatous leprosy.

Question number 8:

What is the most common type of reactional state in patients undergoing treatment for lepromatous leprosy?

- A) Type 1 (reversal) reaction
- B) Type 2 (vasculitis) reaction
- C) Lucio phenomenon
- D) None of the above

Answer: B) Type 2 (vasculitis) reaction.

Diagnosis: Lepromatous leprosy.

Question number 9:

In which type of leprosy are PGL-1 serologic assays most sensitive for diagnosis?

- A) Tuberculoid leprosy
- B) Lepromatous leprosy
- C) Indeterminate leprosy
- D) Borderline leprosy

Answer: B) Lepromatous leprosy.

Diagnosis: Lepromatous leprosy.

Question number 10:

Which of the following is a common cause of biologically false-positive syphilis tests in patients with leprosy?

- A) Tuberculoid leprosy
 - B) Lepromatous leprosy
 - C) Borderline leprosy
 - D) Indeterminate leprosy
- Answer: B) Lepromatous leprosy.
Diagnosis: Lepromatous leprosy.

Question number 11

A 45-year-old patient presents with a chronic, painless ulcer on the lower extremity. Histopathological examination reveals granulomatous inflammation with central caseation and Langhans giant cells. Which of the following is the most likely diagnosis?

- A. Cutaneous leishmaniasis
- B. Chromomycosis
- C. Sporotrichosis
- D. Cutaneous tuberculosis

Answer:

- D. Cutaneous tuberculosis
- Diagnosis: Tuberculous Chancre

Question number 12

Which of the following is the principal therapy for Type 2 leprosy reactions characterized by erythema nodosum leprosum?

- A. Oral prednisone
- B. Thalidomide
- C. Rifampin
- D. Clofazimine

Answer:

- B. Thalidomide

Question number 13

In patients with cutaneous tuberculosis, which of the following represents the classical skin lesion following BCG vaccination?

- A. Tuberculous Chancre
- B. Lupus Vulgaris
- C. Scrofuloderma

D. Tuberculosis Verrucosa Cutis

Answer:

D. Tuberculosis Verrucosa Cutis

Question number 14

A patient with a history of pulmonary tuberculosis develops reddish-brown plaques on the nose with apple-jelly nodules on diascopy. Which variant of cutaneous tuberculosis is this presentation indicative of?

A. Tuberculous Chancre

B. Scrofuloderma

C. Lupus Vulgaris

D. Miliary Tuberculosis

Answer:

C. Lupus Vulgaris

Question number 15

Which type of cutaneous tuberculosis is characterized by subcutaneous nodules on the calves that may ulcerate, forming deep ulcers with undermined bluish borders?

A. Tuberculous Gumma

B. Scrofuloderma

C. Erythema Induratum

D. Lupus Vulgaris

Answer:

C. Erythema Induratum

Question number 16

The presence of which histological feature is most suggestive of cutaneous tuberculosis in a patient presenting with a chronic ulcer?

A. Epidermal hyperplasia

B. Granulomatous inflammation with caseation

C. Leukocytoclastic vasculitis

D. Spongiosis

Answer:

B. Granulomatous inflammation with caseation

Question number 17

In the context of leprosy, what is the most common presentation of a Type 1 reaction?

- A. Erythema Nodosum Leprosum
- B. Acute Cutaneous Lupus Erythematosus
- C. Sweet Syndrome
- D. Cellulitis

Answer:

- B. Acute Cutaneous Lupus Erythematosus

Question number 18

Which of the following is not a typical feature of Papulonecrotic Tuberculid?

- A. Dusky red papules or papulopustules
- B. Asymptomatic nature with occasional pruritus
- C. Central necrosis and spontaneous healing
- D. Predominant distribution on the trunk

Answer:

- D. Predominant distribution on the trunk

Question number 19

For a patient with suspected cutaneous tuberculosis, which of the following diagnostic tests has the highest specificity?

- A. Mantoux Tuberculin Skin Test
- B. Interferon-Gamma Release Assays
- C. Direct microscopic examination for acid-fast bacilli
- D. Histopathological examination

Answer:

- B. Interferon-Gamma Release Assays

Question number 20

In a patient with leprosy, which systemic corticosteroid is recommended for the treatment of Type 1 (reversal) reactions?

- A. Prednisone
- B. Hydrocortisone
- C. Dexamethasone
- D. Betamethasone

Answer:

- A. Prednisone

Question number 21

A 35-year-old patient presents with a rapidly enlarging ulcer on the lower extremity, characterized by undermined edges and a necrotic base. Which of the following is the most likely causative organism?

- A) *Mycobacterium leprae*
- B) *Mycobacterium tuberculosis*
- C) *Mycobacterium ulcerans*
- D) *Mycobacterium marinum*

Answer: C) *Mycobacterium ulcerans*

Diagnosis: Buruli ulcer

Question number 22

A patient with a history of working in an aquarium develops a sporotrichoid pattern of skin lesions. Which diagnostic method is most likely to confirm the suspected pathogen?

- A) Culture at 37°C
- B) Ziehl-Neelsen staining
- C) Culture at 30-32°C
- D) Polymerase Chain Reaction (PCR) for *Mycobacterium tuberculosis*

Answer: C) Culture at 30-32°C

Diagnosis: *Mycobacterium marinum* infection

Question number 23

Which of the following is a characteristic histopathological finding in infections caused by rapidly growing mycobacteria like *Mycobacterium fortuitum*?

- A) Lepromatous granulomas
- B) Caseating granulomas
- C) Suppurative granulomas

D) Sarcoidal granulomas

Answer: C) Suppurative granulomas

Question number 24

A patient presents with multiple erythematous subcutaneous nodules predominantly on the lower limbs. The patient is immunocompromised. What is the most likely causative agent?

A) Mycobacterium avium complex

B) Mycobacterium leprae

C) Mycobacterium haemophilum

D) Mycobacterium scrofulaceum

Answer: A) Mycobacterium avium complex

Question number 25

In the treatment of Mycobacterium ulcerans (Buruli ulcer), which combination of medications is recommended for early, non-ulcerated lesions?

A) Isoniazid and Rifampin

B) Rifampin and Streptomycin

C) Clarithromycin and Ethambutol

D) Rifampin and Clarithromycin

Answer: B) Rifampin and Streptomycin

Question number 26

A patient presents with a long-standing history of a non-tender, firm, subcutaneous nodule that later ulcerated. The patient reports minimal pain. Which toxin is responsible for the pain suppression in this infection?

A) Mycolactone

B) Cord factor

C) Sulfolipid

D) Wax D

Answer: A) Mycolactone

Diagnosis: Buruli ulcer (Mycobacterium ulcerans infection)

Question number 27

For a patient diagnosed with Mycobacterium kansasii skin infection, which of the following is the most effective treatment regimen?

A) Isoniazid, Rifampin, and Ethambutol

- B) Clarithromycin alone
- C) Rifampin and Ethambutol
- D) Multidrug antituberculous therapy

Answer: A) Isoniazid, Rifampin, and Ethambutol

Question number 28

Which clinical feature is most suggestive of a cutaneous *Mycobacterium haemophilum* infection in an immunocompromised adult?

- A) Diffuse papulonodular eruptions
- B) Single bluish-red tender pustule evolving into an abscess
- C) Multiple erythematous macules
- D) Lepromatous nodules

Answer: B) Single bluish-red tender pustule evolving into an abscess

Question number 29

In the diagnosis of *Mycobacterium marinum*, which of the following growth conditions is unique and essential for the organism?

- A) Growth in Lowenstein-Jensen medium
- B) Incubation at 31°C
- C) Requirement of high oxygen tension
- D) Presence of hemin or ferric ions

Answer: B) Incubation at 31°C

Question number 30

What is the main reason for the slow and indolent nature of Buruli ulcer caused by *Mycobacterium ulcerans*?

- A) Resistance to common antibiotics
- B) Intracellular location of the bacteria
- C) Production of mycolactone, a cytotoxic and immunosuppressive toxin
- D) Formation of thick biofilms hindering drug penetration

Answer: C) Production of mycolactone, a cytotoxic and immunosuppressive toxin

Darier disease

Suitable questions included the following: 1, 3, 4, 5, 16

Question Number 1:

Which gene mutation is primarily responsible for Darier Disease?

- A) ATP2C1
- B) ATP2A2
- C) hSPCA1
- D) SERCA2

Answer: B) ATP2A2

Diagnosis: Darier Disease

Question Number 2:

Which clinical feature is NOT typically associated with Darier Disease?

- A) Keratotic papules in seborrheic distribution
- B) Flaccid vesicles in intertriginous areas
- C) Palmoplantar papules
- D) Whitish oral mucosal papules

Answer: B) Flaccid vesicles in intertriginous areas

Question Number 3:

What is the most common mode of inheritance for Hailey-Hailey Disease?

- A) Autosomal recessive
- B) Autosomal dominant
- C) X-linked dominant
- D) Mitochondrial

Answer: B) Autosomal dominant

Diagnosis: Hailey-Hailey Disease

Question Number 4:

In Darier Disease, mutations in the ATP2A2 gene affect which cellular structure?

- A) Mitochondrial membrane
- B) Golgi apparatus
- C) Endoplasmic reticulum
- D) Lysosomal membrane

Answer: C) Endoplasmic reticulum

Question Number 5:

Which histological feature is characteristic of Hailey-Hailey Disease?

- A) Suprabasilar clefting
- B) Acantholysis throughout the spinous layer
- C) "Corps ronds" and "grains"
- D) Basal layer hyperplasia

Answer: B) Acantholysis throughout the spinous layer

Diagnosis: Hailey-Hailey Disease

Question Number 6:

Which factor is known to exacerbate Darier Disease?

- A) Cold temperatures
- B) UV irradiation
- C) High humidity
- D) Hypocalcemia

Answer: B) UV irradiation

Question Number 7:

What is a distinctive clinical feature of segmental type 1 Hailey-Hailey Disease?

- A) Lesions confined to one side of the body
- B) Early onset and severe symptoms
- C) Lesions along the lines of Blaschko
- D) Predominantly facial involvement

Answer: C) Lesions along the lines of Blaschko

Diagnosis: Hailey-Hailey Disease

Question Number 8:

Which of the following is NOT a common site of involvement in Darier Disease?

- A) Scalp
- B) Axillae
- C) Groin
- D) Palms and soles

Answer: D) Palms and soles

Question Number 9:

Which type of mutation is most commonly associated with Hailey-Hailey Disease?

- A) Missense mutations
- B) Nonsense mutations
- C) Frameshift mutations
- D) Deletion mutations

Answer: B) Nonsense mutations

Diagnosis: Hailey-Hailey Disease

Question Number 10:

What is the primary treatment approach for Darier Disease?

- A) Antiviral therapy
- B) Systemic corticosteroids
- C) Topical retinoids
- D) Antibiotic therapy

Answer: C) Topical retinoids

Question Number 11:

A patient presents with vegetative plaques in intertriginous areas. Which additional clinical feature would suggest a diagnosis of Darier Disease over Hailey-Hailey Disease?

- A) Nail dystrophy
- B) Absence of pruritus
- C) Flaccid vesicles
- D) Hyperhidrosis

Answer: A) Nail dystrophy

Diagnosis: Darier Disease

Question Number 12:

Which diagnostic tool is most definitive for differentiating between Darier Disease and Hailey-Hailey Disease?

- A) Clinical examination
- B) Wood's lamp examination
- C) Histopathological examination
- D) Direct immunofluorescence

Answer: C) Histopathological examination

Question Number 13:

A patient with Hailey-Hailey Disease would most likely display which of the following upon histological examination?

- A) Acantholytic dyskeratotic cells in the epidermis
- B) Interface dermatitis with lymphocytic infiltration
- C) Granular layer thickening with hyperkeratosis
- D) Dermal edema and perivascular lymphocytic infiltrate

Answer: A) Acantholytic dyskeratotic cells in the epidermis

Diagnosis: Hailey-Hailey Disease

Question Number 14:

In the management of Darier Disease, which factor is crucial in patient counseling?

- A) Life-long antibiotic therapy
- B) Regular cardiovascular monitoring
- C) Genetic counseling and family screening
- D) Dietary modifications to avoid specific triggers

Answer: C) Genetic counseling and family screening

Question Number 15:

What is the predominant histological finding in Darier Disease?

- A) Lichenoid tissue reaction
- B) Spongiosis and exocytosis
- C) Acantholysis in the upper epidermis
- D) Vacuolar alteration of the basal layer

Answer: C) Acantholysis in the upper epidermis

Diagnosis: Darier Disease

Question Number 16:

A patient with Hailey-Hailey Disease typically benefits most from which treatment approach?

- A) Immunosuppressive therapy
- B) Phototherapy
- C) Systemic antifungal therapy
- D) Maintenance of skin hygiene and avoidance of triggers

Answer: D) Maintenance of skin hygiene and avoidance of triggers

Diagnosis: Hailey-Hailey Disease

Question Number 17:

Which of the following is not typically observed in the clinical course of Darier Disease?

- A) Worsening with sun exposure
- B) Improvement with age
- C) Periods of remission and exacerbation
- D) Persistent pruritus

Answer: B) Improvement with age

Question Number 18:

What type of skin lesion is commonly seen in both Darier Disease and Hailey-Hailey Disease?

- A) Bullous lesions
- B) Erythematous papules
- C) Hyperkeratotic plaques
- D) Vesiculo-pustular lesions

Answer: B) Erythematous papules

Question Number 19:

Which environmental condition tends to exacerbate Hailey-Hailey Disease?

- A) Cold and dry climates
- B) High humidity and heat
- C) Low UV index environments
- D) High altitude

Answer: B) High humidity and heat

Diagnosis: Hailey-Hailey Disease

Question Number 20:

In Darier Disease, which oral medication is commonly used for severe or refractory cases?

- A) Methotrexate
- B) Acitretin
- C) Cyclosporine
- D) Hydroxychloroquine

Answer: B) Acitretin

Ichthyosis

Suitable questions included the following: 6, 7, 18, 25, 26, 36

Question Number 1:

In CHILD syndrome, what is the primary defect leading to the disorder?

- A) Deficiency in steroid sulfatase
- B) Mutation in the KRT10 gene
- C) Inactivating mutations in NSDHL
- D) Mutation in the TGM1 gene

Answer:

- C) Inactivating mutations in NSDHL

Question Number 2:

Which clinical feature is most characteristic of Conradi–Hünemann–Happle (CHH) syndrome?

- A) Bilateral cataracts
- B) Erythema and thick adherent feathery scale in a linear pattern
- C) Unilateral cataracts
- D) Generalized hyperkeratosis

Answer:

- B) Erythema and thick adherent feathery scale in a linear pattern

Question Number 3:

What is the most common skeletal anomaly observed in Conradi–Hünemann–Happle syndrome?

- A) Craniosynostosis
- B) Rhizomelic shortening of the limbs
- C) Frontal bossing
- D) Scoliosis

Answer:

- B) Rhizomelic shortening of the limbs

Question Number 4:

In patients with CHILD syndrome, which of the following skin care treatments has been described as beneficial?

- A) Topical tretinoin or systemic retinoid therapy
- B) Emollients and corticosteroids
- C) Topical lovastatin or simvastatin/cholesterol lotion
- D) Systemic antibiotics

Answer:

- C) Topical lovastatin or simvastatin/cholesterol lotion

Question Number 5:

Which histopathologic feature is characteristic of CHILD syndrome?

- A) Parakeratotic nuclei retaining a round shape
- B) Acantholysis in the epidermis
- C) Loss of the granular layer
- D) Munro microabscesses

Answer:

- A) Parakeratotic nuclei retaining a round shape

Question Number 6:

In Harlequin Ichthyosis, what is the primary genetic defect responsible for the disorder?

- A) Mutation in the ABCA12 gene
- B) Mutation in the TGM1 gene
- C) Inactivating mutations in NSDHL
- D) Mutation in the KRT10 gene

Answer:

- A) Mutation in the ABCA12 gene

Question Number 7:

Which clinical feature is characteristic of Netherton Syndrome?

- A) Hyperkeratosis following the lines of Blaschko
- B) Bilateral cataracts at birth
- C) Erythema and scaling with a distinctive double-edged pattern
- D) Unilateral erythema and scaling

Answer:

- C) Erythema and scaling with a distinctive double-edged pattern

Question Number 8:

What is the hallmark histological feature of Epidermolytic Ichthyosis?

- A) Acantholysis in the epidermis
- B) Parakeratotic scaling
- C) Vacuolar alteration of the basal layer
- D) Extensive hyperkeratosis with granular degeneration

Answer:

- D) Extensive hyperkeratosis with granular degeneration

Question Number 9:

In Sjögren-Larsson Syndrome, which of the following is a characteristic ocular finding?

- A) Glistening white dots in the fundus of the eye
- B) Progressive retinal detachment
- C) Bilateral cataracts
- D) Optic nerve atrophy

Answer:

A) Glistening white dots in the fundus of the eye

Question Number 10:

What is the primary treatment approach for Ichthyosis Vulgaris?

- A) Systemic retinoids
- B) Topical corticosteroids
- C) Emollients and keratolytic agents
- D) Antibiotic therapy for secondary infections

Answer:

C) Emollients and keratolytic agents

Question Number 11:

Which enzyme deficiency is associated with Sjögren-Larsson Syndrome?

- A) Fatty acid synthase
- B) Fatty aldehyde dehydrogenase
- C) Fatty acid desaturase
- D) Fatty acid hydroxylase

Answer:

B) Fatty aldehyde dehydrogenase

Question Number 12:

What is a common histological finding in X-linked dominant chondrodysplasia punctata (Conradi-Hünemann-Happle Syndrome)?

- A) Extensive acantholysis
- B) Hyperkeratosis with focal parakeratosis
- C) Granular layer diminution
- D) Munro microabscess formation

Answer:

B) Hyperkeratosis with focal parakeratosis

Question Number 13:

In CHILD Syndrome, which skeletal abnormality is frequently observed?

- A) Bilateral limb hypoplasia
- B) Unilateral limb hypoplasia
- C) Bilateral polydactyly
- D) Scoliosis

Answer:

B) Unilateral limb hypoplasia

Question Number 14:

What is the primary biochemical defect in Harlequin Ichthyosis?

- A) Deficiency of steroid sulfatase
- B) Mutation in the ABCA12 gene affecting lipid transport
- C) Impaired cholesterol biosynthesis
- D) Abnormal keratinocyte differentiation

Answer:

- B) Mutation in the ABCA12 gene affecting lipid transport

Question Number 15:

What distinguishes Ichthyosis with Confetti from other types of ichthyosis?

- A) Development of hundreds to thousands of pale, confetti-like macules
- B) Presence of hyperkeratosis along the lines of Blaschko
- C) Severe scaling with erythroderma
- D) Development of collodion membrane at birth

Answer:

- A) Development of hundreds to thousands of pale, confetti-like macules

Question Number 16:

Which statement about Netherton Syndrome is correct?

- A) It is typically associated with mutations in the TGM1 gene.
- B) It features erythroderma and scaling with a double-edged pattern.
- C) There is a marked increase in serum IgE levels.
- D) It generally shows mild clinical manifestations.

Answer:

- B) It features erythroderma and scaling with a double-edged pattern.

Question Number 17:

In patients with Epidermolytic Ichthyosis, what mutation is commonly found?

- A) KRT10 gene mutation
- B) ABCA12 gene mutation
- C) NSDHL gene mutation
- D) EBP gene mutation

Answer:

- A) KRT10 gene mutation

Question Number 18:

What characterizes the pathology of Ichthyosis Vulgaris?

- A) Parakeratotic scaling
- B) Orthokeratotic hyperkeratosis and a diminished granular layer

- C) Vacuolar alteration of the basal layer
- D) Granular degeneration in the stratum corneum

Answer:

- B) Orthokeratotic hyperkeratosis and a diminished granular layer

Question Number 19:

Which ocular abnormality is associated with Conradi-Hünemann-Happle Syndrome?

- A) Progressive retinal detachment
- B) Bilateral cataracts at birth
- C) Optic nerve atrophy
- D) Glistening white dots in the fundus

Answer:

- B) Bilateral cataracts at birth

Question Number 20:

What is the primary treatment focus for Sjögren-Larsson Syndrome?

- A) Systemic retinoids
- B) Emollients and keratolytic agents
- C) Topical corticosteroids
- D) Antibiotic therapy for secondary infections

Answer:

- B) Emollients and keratolytic agents

Question Number 21:

A neonate presents with a striking unilateral distribution of erythema and thickened skin with a waxy surface. Which treatment is most effective for this condition?

- A) Topical steroids
- B) Systemic retinoids
- C) Topical lovastatin or simvastatin/cholesterol lotion
- D) Antibiotic therapy for secondary infections

Answer:

- C) Topical lovastatin or simvastatin/cholesterol lotion

Diagnosis:

CHILD Syndrome

Question Number 22:

A patient exhibits linear streaks and whorls of hyperkeratosis following the lines of Blaschko at birth. Which histological finding is expected?

- A) Hyperkeratosis with focal parakeratosis
- B) Acantholysis

- C) Munro microabscesses
- D) Granular layer diminution

Answer:

A) Hyperkeratosis with focal parakeratosis

Diagnosis:

Conradi-Hünemann-Happle Syndrome

Question Number 23:

In a patient with patchy scarring alopecia and rhizomelic shortening of the limbs, which ocular finding is most likely?

- A) Bilateral cataracts at birth
- B) Glistening white dots in the fundus
- C) Progressive retinal detachment
- D) Optic nerve atrophy

Answer:

A) Bilateral cataracts at birth

Diagnosis:

Conradi-Hünemann-Happle Syndrome

Question Number 24:

A patient presents with brownish scale on the lower back and buttocks, accompanied by pruritus. Which ocular abnormality might you expect?

- A) Glistening white dots in the fundus of the eye
- B) Bilateral cataracts
- C) Asymptomatic corneal opacities
- D) Optic nerve atrophy

Answer:

A) Glistening white dots in the fundus of the eye

Diagnosis:

Sjögren-Larsson Syndrome

Question Number 25:

For a patient with erythroderma and scaling with a distinctive double-edged pattern, which laboratory finding is most likely?

- A) Elevated serum IgE levels
- B) Decreased serum cholesterol
- C) Increased serum calcium
- D) Abnormal liver function tests

Answer:

A) Elevated serum IgE levels

Diagnosis:

Netherton Syndrome

Question Number 26:

A child presents with widespread peeling and erosions during the neonatal period, evolving to corrugated hyperkeratosis on the neck. What mutation would you expect in genetic testing?

- A) KRT10 gene mutation
- B) ABCA12 gene mutation
- C) NSDHL gene mutation
- D) EBP gene mutation

Answer:

A) KRT10 gene mutation

Diagnosis:

Epidermolytic Ichthyosis

Question Number 27:

In a patient with yellowish-brown hyperkeratosis accentuated skin markings on the lower back, which enzyme deficiency is likely?

- A) Fatty acid synthase
- B) Fatty aldehyde dehydrogenase
- C) Fatty acid desaturase
- D) Fatty acid hydroxylase

Answer:

B) Fatty aldehyde dehydrogenase

Diagnosis:

Sjögren-Larsson Syndrome

Question Number 28:

A patient with neonatal erythroderma, fine white scales, and a history of flexural involvement, likely has a deficiency in which protein?

- A) Filaggrin
- B) Loricrin
- C) Keratin
- D) Collagen

Answer:

A) Filaggrin

Diagnosis:

Ichthyosis Vulgaris

Question Number 29:

For a patient with bilateral limb hypoplasia and erythema with yellowish adherent scale on one side of the body, which molecular analysis would be most diagnostic?

- A) KRT10 gene
- B) ABCA12 gene
- C) NSDHL gene
- D) EBP gene

Answer:

C) NSDHL gene

Diagnosis:

CHILD Syndrome

Question Number 30:

In an infant with ichthyosiform erythroderma and features of hyperkeratosis along the lines of Blaschko, what would be the most appropriate initial treatment?

- A) Systemic retinoids
- B) Topical corticosteroids
- C) Emollients and keratolytic agents
- D) Antibiotic therapy for secondary infections

Answer:

C) Emollients and keratolytic agents

Diagnosis:

Ichthyosis Vulgaris

Question Number 31:

A patient presents with erythroderma and thick adherent feathery scale at birth, with resolution of erythroderma but progression to linear or patchy follicular atrophoderma. Which enzyme defect is expected in this case?

- A) 3β -hydroxysteroid-dehydrogenase
- B) $\Delta 8$ - $\Delta 7$ -sterol isomerase
- C) Fatty aldehyde dehydrogenase
- D) Steroid sulfatase

Answer:

B) $\Delta 8$ - $\Delta 7$ -sterol isomerase

Diagnosis:

Conradi-Hünemann-Happle Syndrome

Question Number 32:

In a neonate with unilateral distribution of erythema and thickened skin with a waxy surface, what histopathological finding is most characteristic?

- A) Acantholysis
- B) Ortho- and parakeratosis with round parakeratotic nuclei
- C) Vacuolar alteration of the basal layer
- D) Munro microabscesses

Answer:

- B) Ortho- and parakeratosis with round parakeratotic nuclei

Diagnosis:

CHILD Syndrome

Question Number 33:

For a patient with ichthyosiform erythroderma, pruritus, and yellowish-brown hyperkeratosis on the lower back, which ocular finding would you expect?

- A) Bilateral cataracts at birth
- B) Glistening white dots in the fundus of the eye
- C) Asymptomatic corneal opacities
- D) Optic nerve atrophy

Answer:

- B) Glistening white dots in the fundus of the eye

Diagnosis:

Sjögren-Larsson Syndrome

Question Number 34:

A child presents with widespread peeling and erosions during the neonatal period, evolving to corrugated hyperkeratosis on the neck. What enzyme deficiency should be considered?

- A) Fatty aldehyde dehydrogenase
- B) Δ^8 - Δ^7 -sterol isomerase
- C) 3β -hydroxysteroid-dehydrogenase
- D) Transglutaminase-1

Answer:

- C) 3β -hydroxysteroid-dehydrogenase

Diagnosis:

CHILD Syndrome

Question Number 35:

In a patient with bilateral limb hypoplasia and erythema with yellowish adherent scale on one side of the body, which molecular defect is most likely?

- A) Mutation in ABCA12 gene
- B) Mutation in EBP gene
- C) Mutation in KRT10 gene
- D) Inactivating mutations in NSDHL

Answer:

- D) Inactivating mutations in NSDHL

Diagnosis:

CHILD Syndrome

Question Number 36:

A neonate presents with erythroderma and scaling, which resolves to reveal linear or patchy follicular atrophoderma and dilated follicular openings. Which skeletal anomaly is likely present?

- A) Craniosynostosis
- B) Rhizomelic shortening of the limbs
- C) Scoliosis
- D) Frontal bossing

Answer:

- B) Rhizomelic shortening of the limbs

Diagnosis:

Conradi-Hünemann-Happle Syndrome

Question Number 37:

For a patient with patchy scarring alopecia, rhizomelic shortening of the limbs, and stippled epiphyses, what skin care treatment is most beneficial?

- A) Topical corticosteroids
- B) Emollients and keratolytic agents
- C) Systemic retinoids
- D) Topical lovastatin or simvastatin/cholesterol lotion

Answer:

- B) Emollients and keratolytic agents

Diagnosis:

Conradi-Hünemann-Happle Syndrome

Question Number 38:

A patient with ichthyosiform erythroderma and features of hyperkeratosis along the lines of Blaschko is likely to have a deficiency in which protein?

- A) Filaggrin
- B) Loricrin
- C) Keratin
- D) Collagen

Answer:

A) Filaggrin

Diagnosis:

Ichthyosis Vulgaris

Question Number 39:

In a patient with erythroderma and scaling with a distinctive double-edged pattern, which laboratory finding is most likely?

- A) Elevated serum IgE levels
- B) Decreased serum cholesterol
- C) Increased serum calcium
- D) Abnormal liver function tests

Answer:

A) Elevated serum IgE levels

Diagnosis:

Netherton Syndrome

Question Number 40:

For a neonate with a collodion membrane and subsequent development of brownish scale on the lower back, which systemic therapy would be most appropriate?

- A) Systemic retinoids
- B) Topical corticosteroids
- C) Emollients and keratolytic agents
- D) Antibiotic therapy for secondary infections

Answer:

A) Systemic retinoids

Diagnosis:

Harlequin Ichthyosis

Acne

Suitable questions included the following: 2, 4, 6, 21, 33, 37, 52, 55, 60

Question Number 1: In the context of acne vulgaris pathogenesis, what is the role of interleukin-1 α (IL-1 α) in the formation of microcomedo?

- A) IL-1 α suppresses microcomedo formation.
- B) IL-1 α has no role in microcomedo formation.
- C) IL-1 α is implicated in the inciting event for microcomedo formation.
- D) IL-1 α promotes the resolution of microcomedo.

Correct Answer: C) IL-1 α is implicated in the inciting event for microcomedo formation.

Question Number 2: In acne vulgaris, which androgen-metabolizing enzymes are active within the sebaceous gland?

- A) 3 β -hydroxysteroid dehydrogenase, 17 β -HSD, and 5 α -reductase
- B) Aromatase and 11 β -HSD
- C) Cytochrome P450 and glucuronosyltransferase
- D) 21-hydroxylase and sulfotransferase

Correct Answer: A) 3 β -hydroxysteroid dehydrogenase, 17 β -HSD, and 5 α -reductase

Question Number 3: What is the significance of CD4+ T cells and levels of IL-1 in the development of acne lesions?

- A) They are decreased in acne-prone sites.
- B) They are markers of late-stage acne lesions.
- C) They are increased perifollicularly prior to hyperkeratinization in acne-prone sites.
- D) They play no role in acne lesion formation.

Correct Answer: C) They are increased perifollicularly prior to hyperkeratinization in acne-prone sites.

Question Number 4: How does insulin-like growth factor-1 (IGF-1) influence acne pathogenesis?

- A) It decreases sebum production and reduces inflammation.
- B) It increases the expression of inflammatory markers and sebum production in cultured sebocytes.
- C) It has no impact on sebum production or inflammation.
- D) It primarily affects keratinocyte proliferation.

Correct Answer: B) It increases the expression of inflammatory markers and sebum production in cultured sebocytes.

Question Number 5: What effect does vitamin B12 supplementation have on acne development?

- A) It reduces acne severity by modifying skin microbiota.
- B) It has no impact on acne development.
- C) It can potentially trigger acne development by altering the transcriptome of skin microbiota.
- D) It enhances acne treatment effectiveness.

Correct Answer: C) It can potentially trigger acne development by altering the transcriptome of skin microbiota.

Question Number 6: Regarding the genetic predisposition to acne, which genes have been identified through genome-wide association studies (GWAS) as potentially linked to acne?

- A) Genes encoding components of the tumor growth factor- β pathway, inflammatory mediators, and regulators of androgen metabolism
- B) Genes related to keratinocyte differentiation and lipid metabolism
- C) Genes associated with melanin synthesis and vitamin D metabolism
- D) Genes encoding for epidermal growth factor and its receptors

Correct Answer: A) Genes encoding components of the tumor growth factor- β pathway, inflammatory mediators, and regulators of androgen metabolism

Question Number 7: What is the relationship between the intake of skim milk and acne prevalence?

- A) Skim milk intake is inversely related to acne prevalence.
- B) No relationship has been established between skim milk intake and acne.
- C) Skim milk intake is positively associated with acne prevalence and severity.
- D) Skim milk only affects acne severity but not prevalence.

Correct Answer: C) Skim milk intake is positively associated with acne prevalence and severity.

Question Number 8: What is the estimated annual cost of acne vulgaris in the United States?

- A) Less than \$1 billion
- B) At least \$2.5 billion
- C) Approximately \$5 billion
- D) Over \$10 billion

Correct Answer: B) At least \$2.5 billion

Question Number 9: What is the significance of early, non-specific inflammation in acne lesions regarding scarring?

- A) It leads to more scarring than delayed specific inflammatory responses.
- B) It results in less scarring than delayed specific inflammatory responses.
- C) It has no impact on the development of scarring.
- D) It only affects the depth of scarring but not its prevalence.

Correct Answer: B) It results in less scarring than delayed specific inflammatory responses.

Question Number 10: What role do neutrophils play in the inflammatory process of early acne lesions?

- A) They reduce inflammation and promote healing.
- B) They predominantly lead to the formation of nodules.
- C) They initiate suppuration, forming pustules, and promote inflammation by releasing lysosomal enzymes.
- D) They are not present in early acne lesions.

Correct Answer: C) They initiate suppuration, forming pustules, and promote inflammation by releasing lysosomal enzymes.

Question Number 11: What is the role of *Propionibacterium acnes* (*P. acnes*) in the pathogenesis of acne vulgaris?

- A) *P. acnes* is a pathogenic organism that directly causes acne.
- B) *P. acnes* produces porphyrins and lipases, contributing to comedo rupture and stimulation of proinflammatory mediators.
- C) *P. acnes* has no significant role in acne development.
- D) *P. acnes* solely acts by obstructing sebaceous glands.

Correct Answer: B) *P. acnes* produces porphyrins and lipases, contributing to comedo rupture and stimulation of proinflammatory mediators.

Question Number 12: How are non-inflammatory and inflammatory acne lesions clinically distinguished?

- A) Non-inflammatory acne is characterized by nodules, while inflammatory acne includes papules and pustules.
- B) Non-inflammatory acne includes open and closed comedones, whereas inflammatory acne involves papules, pustules, and nodules.
- C) All acne lesions are considered inflammatory.
- D) Inflammatory acne shows no visible lesions, whereas non-inflammatory acne is visible.

Correct Answer: B) Non-inflammatory acne includes open and closed comedones, whereas inflammatory acne involves papules, pustules, and nodules.

Question Number 13: What characterizes acne fulminans?

- A) Mild comedonal acne with no systemic symptoms.
- B) Chronic, persistent acne predominantly in adults.
- C) The abrupt development of nodular and suppurative acne lesions with systemic manifestations.
- D) Exclusively comedonal acne in preadolescents.

Correct Answer: C) The abrupt development of nodular and suppurative acne lesions with systemic manifestations.

Question Number 14: What is neonatal acne also known as?

- A) Adolescent acne.
- B) Infantile acne.
- C) Neonatal cephalic pustulosis.
- D) Mid-childhood acne.

Correct Answer: C) Neonatal cephalic pustulosis.

Question Number 15: At what age range is infantile acne most commonly observed?

- A) Birth to 6 months.
- B) 2 to 12 months.
- C) 1 to 6 years.
- D) During adolescence.

Correct Answer: B) 2 to 12 months.

Question Number 16: What is an essential consideration in the diagnosis of mid-childhood acne?

- A) It is a common manifestation of puberty.
- B) It may indicate an underlying hyperandrogenic condition.
- C) It is treated differently from adolescent acne.
- D) It is predominantly comedonal.

Correct Answer: B) It may indicate an underlying hyperandrogenic condition.

Question Number 17: What is acne excoriée?

- A) A severe form of acne with systemic symptoms.
- B) A form of acne characterized by self-induced skin lesions.
- C) A genetic syndrome associated with acne.
- D) Acne primarily caused by hormonal imbalances.

Correct Answer: B) A form of acne characterized by self-induced skin lesions.

Question Number 18: How should acne associated with endocrinologic abnormalities be approached?

- A) Treated primarily with over-the-counter acne products.
- B) Considered for hormonal evaluation and tailored treatment.
- C) Managed exclusively with dietary changes.
- D) Ignored unless severe.

Correct Answer: B) Considered for hormonal evaluation and tailored treatment.

Question Number 19: What distinguishes acne associated with genetic syndromes?

- A) It is typically resistant to standard acne therapies.
- B) It is always associated with systemic symptoms.

- C) It only occurs in neonates.
- D) It is less severe than other forms of acne.

Correct Answer: A) It is typically resistant to standard acne therapies.

Question Number 20: What are acneiform eruptions?

- A) Eruptions that exclusively involve the formation of comedones.
- B) Lesions that resemble acne but are caused by external factors like drugs or chemicals.
- C) A rare form of genetic acne.
- D) A type of acne that only occurs during adolescence.

Correct Answer: B) Lesions that resemble acne but are caused by external factors like drugs or chemicals.

Question Number 21: What role does *Propionibacterium acnes* play in the innate immune system's response in acne vulgaris?

- A) It has no significant role in activating the innate immune response.
- B) It activates Toll-like receptors, leading to the release of proinflammatory mediators.
- C) It primarily functions to reduce the inflammatory response.
- D) It is only involved in the later stages of acne development.

Correct Answer: B) It activates Toll-like receptors, leading to the release of proinflammatory mediators.

Question Number 22: What distinguishes non-inflammatory acne lesions clinically?

- A) Presence of nodules and cysts.
- B) Absence of comedones.
- C) Characterized by open and closed comedones.
- D) Marked by significant erythema and edema.

Correct Answer: C) Characterized by open and closed comedones.

Question Number 23: What characterizes acne fulminans?

- A) Presence of closed comedones and mild inflammation.
- B) Rapid development of nodular and suppurative acne lesions with systemic symptoms.
- C) Gradual onset of pustules without systemic involvement.
- D) Limited to facial involvement without systemic manifestations.

Correct Answer: B) Rapid development of nodular and suppurative acne lesions with systemic symptoms.

Question Number 24: Neonatal acne, also known as neonatal cephalic pustulosis, primarily involves which types of lesions?

- A) Comedones and nodules.
 - B) Papulopustules, not comedones.
 - C) Only cystic lesions.
 - D) Predominantly open comedones.
- Correct Answer: B) Papulopustules, not comedones.

Question Number 25: What is a characteristic feature of infantile acne?

- A) Absence of comedones and cysts.
 - B) Presence of comedones and potential for scarring.
 - C) Only involves erythematous papules.
 - D) Exclusive manifestation of pustules.
- Correct Answer: B) Presence of comedones and potential for scarring.

Question Number 26: In the context of mid-childhood acne, what is a crucial consideration for differential diagnosis?

- A) It is typically related to environmental factors.
 - B) It might indicate an underlying hyperandrogenic condition.
 - C) It is commonly linked to dietary habits.
 - D) It is usually a result of poor hygiene.
- Correct Answer: B) It might indicate an underlying hyperandrogenic condition.

Question Number 27: Acne excoriée is characterized by:

- A) Hormonal imbalances leading to severe acne.
 - B) Genetic predisposition to acne development.
 - C) Systematic excoriation of the skin, often leading to crusted erosions.
 - D) Predominantly comedonal acne.
- Correct Answer: C) Systematic excoriation of the skin, often leading to crusted erosions.

Question Number 28: In patients with acne and endocrinologic abnormalities, what is a common presenting feature?

- A) The absence of comedones.
 - B) Mild inflammatory lesions.
 - C) Severe or difficult-to-treat acne.
 - D) Exclusive presence of pustules.
- Correct Answer: C) Severe or difficult-to-treat acne.

Question Number 29: Acne associated with genetic syndromes is:

- A) Usually responsive to standard acne therapies.
- B) Characterized by the absence of nodulocystic lesions.

- C) Often resistant to standard acne therapies.
- D) Not linked to severe forms of acne.

Correct Answer: C) Often resistant to standard acne therapies.

Question Number 30: Acneiform eruptions can be induced by:

- A) Hormonal changes only.
- B) Genetic factors exclusively.
- C) Medications, chemicals, or external factors.
- D) Dietary habits.

Correct Answer: C) Medications, chemicals, or external factors.

Question Number 31: What is a key feature of drug-induced acne?

- A) It is characterized by a variety of lesion types.
- B) It typically presents as an abrupt monomorphous eruption.
- C) It only involves comedonal acne.
- D) It is usually associated with systemic symptoms.

Correct Answer: B) It typically presents as an abrupt monomorphous eruption.

Question Number 32: Occupational acne, acne cosmetica, and pomade acne are primarily caused by:

- A) Hormonal imbalances.
- B) Genetic predispositions.
- C) Follicle-occluding substances.
- D) Dietary factors.

Correct Answer: C) Follicle-occluding substances.

Question Number 33: Chloracne results from exposure to:

- A) Ultraviolet radiation.
- B) Halogenated aromatic hydrocarbons.
- C) Dietary allergens.
- D) Hormonal fluctuations.

Correct Answer: B) Halogenated aromatic hydrocarbons.

Question Number 34: Acne mechanica is caused by:

- A) Genetic factors.
- B) Repeated mechanical and frictional obstruction.
- C) Exposure to certain medications.
- D) Hormonal changes during adolescence.

Correct Answer: B) Repeated mechanical and frictional obstruction.

Question Number 35: Tropical acne is often associated with:

- A) Genetic predisposition.
- B) Exposure to extreme heat.
- C) Dietary factors.
- D) Poor hygiene.

Correct Answer: B) Exposure to extreme heat.

Question Number 36: Radiation acne is characterized by:

- A) Erythematous papules with systemic symptoms.
- B) Comedo-like papules at sites of ionizing radiation exposure.
- C) Widespread pustular lesions.
- D) Hormonal imbalance-induced acne.

Correct Answer: B) Comedo-like papules at sites of ionizing radiation exposure.

Question Number 37: "Pseudoacne" of the nasal crease is:

- A) A form of acne vulgaris.
- B) Caused by hormonal imbalances.
- C) Characterized by milia and comedones along the nasal crease.
- D) A rare genetic condition.

Correct Answer: C) Characterized by milia and comedones along the nasal crease.

Question Number 38: Idiopathic facial aseptic granuloma primarily presents as:

- A) Multiple inflamed nodules on the face.
- B) Painless nodule with an acneiform appearance on the cheeks.
- C) Comedonal acne on the forehead and chin.
- D) Cystic lesions on the trunk and limbs.

Correct Answer: B) Painless nodule with an acneiform appearance on the cheeks.

Question Number 39: Childhood flexural comedones are characterized by:

- A) Presence of multiple inflamed nodules.
- B) Discrete double-orifice comedones in axillae or groin.
- C) Widespread comedonal acne on the face.
- D) Erythematous papules and pustules.

Correct Answer: B) Discrete double-orifice comedones in axillae or groin.

Question Number 40: Histopathologically, early acne lesions are characterized by:

- A) Atrophic sebaceous glands and absence of bacteria.
- B) Microcomedones with a mildly distended follicle impacted by keratinocytes.
- C) Marked inflammatory infiltrate and cystic structures.

D) Absence of any follicular changes.

Correct Answer: B) Microcomedones with a mildly distended follicle impacted by keratinocytes

Question Number 41: In a patient with neonatal cephalic pustulosis, which histological feature is expected?

A) Atrophic sebaceous glands

B) Hyperkeratotic plugs

C) Mild perivascular mononuclear cell infiltrate

D) Eosinophilic keratinaceous debris

Correct Answer: C) Mild perivascular mononuclear cell infiltrate 【

Question Number 42: For a teenager with acne vulgaris predominantly presenting with closed comedones, what treatment should be primarily considered?

A) Systemic antibiotics

B) Topical retinoids

C) Hormonal therapy

D) Isotretinoin

Correct Answer: B) Topical retinoids.

Question Number 43: In a patient with suspected acne fulminans, what histopathological finding is indicative of this condition?

A) Massive inflammation with necrosis

B) Predominance of comedones

C) Eosinophilic keratinaceous debris

D) Sebaceous gland hyperplasia

Correct Answer: A) Massive inflammation with necrosis.

Question Number 44: For a patient diagnosed with drug-induced acne, which medication should be reviewed for potential causation?

A) Oral contraceptives

B) Antihypertensives

C) Systemic corticosteroids

D) Antihistamines

Correct Answer: C) Systemic corticosteroids.

Question Number 45: In a child presenting with mid-childhood acne, which investigation is crucial for diagnosis?

A) Skin biopsy

B) Hormonal evaluation

C) Allergy testing

D) Stool analysis

Correct Answer: B) Hormonal evaluation.

Question Number 46: When managing a case of neonatal acne, which differential diagnosis should be excluded?

A) Sebaceous hyperplasia

B) Miliaria rubra

C) Milia

D) All of the above

Correct Answer: D) All of the above.

Question Number 47: In a patient with occupational acne, which environmental factor is the likely cause?

A) Dietary habits

B) Sun exposure

C) Exposure to industrial chemicals

D) Humidity and sweating

Correct Answer: C) Exposure to industrial chemicals.

Question Number 48: For an adult patient with acneiform eruptions due to EGFR inhibitors, what is the recommended management?

A) Discontinuation of EGFR inhibitors

B) Systemic antibiotics

C) Topical benzoyl peroxide

D) Phototherapy

Correct Answer: C) Topical benzoyl peroxide.

Question Number 49: In a patient with acne excoriée, what underlying condition should be addressed?

A) Hormonal imbalance

B) Psychological factors

C) Dietary allergens

D) Genetic predisposition

Correct Answer: B) Psychological factors [].

Question Number 50: When diagnosing chloracne, what clinical history is most indicative?

A) Prolonged sun exposure

B) Use of cosmetic products

C) Exposure to halogenated aromatic hydrocarbons

D) History of food allergies

Correct Answer: C) Exposure to halogenated aromatic hydrocarbons.

Question Number 51: For a neonate presenting with small yellowish papules on the cheeks and forehead, what diagnostic test would confirm sebaceous hyperplasia?

- A) Wood's lamp examination
- B) Histopathologic examination
- C) Blood hormonal levels
- D) Skin swab culture

Correct Answer: B) Histopathologic examination.

Question Number 52: In a patient with comedonal acne, which differential diagnosis should be considered when multiple open comedones are observed in the lateral malar region?

- A) Favre–Racouchot syndrome
- B) Nevus comedonicus
- C) Trichostasis spinulosa
- D) Radiation-induced comedones

Correct Answer: A) Favre–Racouchot syndrome.

Question Number 53: When encountering a patient with radiation acne, what is the expected histological finding?

- A) Follicular atrophy
- B) Comedo-like papules with epithelial metaplasia
- C) Predominantly inflammatory infiltrate
- D) Hyperkeratosis without follicular involvement

Correct Answer: B) Comedo-like papules with epithelial metaplasia.

Question Number 54: In a patient presenting with acneiform lesions and a history of anabolic steroid use, what is the most appropriate management?

- A) Discontinuation of anabolic steroids
- B) Initiation of oral isotretinoin
- C) Topical corticosteroids
- D) Systemic antibiotics

Correct Answer: A) Discontinuation of anabolic steroids.

Question Number 55: For a young adult with idiopathic facial aseptic granuloma presenting as a solitary nodule on the cheek, what is the recommended treatment?

- A) Systemic antibiotics
- B) Topical retinoids
- C) Corticosteroid injection
- D) Observation and reassurance

Correct Answer: D) Observation and reassurance.

Question Number 56: In a case of acne vulgaris where the patient has a predominance of inflammatory lesions, which histopathologic feature is typically seen?

- A) Broad expanded follicular ostia
- B) Mild perivascular mononuclear cell infiltrate
- C) Increased follicular distension with cystic structure
- D) Atrophic sebaceous glands

Correct Answer: B) Mild perivascular mononuclear cell infiltrate.

Question Number 57: When managing a patient with P. acnes-related acne vulgaris, which treatment approach targets the bacterial component?

- A) Hormonal therapy
- B) Topical benzoyl peroxide
- C) Phototherapy
- D) Systemic retinoids

Correct Answer: B) Topical benzoyl peroxide.

Question Number 58: In a child with childhood flexural comedones presenting with double-orifice comedones in flexural areas, what is the most appropriate management?

- A) Topical retinoids
- B) Systemic antibiotics
- C) Phototherapy
- D) Observation and reassurance

Correct Answer: D) Observation and reassurance.

Question Number 59: For a patient presenting with acneiform eruptions following lithium therapy, what is the most likely diagnosis?

- A) Drug-induced acne
- B) Acne vulgaris
- C) Acne excoriée
- D) Chloracne

Correct Answer: A) Drug-induced acne.

Question Number 60: In diagnosing a patient with comedonal acne vulgaris, what differential should be excluded when multiple vellus hairs arise from a dilated follicular orifice?

- A) Trichostasis spinulosa
- B) Favre–Racouchot syndrome
- C) Radiation-induced comedones
- D) Nevus comedonicus

Correct Answer: A) Trichostasis spinulosa.

Rosacea

Suitable questions included the following: 7, 18, 19

Question Number 1:

Which of the following is a major pathomechanism in erythematotelangiectatic rosacea (ETTR)?

- A) Sebaceous hyperplasia
- B) Comedo formation
- C) Vascular ectasia and mild edema
- D) Non-caseating epithelioid granulomas

Answer: C) Vascular ectasia and mild edema

Question Number 2:

A patient presents with centropacial erythema and multiple small, dome-shaped erythematous papules. Which subtype of rosacea is most likely?

- A) Erythematotelangiectatic
- B) Papulopustular
- C) Phymatous
- D) Ocular

Answer: B) Papulopustular Rosacea

Question Number 3:

Which feature is NOT typically associated with phymatous rosacea?

- A) Sebaceous gland hypertrophy
- B) Fibrosis
- C) Prominent telangiectasia
- D) Comedo formation

Answer: D) Comedo formation

Question Number 4:

In the context of rosacea, Demodex mites are known to:

- A) Have no significant association with the disease
- B) Be less numerous in rosacea patients compared to healthy individuals
- C) Be more numerous in rosacea patients and associated with inflammation
- D) Only infest patients with ocular rosacea

Answer: C) Be more numerous in rosacea patients and associated with inflammation

Question Number 5:

What is the first-line treatment for mild to moderate papulopustular rosacea?

- A) Systemic corticosteroids

- B) Topical antibiotics
 - C) Vascular laser therapy
 - D) High-dose isotretinoin
- Answer: B) Topical antibiotics

Question Number 6:

A patient with rosacea complains of a dry, gritty sensation in their eyes. This symptom is most indicative of which subtype?

- A) Erythematotelangiectatic
- B) Papulopustular
- C) Phymatous
- D) Ocular

Answer: D) Ocular Rosacea

Question Number 7:

Which of the following is NOT a feature of granulomatous rosacea?

- A) Skin-colored to red-brown facial papules
- B) Centrofacial distribution
- C) Non-caseating epithelioid granulomas
- D) Prominent vascular ectasia

Answer: D) Prominent vascular ectasia

Question Number 8:

In rosacea, an increase in blood flow within skin lesions has been demonstrated. This observation primarily supports which pathomechanism?

- A) Aberrant innate immune response
- B) Neurovascular dysregulation
- C) Skin barrier dysfunction
- D) Sebaceous gland hyperplasia

Answer: B) Neurovascular dysregulation

Question Number 9:

A patient with rosacea presents with persistent centrofacial erythema, frequent troublesome flushing, and several distinct telangiectasias. This presentation corresponds to which grade of erythematotelangiectatic rosacea?

- A) Grade 1
- B) Grade 2
- C) Grade 3
- D) Not classifiable

Answer: B) Grade 2

Question Number 10:

Which of the following is a common trigger for rosacea flare-ups?

- A) Cold temperatures
- B) Low humidity
- C) UV radiation
- D) Diminished sensory irritants

Answer: C) UV radiation

Question Number 11:

In patients presenting with erythematotelangiectatic rosacea, which of the following is a distinguishing feature when differentiating it from actinic damage (telangiectatic photoaging)?

- A) Presence of comedones
- B) Erythema predominantly in the central face
- C) Erythema predominantly in the lateral face
- D) Presence of atrophic scars

Answer: B) Erythema predominantly in the central face

Diagnosis: Erythematotelangiectatic rosacea

Question Number 12:

Which of the following features is most suggestive of seborrheic dermatitis rather than erythematotelangiectatic rosacea?

- A) Erythema with greasy scale in eyebrows
- B) Transient facial erythema
- C) Ocular changes
- D) Well-demarcated edematous plaques

Answer: A) Erythema with greasy scale in eyebrows

Question Number 13:

For a patient diagnosed with papulopustular rosacea, which treatment is considered a first-line therapy?

- A) Oral isotretinoin
- B) Topical metronidazole
- C) Systemic corticosteroids
- D) High potency topical corticosteroids

Answer: B) Topical metronidazole

Question Number 14:

A patient with ocular rosacea grade 2 disease is best treated with:

- A) Eyelid hygiene and artificial tears only
- B) Systemic antibiotics

- C) Topical corticosteroids
 - D) Surgical intervention
- Answer: B) Systemic antibiotics

Question Number 15:

In the management of phymatous rosacea, which modality is considered most effective for severe disease?

- A) Oral antibiotics
- B) Topical brimonidine
- C) CO2 laser therapy
- D) Topical ivermectin

Answer: C) CO2 laser therapy

Question Number 16:

A 25-year-old patient presents with facial erythema, telangiectasia, and numerous fine papules and pustules. She has been using topical corticosteroids for several months. The most likely diagnosis is:

- A) Acne vulgaris
- B) Steroid-induced rosacea
- C) Perioral dermatitis
- D) Systemic lupus erythematosus

Answer: B) Steroid-induced rosacea

Question Number 17:

Which feature differentiates erythematotelangiectatic rosacea from keratosis pilaris rubra?

- A) Onset during adolescence
- B) Presence of follicular papules
- C) Facial erythema in the central region
- D) Absence of ocular changes

Answer: C) Facial erythema in the central region

Question Number 18:

In a patient with suspected ocular rosacea, which symptom would indicate a need for immediate referral to an ophthalmologist?

- A) Mild eyelid margin erythema
- B) Formation of a chalazion
- C) Pain and photophobia
- D) Dryness and mild irritation

Answer: C) Pain and photophobia

Question Number 19:

Which of the following is a characteristic feature of acne (vulgaris) distinguishing it from papulopustular rosacea?

- A) Presence of transient erythema
- B) Comedones and cysts
- C) Greater involvement of the central face
- D) Nonresponse to topical metronidazole

Answer: B) Comedones and cysts

Question Number 20:

A patient with erythematotelangiectatic rosacea would most likely benefit from which of the following treatments?

- A) Systemic isotretinoin
- B) High potency topical corticosteroids
- C) Vascular laser therapy
- D) Oral antibiotics only

Answer: C) Vascular laser therapy

Diagnosis: Erythematotelangiectatic rosacea

Vasculitis

Suitable questions included the following: 4, 5, 8, 13, 18, 23, 29

Question number 1:

Which vessels are primarily involved in cutaneous small vessel vasculitis (CSVV)?

- A) Arterioles, capillaries, and postcapillary venules
- B) Small arteries and veins in the deep dermis
- C) Large vessels like the aorta
- D) Predominantly medium-sized vessels in the subcutis

Answer: A) Arterioles, capillaries, and postcapillary venules.

Question number 2:

In the context of cutaneous vasculitis, which classification system is employed based on the predominant size of the involved blood vessel?

- A) The 1990 American College of Rheumatology criteria
- B) The 2012 revised International Chapel Hill Consensus Conference Nomenclature system
- C) Both A and B
- D) Neither A nor B

Answer: C) Both A and B.

Question number 3:

What differentiates the pathogenesis of CSVV from ANCA-associated vasculitides?

- A) CSVV is mediated by immune complexes, whereas ANCA-associated vasculitides involve direct neutrophil-mediated vessel wall damage.
- B) Both are primarily mediated by antineutrophil cytoplasmic antibodies (ANCA).
- C) CSVV is primarily a large vessel vasculitis, unlike ANCA-associated vasculitides.
- D) ANCA-associated vasculitides are mediated by immune complexes.

Answer: A) CSVV is mediated by immune complexes, whereas ANCA-associated vasculitides involve direct neutrophil-mediated vessel wall damage.

Question number 4:

What is the typical time frame for the appearance of skin lesions in CSVV following a triggering event?

- A) 1-3 days
- B) 7-10 days
- C) 2-4 weeks
- D) 1-2 months

Answer: B) 7-10 days.

Question number 5:

In medium-sized vessel vasculitis, which clinical features are most likely to be observed?

- A) Palpable purpura and macular purpura
- B) Livedo racemosa, retiform purpura, ulcers, subcutaneous nodules, and digital necrosis
- C) Urticarial papules and vesicles
- D) Targetoid lesions and petechiae

Answer: B) Livedo racemosa, retiform purpura, ulcers, subcutaneous nodules, and digital necrosis.

Question number 6:

Which systemic symptoms are commonly associated with vasculitis of any sized vessel?

- A) Arthralgias, arthritis, and constitutional symptoms like fever, weight loss, and malaise
- B) Gastrointestinal symptoms and hematuria
- C) Neurological symptoms like paresthesias
- D) Respiratory symptoms like dyspnea

Answer: A) Arthralgias, arthritis, and constitutional symptoms like fever, weight loss, and malaise.

Question number 7:

Cutaneous vasculitis can be due to various etiologies. Which of the following is NOT typically associated with cutaneous vasculitis?

- A) Infections like hepatitis C virus
- B) Medications such as penicillins
- C) Primary central nervous system disorders
- D) Autoimmune connective tissue diseases like Sjögren syndrome

Answer: C) Primary central nervous system disorders.

Question number 8:

For the diagnosis of CSVV, what is the ideal timing for a skin biopsy?

- A) Within the first 24 to 48 hours of lesion appearance
- B) After 1 week of lesion appearance
- C) Only after the lesion has fully developed
- D) Timing of the biopsy is not critical for diagnosis

Answer: A) Within the first 24 to 48 hours of lesion appearance.

Question number 9:

What histopathologic features are characteristic of CSVV?

- A) Predominantly mononuclear infiltrate in lesions older than 48 to 72 hours
- B) Transmural infiltration of small vessel walls by neutrophils and fibrinoid necrosis
- C) Both A and B
- D) Neither A nor B

Answer: C) Both A and B.

Question number 10:

In patients with CSVV due to levamisole-tainted cocaine use, what additional histopathological features are observed?

- A) Eosinophilic infiltration
- B) Thrombi formation
- C) Dense dermal inflammation
- D) Both B and C

Answer: D) Both B and C.

Question number 11:

What is the annual population-based incidence of biopsy-proven cutaneous leukocytoclastic vasculitis (LCV), and which demographic shows a higher prevalence?

- A) ~45 per million, with a higher prevalence in children
- B) ~45 per million, with a higher prevalence in adults
- C) ~30 per million, evenly distributed among all age groups
- D) ~60 per million, with a higher prevalence in the elderly

Answer: B) ~45 per million, with a higher prevalence in adults.

Question number 12:

In CSVV, what is the primary mechanism of vessel wall damage, and how does it differ from ANCA-associated vasculitides?

- A) Direct neutrophilic damage; differs as ANCA-associated vasculitides involve immune complex-mediated damage
- B) Immune complex-mediated; differs as ANCA-associated vasculitides involve direct neutrophil-mediated damage
- C) Immune complex-mediated; similar mechanism in ANCA-associated vasculitides
- D) Direct neutrophilic damage; similar mechanism in ANCA-associated vasculitides

Answer: B) Immune complex-mediated; differs as ANCA-associated vasculitides involve direct neutrophil-mediated damage.

Question number 13:

What is the typical temporal relationship between the triggering event and the appearance of skin lesions in CSVV?

- A) Skin lesions typically appear immediately after the triggering event
- B) Skin lesions usually appear 7–10 days after the triggering event
- C) Skin lesions generally appear 1–3 months after the triggering event
- D) Skin lesions appear inconsistently and are not linked to a specific timeframe

Answer: B) Skin lesions usually appear 7–10 days after the triggering event.

Question number 14:

Which factors must be considered for a comprehensive evaluation and treatment plan after diagnosing cutaneous vasculitis?

- A) Only the size and location of the involved vessels
- B) The underlying cause, severity, and sites of internal involvement
- C) Predominantly the patient's age and gender
- D) Only the histopathological findings and clinical manifestations

Answer: B) The underlying cause, severity, and sites of internal involvement.

Question number 15:

What is the abbreviation AI-CTD, often associated with cutaneous vasculitis, stand for?

- A) Acute Inflammatory Cutaneous Tissue Disease
- B) Autoimmune Connective Tissue Disease
- C) Antigen-Induced Cutaneous Tissue Disruption
- D) Anti-Inflammatory Cutaneous Therapy Drugs

Answer: B) Autoimmune Connective Tissue Disease.

Question number 16:

For optimal diagnostic yield in CSVV, within what timeframe should a skin biopsy ideally be performed?

- A) Within the first 24 to 48 hours of lesion appearance
- B) Within one week of lesion appearance
- C) Anytime during the active phase of the lesion
- D) After the lesion has fully developed

Answer: A) Within the first 24 to 48 hours of lesion appearance.

Question number 17:

Which histopathological feature is most commonly observed in lesions of CSVV that have been present for more than 48 to 72 hours?

- A) A predominantly neutrophilic infiltrate
- B) A predominantly mononuclear infiltrate
- C) Granuloma formation
- D) Eosinophilic infiltration

Answer: B) A predominantly mononuclear infiltrate.

Question number 18:

In medium-sized vessel vasculitis, what histopathological change is typically observed in older lesions?

- A) Predominant lymphocytic infiltration
- B) Neovascularization of the adventitia
- C) Extensive fibrosis and calcification
- D) Decreased vascular luminal diameter

Answer: B) Neovascularization of the adventitia.

Question number 19:

In CSVV, what percentage of cases show deposition of immunoglobulins and C3 in a granular pattern within the vessel walls, as detected by direct immunofluorescence?

- A) Approximately 50%
- B) Nearly 100% in lesions present for ≤ 48 hours
- C) Less than 30%
- D) Around 80% regardless of the duration of lesions

Answer: B) Nearly 100% in lesions present for ≤ 48 hours.

Question number 20:

How does the duration of lesions affect the results of direct immunofluorescence in CSVV, and what is the typical result in ANCA-positive vasculitis?

- A) Immunoglobulin deposition decreases with lesion duration; DIF is usually negative in ANCA-positive vasculitis
- B) Immunoglobulin deposition increases with lesion duration; DIF shows granular IgG in ANCA-positive vasculitis
- C) C3 deposition is the only finding in lesions older than 72 hours; DIF is positive for immunoglobulins in ANCA-positive vasculitis
- D) Immunoglobulin deposition remains consistent regardless of lesion duration; DIF shows mixed immunoglobulin deposition in ANCA-positive vasculitis

Answer: A) Immunoglobulin deposition decreases with lesion duration; DIF is usually negative in ANCA-positive vasculitis.

Question number 21:

A 45-year-old female presents with palpable purpura on her lower legs and a slight fever. She has a history of hepatitis C. What is the most likely diagnosis?

- A) Granulomatosis with polyangiitis
- B) Cryoglobulinemic vasculitis
- C) Henoch-Schönlein purpura
- D) Urticarial vasculitis

Answer: B) Cryoglobulinemic vasculitis

Rationale: Cryoglobulinemic vasculitis often presents with palpable purpura and can be associated with hepatitis C infection.

Question number 22:

A 60-year-old male with a history of nasal carriage of *Staphylococcus aureus* develops a skin rash characterized by palpable purpura and small necrotic ulcers. What type of vasculitis should be considered?

- A) Urticarial vasculitis
- B) Cutaneous small vessel vasculitis
- C) Cryoglobulinemic vasculitis
- D) Polyarteritis nodosa

Answer: B) Cutaneous small vessel vasculitis

Rationale: The presence of palpable purpura and necrotic ulcers with a background of *Staphylococcus aureus* carriage suggests cutaneous small vessel vasculitis.

Question number 23:

A patient presents with skin lesions including palpable purpura and livedo reticularis, accompanied by kidney impairment and neuropathy. Which vasculitis is most likely?

- A) Henoch-Schönlein purpura
- B) Eosinophilic granulomatosis with polyangiitis
- C) Microscopic polyangiitis
- D) Urticarial vasculitis

Answer: C) Microscopic polyangiitis

Rationale: This presentation, including renal and nerve involvement, is characteristic of microscopic polyangiitis

Question number 24:

A 35-year-old woman reports recurrent urticarial plaques and arthralgia. Lab tests show low complement levels. What is the most probable diagnosis?

- A) Cryoglobulinemic vasculitis
- B) Hypocomplementemic urticarial vasculitis
- C) Cutaneous small vessel vasculitis
- D) Polyarteritis nodosa

Answer: B) Hypocomplementemic urticarial vasculitis

Rationale: The combination of urticarial plaques, arthralgia, and low complement levels points to hypocomplementemic urticarial vasculitis.

Question number 25:

A 7-year-old child presents with palpable purpura on the buttocks and lower extremities, abdominal pain, and arthralgia. What is the most likely diagnosis?

- A) Urticarial vasculitis
- B) Henoch-Schönlein purpura
- C) Eosinophilic granulomatosis with polyangiitis
- D) Cryoglobulinemic vasculitis

Answer: B) Henoch-Schönlein purpura

Rationale: This classic presentation, including palpable purpura in a child with abdominal pain and joint symptoms, indicates Henoch-Schönlein purpura.

Question number 26:

A patient presents with necrotic skin ulcers over the lower extremities and a history of asthma. Laboratory tests reveal eosinophilia. What is the likely diagnosis?

- A) Churg-Strauss syndrome (eosinophilic granulomatosis with polyangiitis)
- B) Henoch-Schönlein purpura
- C) Urticarial vasculitis
- D) Microscopic polyangiitis

Answer: A) Churg-Strauss syndrome (eosinophilic granulomatosis with polyangiitis)

Rationale: Necrotic skin ulcers, asthma, and eosinophilia are characteristic of Churg-Strauss syndrome.

Question number 27:

A 50-year-old man with renal insufficiency develops palpable purpura and mononeuritis multiplex. ANCA test is positive. Which vasculitis is this presentation indicative of?

- A) Granulomatosis with polyangiitis
- B) Eosinophilic granulomatosis with polyangiitis

- C) Microscopic polyangiitis
- D) Henoch-Schönlein purpura

Answer: C) Microscopic polyangiitis

Rationale: The combination of renal involvement, skin lesions, nerve damage, and positive ANCA test suggests microscopic polyangiitis.

Question number 28:

A 30-year-old female with Sjögren syndrome presents with palpable purpura and has been taking penicillin for a recent infection. What is the most probable diagnosis?

- A) Drug-induced cutaneous small vessel vasculitis
- B) Cryoglobulinemic vasculitis
- C) Polyarteritis nodosa
- D) Granulomatosis with polyangiitis

Answer: A) Drug-induced cutaneous small vessel vasculitis

Rationale: The temporal relationship with penicillin use and the presence of palpable purpura in a patient with an autoimmune condition points to drug-induced cutaneous small vessel vasculitis.

Question number 29:

A 20-year-old patient presents with digital necrosis and subcutaneous nodules, along with a history of hepatitis B infection. What type of vasculitis should be suspected?

- A) Henoch-Schönlein purpura
- B) Urticarial vasculitis
- C) Polyarteritis nodosa
- D) Granulomatosis with polyangiitis

Answer: C) Polyarteritis nodosa

Rationale: The presentation of digital necrosis, subcutaneous nodules, and an association with hepatitis B infection is indicative of polyarteritis nodosa.

Question number 30:

A patient presents with recurrent episodes of sinusitis, palpable purpura, and deteriorating renal function. ANCA test is positive. What is the most likely diagnosis?

- A) Eosinophilic granulomatosis with polyangiitis
- B) Microscopic polyangiitis
- C) Urticarial vasculitis
- D) Henoch-Schönlein purpura

Answer: B) Microscopic polyangiitis

Rationale: Sinusitis, skin involvement, renal impairment, and a positive ANCA test align with the diagnosis of microscopic polyangiitis.

Question number 31:

A patient with hepatitis C presents with palpable purpura, arthralgia, and proteinuria. Which type of vasculitis should be primarily considered?

- A) Henoch-Schönlein purpura
- B) Cryoglobulinemic vasculitis
- C) Eosinophilic granulomatosis with polyangiitis
- D) Urticarial vasculitis

Answer: B) Cryoglobulinemic vasculitis

Rationale: Hepatitis C is commonly associated with cryoglobulinemic vasculitis, presenting with palpable purpura, arthralgia, and renal involvement.

Question number 32:

A 55-year-old presents with asthma, peripheral neuropathy, and transient purpuric rash. Laboratory findings show eosinophilia. What is the most likely diagnosis?

- A) Microscopic polyangiitis
- B) Granulomatosis with polyangiitis
- C) Eosinophilic granulomatosis with polyangiitis
- D) Polyarteritis nodosa

Answer: C) Eosinophilic granulomatosis with polyangiitis

Rationale: The combination of asthma, peripheral neuropathy, transient rash, and eosinophilia points towards eosinophilic granulomatosis with polyangiitis.

Question number 33:

A 30-year-old patient presents with weight loss, night sweats, and a purpuric skin rash. A skin biopsy shows granulomatous inflammation. What should be the top differential diagnosis?

- A) Tuberculosis-associated vasculitis
- B) Granulomatosis with polyangiitis
- C) Churg-Strauss syndrome
- D) Cutaneous small vessel vasculitis

Answer: B) Granulomatosis with polyangiitis

Rationale: Granulomatous inflammation in the biopsy with systemic symptoms is characteristic of granulomatosis with polyangiitis.

Question number 34:

A patient with a history of rheumatoid arthritis develops a skin rash characterized by palpable purpura and ulcers. Which vasculitis is most likely?

- A) Rheumatoid vasculitis
- B) Microscopic polyangiitis

C) Henoch-Schönlein purpura

D) Cryoglobulinemic vasculitis

Answer: A) Rheumatoid vasculitis

Rationale: In a patient with rheumatoid arthritis, the development of palpable purpura and ulcers is indicative of rheumatoid vasculitis.

Question number 35:

A 40-year-old patient presents with fever, malaise, muscle pain, and a rash that includes heliotrope erythema and Gottron's papules. What is the most likely diagnosis?

A) Dermatomyositis-associated vasculitis

B) Systemic lupus erythematosus-associated vasculitis

C) Sjögren's syndrome-associated vasculitis

D) Rheumatoid arthritis-associated vasculitis

Answer: A) Dermatomyositis-associated vasculitis

Rationale: The clinical presentation is consistent with dermatomyositis, which can be associated with vasculitis.

Question number 36:

A patient presents with purpura on the lower extremities and abdominal pain. A biopsy shows IgA deposition. What is the most likely diagnosis?

A) Henoch-Schönlein purpura

B) Urticarial vasculitis

C) Cryoglobulinemic vasculitis

D) Cutaneous small vessel vasculitis

Answer: A) Henoch-Schönlein purpura

Rationale: The clinical presentation and IgA deposition in biopsy are characteristic of Henoch-Schönlein purpura.

Question number 37:

A 50-year-old smoker presents with intermittent claudication, reduced pulses in the upper extremities, and elevated ESR. What type of vasculitis should be suspected?

A) Takayasu arteritis

B) Giant cell arteritis

C) Thromboangiitis obliterans

D) Polyarteritis nodosa

Answer: C) Thromboangiitis obliterans

Rationale: These symptoms are typical of thromboangiitis obliterans (Buerger's disease), particularly in smokers.

Question number 38:

A patient presents with unilateral headache, jaw claudication, and visual disturbances. Biopsy of the temporal artery is planned. What is the most likely diagnosis?

- A) Temporal arteritis
- B) Takayasu arteritis
- C) Polyarteritis nodosa
- D) Granulomatosis with polyangiitis

Answer: A) Temporal arteritis

Rationale: The clinical symptoms suggest temporal arteritis (giant cell arteritis), and biopsy of the temporal artery is a diagnostic procedure.

Question number 39:

A young female patient presents with Raynaud's phenomenon, sclerodactyly, and esophageal dysmotility. Which associated vasculitis is most likely?

- A) Systemic sclerosis-associated vasculitis
- B) Mixed connective tissue disease-associated vasculitis
- C) Rheumatoid arthritis-associated vasculitis
- D) Dermatomyositis-associated vasculitis

Answer: A) Systemic sclerosis-associated vasculitis

Rationale: This clinical presentation is typical of systemic sclerosis, which can have associated vasculitis.

Question number 40:

A patient with a known history of HIV infection develops palpable purpura and hematuria. Renal biopsy shows immune complex deposition. What type of vasculitis should be considered?

- A) HIV-associated vasculitis
- B) Cryoglobulinemic vasculitis
- C) Henoch-Schönlein purpura
- D) Urticarial vasculitis

Answer: A) HIV-associated vasculitis

Rationale: In the context of HIV infection, the development of palpable purpura and hematuria with immune complex deposition in the kidney biopsy suggests HIV-associated vasculitis.

Question number 41:

A 50-year-old patient presents with headache, jaw claudication, and visual disturbances. What histological feature is most characteristic of the likely diagnosis?

- A) Granuloma formation with giant cells
- B) Neutrophil infiltration in the vessel wall
- C) IgA deposition
- D) Fibrinoid necrosis

Answer: A) Granuloma formation with giant cells

Diagnosis: Giant Cell (Temporal) Arteritis

Question number 42:

A patient presents with palpable purpura, abdominal pain, and a skin biopsy showing IgA deposition. What is the first-line treatment for this condition?

- A) High-dose corticosteroids
- B) Cyclophosphamide
- C) NSAIDs and supportive care
- D) Intravenous immunoglobulins

Answer: C) NSAIDs and supportive care

Diagnosis: Henoch-Schönlein Purpura

Question number 43:

A patient with asthma, peripheral eosinophilia, and transient purpuric rash is likely to show what on histology?

- A) Eosinophilic infiltration
- B) Granuloma formation
- C) IgA deposition
- D) Both A and B

Answer: D) Both A and B (Eosinophilic infiltration and Granuloma formation)

Diagnosis: Eosinophilic Granulomatosis with Polyangiitis (Churg-Strauss Syndrome)

Question number 44:

A patient presenting with renal and pulmonary involvement, along with granulomas and ANCA positivity, should be treated with what first-line therapy?

- A) Corticosteroids and cyclophosphamide
- B) NSAIDs
- C) Antihistamines
- D) Angiotensin-converting enzyme inhibitors

Answer: A) Corticosteroids and cyclophosphamide

Diagnosis: Granulomatosis with Polyangiitis (Wegener's Granulomatosis)

Question number 45:

A patient with hepatitis C develops a condition characterized by palpable purpura and cryoglobulins. What is the mainstay of treatment?

A) Antiviral therapy

B) NSAIDs

C) Plasmapheresis

D) High-dose corticosteroids

Answer: A) Antiviral therapy

Diagnosis: Cryoglobulinemic Vasculitis

Question number 46:

In a patient with asthma, sinusitis, peripheral neuropathy, and eosinophilia, what would a lung biopsy likely reveal?

A) Non-caseating granulomas

B) Necrotizing granulomas

C) Eosinophilic infiltration

D) Fibrinoid necrosis

Answer: C) Eosinophilic infiltration

Diagnosis: Eosinophilic Granulomatosis with Polyangiitis (Churg-Strauss Syndrome)

Question number 47:

A patient with a history of rheumatoid arthritis develops a severe vasculitic condition. What histological feature is typically observed?

A) Fibrinoid necrosis

B) Neutrophilic infiltration

C) IgA deposition

D) Granuloma formation

Answer: A) Fibrinoid necrosis

Diagnosis: Rheumatoid Vasculitis

Question number 48:

In a patient presenting with hypertension, weight loss, and mononeuritis multiplex, which organ system requires careful monitoring?

- A) Gastrointestinal tract
- B) Central nervous system
- C) Renal system
- D) Pulmonary system

Answer: C) Renal system

Diagnosis: Polyarteritis Nodosa

Question number 49:

A patient with systemic lupus erythematosus develops a skin condition characterized by small vessel inflammation. What is the most appropriate initial treatment?

- A) High-dose corticosteroids
- B) NSAIDs
- C) Antimalarial drugs
- D) Immunosuppressive agents

Answer: D) Immunosuppressive agents

Diagnosis: Lupus Vasculitis

Question number 50:

In a young patient presenting with a weak pulse in the upper limbs and blood pressure discrepancy between arms, which imaging modality is most useful for assessing the suspected condition?

- A) X-ray
- B) MRI
- C) CT angiography
- D) Ultrasound

Answer: C) CT angiography

Diagnosis: Takayasu Arteritis