

Navaratnas in Dermatology

Introduction

The field of dermatology is filled with a wide range of fascinating clinical diseases, symptoms, and syndromes. Everyone is making every effort to make this difficult topic more widely accepted and practical. In Vedic astrology, the “Navaratnas,” nine gems [Figure 1] linked to planets, are believed to influence energies, fostering balance, and attracting good fortune. Further, these “navaratnas” have captured mankind’s imagination and fantasy with their sheer brilliance and colors. This leads to interesting comparisons and descriptions. Here, we present a compilation of data on dermatological disorders based on “navaratnas.”

Navaratnas

1. Cat eye syndrome: Cat eye syndrome or Schmid-Fraccaro syndrome encompasses varied symptoms such as ocular coloboma, anal atresia, preauricular skin tags, heart and kidney issues, distinctive facial features, and cognitive challenges.^[1]
2. Coral bead sign: Papules on the periungual area can resemble ‘coral beads’ in multicentric reticulohistocytosis, typically asymptomatic but occasionally associated with pruritus.^[2]
3. Coral dermatitis: It is a dermatitis caused by toxic substances produced by corals, most commonly observed in scuba divers. It usually presents as acute urticaria, acute vesiculobullous dermatitis, subacute fleshy granulomatous dermatitis, and chronic lichenoid dermatitis all over the body. They are generally associated with staphylococcal infections.^[3]
4. Coral reef bleaching: Coral reefs play a crucial role in our environment, providing habitat for up to a million different species, including fish, invertebrates, and algae. Corals, which are members of the Cnidaria family, are soft-bodied organisms that live in symbiotic relationships with algae known as zooxanthellae. Coral reef bleaching is an environmental phenomenon seen with the usage of sunscreen, which contains oxybenzone as an active ingredient, which activates coral viruses and culminates oxidative stress, leading to coral reef bleaching.^[4]
5. Coral red fluorescence: It is typically seen in erythrasma caused by *Corynebacterium minutissimum*. Wood’s lamp examination of this condition shows characteristic coral red fluorescence [Figure 2] due to coproporphyrin III.^[5]
6. Diamond finger gap test: The Schamroth window or diamond finger gap test aids in diagnosing clubbing. Normally, a diamond-shaped gap appears between opposing fingers’ nail beds; in clubbing, this gap is absent [Figure 3].
7. Diamond hair pattern: A diamond pattern of hair is excessive hair growth extending from the pubic area to the umbilicus, which indicates hirsutism, as the usual female pattern is a triangle.
8. Diamond peel or diamond microdermabrasion: Cosmetologists and dermatologists use skin-shaving devices featuring diamond-tip wands tailored to diverse skin types and regeneration levels. These wands gently exfoliate with diamond crystals, while a built-in vacuum eliminates dead skin cells and impurities, offering effective skin rejuvenation with minimal side effects.^[6]
9. Diamond necklace appearance: Dermoscopy with ultraviolet light of superficial porokeratosis shows the characteristic “diamond necklace”

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Figure 1: Set of nine gemstones("navaratnas") (Acknowledgement: Ram Thanganagai Maligai, Puducherry)

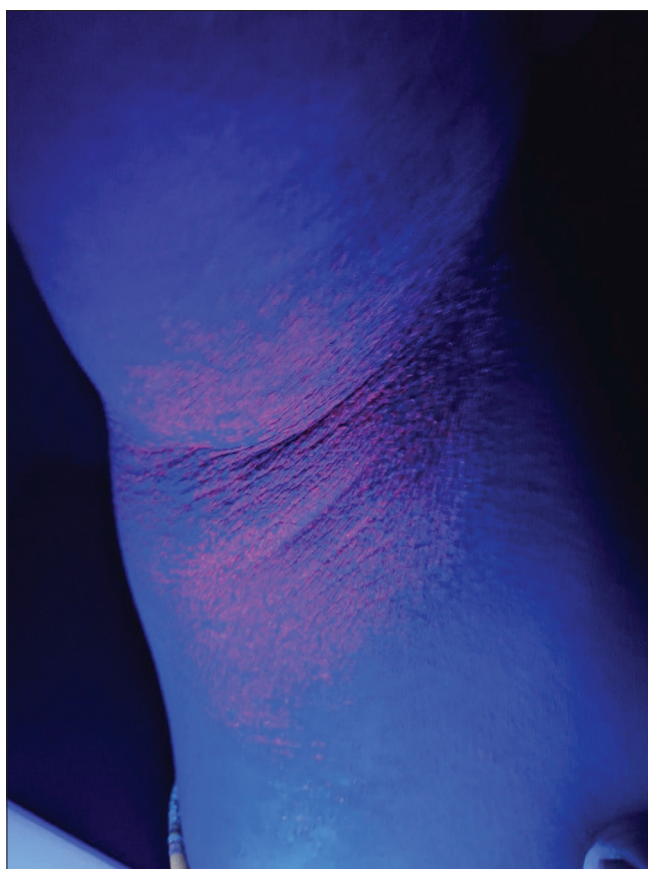


Figure 2: A case of erythrasma showing coral-red fluorescence on Wood's lamp examination

appearance of these lesions. The keratotic ridge or the thread-like border glows in the ultraviolet dermatoscope.^[7]

10. Diamond's medium: Remel Diamond's medium modified, developed in 1957 by Diamond and later improved by substituting sheep serum with horse

serum, is the gold standard for detecting *Trichomonas vaginalis*, claiming over 80% sensitivity.^[8]

11. Diamond keratinocytes: Lozenge-shaped keratinocytes or diamond-shaped keratinocytes are seen in the histopathology of Zoon's or plasma cell balanitis, along with siderophages and variable plasma cell infiltrate in the dermis.^[9]
12. Diamond palmar pattern: Hyperlinearity of palms in atopic dermatitis, which occurs because of loss of function mutation of filaggrin gene, is classified into five patterns. The type 5 pattern is the diamond pattern across the entire palms and is associated with more severe disease and poorer barrier function.^[10]
13. Diamond-shaped depigmented patch (forehead): Piebaldism is a congenital autosomal recessive disorder that presents with a white forelock with hypopigmented or depigmented patch. The hypopigmented or depigmented patch is a diamond-shaped or triangular, and located in the midline on the forehead with a white forelock [Figure 4].^[11]
14. Diamond scales: Harlequin ichthyosis is a rare genetic disorder presenting with severe erythrodermic ichthyosis. Its name is derived from diamond-shaped patches resembling the costume of harlequin clowns.^[12]
15. Diamond skin disease: *Erysipelothrix rhusiopathiae* infection in pigs is commonly referred to as diamond skin disease due to the diamond-shaped patches that appear on the skin as a result of the bacteria. This bacterium is also capable of causing zoonotic infections in humans, known as erysiploid.^[13]
16. Diamond's triad: It is seen in Graves' disease; it features pretibial myxedema (localized edematous pretibial plaques), thyroid acropachy (finger/toe clubbing with soft-tissue swelling and new bone formation), and exophthalmos.^[14]



Figure 3: Diamond finger gap test demonstrating an absent gap in the presence of clubbing



Figure 4: Diamond-shaped depigmented patch with white forelock in a case of piebaldism

17. Emerald laser: The emerald laser, with a 532-nm wavelength, treats vascular lesions, pigmented lesions, and rosacea and aids in skin rejuvenation by targeting hemoglobin and melanin with minimal downtime.
18. Epstein pearls: Epstein pearls are small whitish to yellowish papules seen in newborns and are typically situated along the mid-palatine raphe.^[15]
19. Gardner-Diamond syndrome: Gardner-Diamond syndrome, also termed auto-erythrocyte sensitization syndrome or psychogenic purpura [Figure 5], manifests as painful, edematous skin lesions evolving into ecchymoses within 24 hours, often triggered by emotional stress because of sensitization to phosphatidylserine.^[16]
20. Horn pearls or keratin pearls: Horn pearls or keratin pearls are whorled structures seen in histopathology of squamous cell carcinoma. They are formed when the malignant squamous cells undergo keratinization and get arranged in a concentric pattern, appearing as concentric whorls of keratin around a central core of keratin.^[17]
21. Pearl fractional laser: Pearl introduced it in 2007 for aesthetic purposes. It uses 2790-nm wavelength yttrium-scandium gallium-garnet (YSGG). It is used for superficial brown epidermal dyschromia, superficial fine lines, and acne scars and has produced excellent results. Since it delivers a lower thermal load to the skin,

it is associated with less pigmentary loss post-laser treatment.^[18]

22. Pearly penile papules: Pearly penile papules are harmless benign lesions that appear in clusters around the corona of the glans penis in late teenage years or early adulthood [Figure 6].^[19]
23. Pearly wreath: It is a clinical finding in the case of cutaneous anthrax, which presents as an eschar surrounded by nonpitting edema. Translucent vesicles around the lesion appear as pearly wreath.^[20]
24. Ruby laser: The ruby laser, emitting a 694-nm wavelength, is used in dermatology for tattoo removal, treating pigmented lesions, and hair removal, effectively targeting melanin with minimal skin damage.
25. Red coral vessels: It is a dermoscopic feature of clear cell acanthoma, appearing as multiple long-branched, round-ending vessels that are arranged together in the center, along with a peripheral collarette of scale, resembling a red coral pattern.^[21]
26. Ruby spots: Ruby spots or cherry angiomas are benign cutaneous vascular proliferations present as small bright red papules commonly seen on the trunk [Figure 7].^[22]
27. Smegma pearls: Smegma pearls are tiny, pale-yellow lumps that may form in the glans penis of boys who have not been circumcised. This occurs as a result of an accumulation of smegma and is usually found between the preputial membrane and the tip of the glans penis.^[23]
28. String of pearls:
 - A.) Linear IgA bullous dermatosis: ‘String of pearls’ or ‘crown of jewels’ describes tense vesicles and bullae arranged circularly on a reddened base. This is commonly seen in linear IgA bullous dermatosis [Figure 8] in children and adults and occasionally in bullous pemphigoid.^[24]
 - B.) Clear-cell acanthoma: A benign skin tumor that typically displays a distinct vascular pattern



Figure 5: Ecchymosis over the right forearm in a case of Gardner-Diamond syndrome



Figure 6: Dome-shaped papules along the corona of the glans penis suggestive of pearly penile papules



Figure 7: Ruby spots or cherry angioma over the right side of the abdomen



Figure 8: String of pearls appearance in a case of linear IgA bullous dermatosis

consisting of dotted and coiled vessels arranged in a mesh-like or serpiginous fashion, seen in dermoscopy. This arrangement is often referred to as a “string of pearls.”^[25]

C.) *Bacillus anthracis*: It is sensitive to penicillin. This organism, when cultured with low penicillin levels, forms a chain of swollen cells resembling a “string of pearls,” distinguishing it from penicillin-resistant *Bacillus* species.

29. Sapphire lasers: Sapphire lasers (755 nm) are a type of laser used in dermatology for various skin treatments such as hair removal, pigmented lesion removal, and treatment of vascular lesions such as spider veins.

Conclusion

In conclusion, the symbolic significance of gemstones, particularly the “Navaratnas,” has inspired vivid descriptions

and unique diagnostic terms for various conditions. This compilation explores the diverse dermatological disorders and phenomena named after these gems, highlighting their clinical presentations and implications. By drawing these comparisons, we aim to foster a deeper understanding and appreciation of dermatological conditions, making them more accessible and memorable for both practitioners and patients.

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Conflicts of interest

There are no conflicts of interest.

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