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Net Quiz in Dermatology

Quiz questions from contact dermatitis

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1. The grading system for patch test was first introduced by .....
2. The most frequent contact allergen is .....
3. The chelating agent that has been reported to be useful in nickel allergy is .....
4. The most common contact allergen in nail varnish is .....
5. Fingertip eczema of the non-dominant hand is a classic presentation of contact allergy to ..... and .....
6. Which class of textile dye is most likely to cause sensitization?
7. False-positive irritant reactions in patch tests are liable to induce stronger reactions at day 2 than day 4, which is called the ..... effect.
8. A combination of substances reducing the allergic reaction to individual components is called ..... effect.
9. Staging system for contact urticaria was described by ..... and .....
10. Cumulative cosmetic irritant contact dermatitis (CD) occurring in persons using multiple cosmetic products is called .....
11. Tristimulus colorimetry and laser Doppler flowmetry are methods of quantifying ..... due to irritant CD.
12. Occupational acne caused by working in fast-food restaurants is called .....
13. Black spots preceding dermatitis is caused by contact with ..... plant.
14. The allergen identified in Dogger Bank itch is .....
15. Who first identified parthenium sensitivity in India?
16. What is atomizer sign?
17. The metal allergen known to cause persistent patch test reaction is .....
18. Which are the tests to detect CD due to cosmetics?
19. The substances causing systemic CD in the pattern of dyshidrosiform hand eczema are ..... and .....
20. The term "allergic contact urticaria" was introduced by .....
21. The term "allergie" was first coined by .....
22. The most potent acnegenic chemical agents are .....
23. Photoallergic reactions are most commonly caused by ..... and .....
24. Open test is widely used and advocated for testing allergy to .....
25. Contact urticaria on buccal mucosa due to eating raw fruits is called .....
26. Which of the following substances is known to cross react with hydroxyzine?
    a. Dexpanthenol
    b. Ethylenediamine
    c. Gentamicin
    d. Thiuram
27. When patch testing using Finn chambers, ... mg of allergen in petrolatum dispersion

has been shown to be the optimum dose.
   a. 5 mg
   b. 10 mg
   c. 15 mg
   d. 20 mg

28. Paraphenylenediamine (PPD) does not cross-react with .....
   a. Aniline dyes
   b. Hydrochlorothiazide
   c. Lignocaine
   d. Sulfonylureas

29. Match the following tests or chemical with the substance that they detect

1. Dimethylglyoxime test	(a) Chromium
2. Diphenylcarbazide test	(b) Nickel
3. Lutidine test	(c) Cobalt
4. 2-nitroso-1-naphthol -4 -sulfonic acid	(d) Formaldehyde

30. Match the following patterns of non-eczematous CD to causative agents

1. Purpuric	(a) Primula obconica
2. Erythema multiforme-like	(b) Azo dyes
3. Lymphomatoid	(c) Kumkum
4. Lichenoid	(d) PPD
5. Pigmented	(e) Exotic Woods

ANSWERS

1. Bruno Bloch
   Patch testing is the diagnostic tool for allergic dermatitis. Josef Jadassohn is generally accepted as its founder. Bruno Bloch expanded and enhanced Jadassohn's technique. He created a grading system for patch test reactions in 1895.[1]
2. Nickel
   Nickel is the most frequent contact allergen. The prevalence of nickel sensitivity recorded in patch test clinics ranges between 15% and 30%.[1]
3. Tetraethylthiuramdisulfide/disulfiram
   Tetraethylthiuramdisulfide/disulfiram chelates nickel and has been reported to be of value in the treatment of nickel allergy. However, liver enzymes must be monitored carefully, as side effects are frequent.[1]
4. Tosylamide formaldehyde resin
   It can cause allergic CD, occupational CD, and onycholysis.[1,2]
5. Onion, garlic
   Onion and garlic are usually held in the non-dominant hand, while the dominant hand holds a tool to cut them.[1]
6. Disperse dyes
   Among textile dyes, disperse dyes show the maximum potential to cause sensitization. They are chiefly anthroquinone and azo dyes. Disperse dyes may contain more than one component, along with impurities, all of which can contribute to sensitization.[1]
7. Crescendo-decrescendo[1]
8. Quenching[1]
   Quenching phenomenon has been explored chiefly in fragrance material aldehydes. The combined substances may alter the available bonding sites or may form a compound that follows a different detoxification pathway.
9. Amin, Maibach[1]

The following staging system for contact urticaria syndrome has been described by Amin and Maibach.

- Stage 1: Localized urticaria, dermatitis and non-specific symptoms (itching, tingling, and burning sensation)
- Stage 2: Generalized urticaria
- Stage 3: Bronchial asthma, rhinitis, conjunctivitis, orolaryngeal symptoms (lip swelling, hoarseness, and dysphagia), and gastrointestinal symptoms (nausea, vomiting, diarrhea, and cramps)
- Stage 4: Anaphylactoid reactions (features of shock)

10. Cosmetic exhaustion
    It may be possible to arrive at a diagnosis only by comprehensive patch testing for all the suspected products and their ingredients.[3]
11. Erythema
    Laser Doppler flowmetry measures the superficial blood flow through the transmission of monochromatic light emitted from a helium–neon laser to the skin surface through optic fibers. Tristimulus colorimetry uses a system for color definition known as the Commission Internationale de l'Eclairage (CIE) L*a*b* color system, which employs a three-dimensional coordinate system. L* stands for an axis for brightness, a* for a green-red axis, and b* represents a yellow-blue axis.[3]
12. McDonald's acne
    Acne lesions on face and chest can occur in people who come in contact with oil and grease while working in fast-food restaurants, particularly in those engaged in frying hamburgers.[4]
13. *Toxicodendron* (poison ivy) plant
    Black-spot poison ivy is an uncommon manifestation of contact with poison ivy (*Toxicodendron*) plants. Oxidation of the oleoresin results in formation of a black lacquer within hours of contact with the plant, which causes the appearance of irregular black spots on the skin. After a few days to weeks, an irritant dermatitis-like picture often develops. The development of an irregular black skin lesion might be alarming to patients and may encourage them to seek evaluation.[5]
14. (2-hydroxyethyl) dimethylsulfoxonium ion
    Dogger bank itch is CD of exposed skin while handling nets containing marine organisms (bryozoans) during summer, common in European fishermen.[1]

15. Ranade, Lonkar, and Jog, Pune, 1968
    Parthenium dermatitis is caused by contact with *Parthenium hysterophorus* plant and is the most common cause of phytodermatitis in India. A member of the Compositae family of plants, it has multiple synonyms including "bitterweed," "feverfew," or "escobar amarga." In India, it is also known by the names "Congress grass" or "Congress weed," which alludes to the US congress that had allocated a shipment to Pune, India. Originally a native of tropical America, it was transported to Asia as a contaminant in cereal and grass seed shipments from America during the 1950s. *Parthenium hysterophorus* has become known as the "scourge of India" and has caused epidemics of phyto-CD.[6,7]
16. Repeated application of fragrance to anterior neck in a sensitized individual resulting in the development of dermatitic plaque on the neck.[8]
17. Gold salts
    Gold chloride, gold sodium thiosulfate, and gold sodium thiomalate have been reported to cause persistent patch test reactions.[8,9]
18. Patch test, repeat open application test (ROAT), and usage test
    ROAT is used to assess the significance of doubtful positive patch test reactions to preparations that contain the suspected allergen in low concentration. However, false negative results may occur. The usage test is performed by reintroducing the suspected cosmetic products, one at a time, and using each product for up to 3 days.[1]
19. Nickel, balsam of Peru[8]
20. Fisher[1]
21. von Pirquet[1]
22. Halogenated aromatic hydrocarbons[1]
23. Sunscreens and topical nonsteroidal anti-inflammatory agents
    Ketoprofen may produce cross-sensitization with the UV (ultraviolet) filter benzophenone as well.[1]
24. Hair dyes
    The dye is applied to the retroauricular area. Examination of the site 2 days later is an accurate method of detecting sensitization.[1]
25. Oral allergy syndrome
    The oral allergy syndrome, also known as the pollen-fruit syndrome, occurs as a result of eating raw/unprocessed fruits, vegetables, and nuts. Symptoms include irritation, tingling, and mucosal swelling. Anaphylaxis has been reported rarely.[1]
26. Ethylenediamine
    Ethylenediamine can cross-react with hydroxyzine, meclizine, and aminophylline.[10]
27. 20 mg[1]
28. Lignocaine
    The local anesthetics known to cross-react with PPD are ester anesthetics such as benzocaine, procaine, and tetracaine. Amide local anesthetics such as lignocaine do not cross react with PPD.[8]
29. 1-(b), 2-(a), 3-(d), 4- (c)[1,8]
30. 1-(b), 2-(e), 3-(d), 4-(a), 5-(c).[1,8,11]

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Dr. Parvathy Santhosh is on the editorial board of the Journal.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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