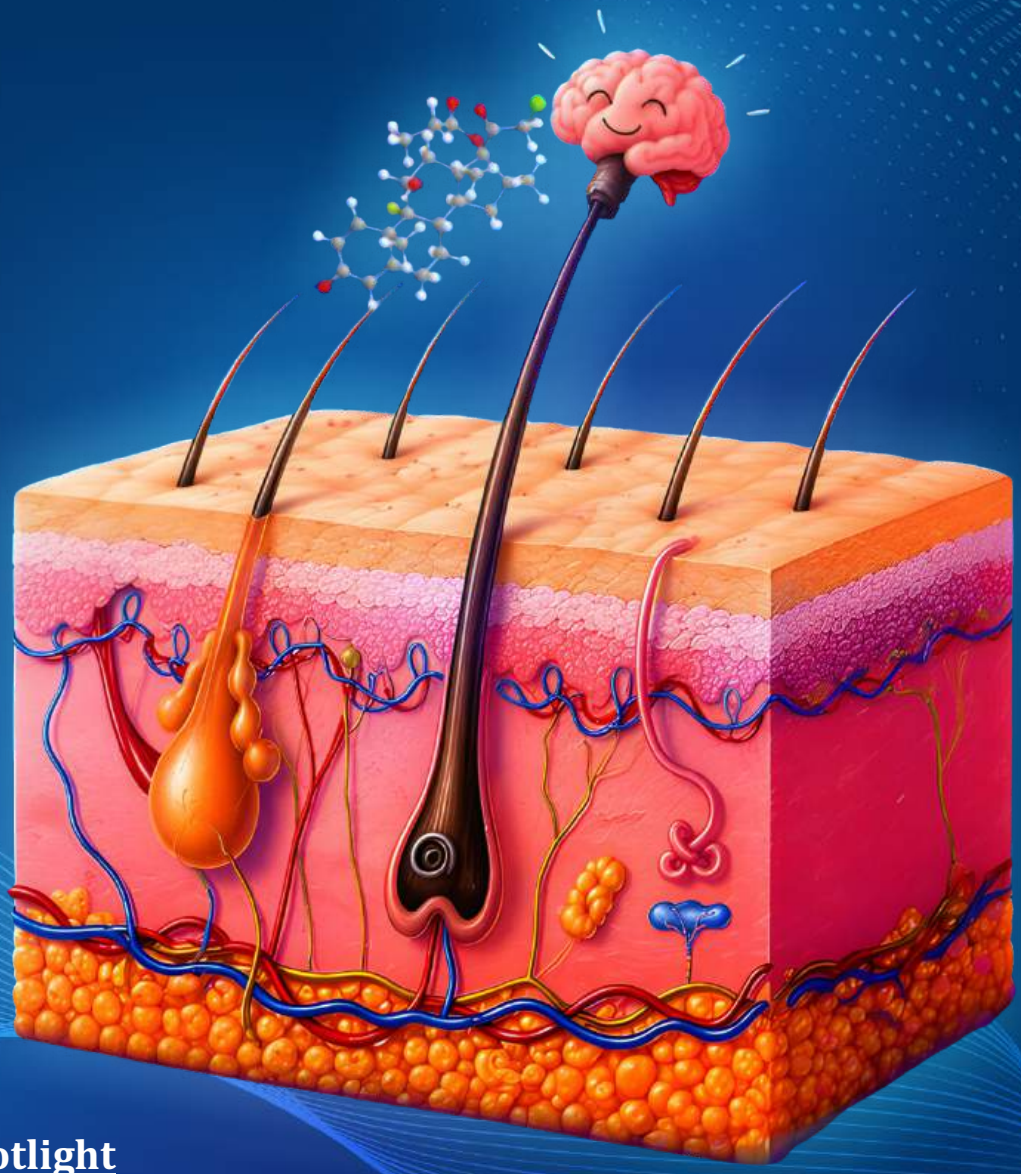
Indian Association of Dermatologists, Venereologists & Leprologists West Bengal State Branch

SKINTELLECT

The Official Newsletter of the IADVL West Bengal State Branch



Issue Spotlight

"Skintellect," is the online monthly newsletter of the IADVL WB, dedicated to the dynamic world of dermatology. This publication is a testament to the commitment of our members towards advancing the ever stretching horizon of the discipline , sharing knowledge, creating bonhomie and archiving our IADVL WB activities.

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Note from the President

Dear Colleagues.

Warm greetings from IADVL WB.

We had a busy June 2026.

We observed the World Vitiligo Day on the 25th of June through various patient and community awareness programs during the day at various institutions and Medical Colleges across the state. In the evening we had a webinar where eminent faculties elaborated on the recent pathogenetic and treatment aspects of vitiligo.

We had our just concluded Mid Term Conference of IADVL WB 2026 at Bankura on the 27th and 28th of June which was a huge success both in its academic content and culinary delights. It was attended by 183 delegates.

I congratulate each and every member for their whole hearted participation to make these academic events a huge success.

Long live IADVL.

Jai Hind

Dr. Arghyaprasun Ghosh
President
IADVL WB

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Secretary's Scribes

Dear Esteemed Members and Readers,

It gives me immense pleasure to present another issue of Skintellect, the official academic journal of IADVL West Bengal State Branch.

Our association has always believed in academic excellence, the encouragement of scientific curiosity, and the creation of a platform where knowledge can be shared for the advancement of dermatology. Skintellect stands as a reflection of this commitment, bringing together valuable scientific contributions, clinical experiences, innovative ideas, and scholarly discussions from our esteemed members and contributors.

In the ever-evolving field of dermatology, continuous learning and the exchange of knowledge remain essential. This journal not only highlights recent developments and academic achievements but also inspires young dermatologists and postgraduate students to actively engage in research and publication.

I sincerely appreciate the tireless efforts of the editorial board, contributors, and everyone involved in making this publication possible. Their dedication and hard work continue to strengthen the academic spirit of our association.

I hope this issue of Skintellect will serve as a valuable resource for all readers and further encourage meaningful academic interaction within our fraternity.

Wishing Skintellect continued success in its journey of academic excellence.

With Warm regards,

Dr. Somenath Sarkar
Honorary Secretary
IADVL WB

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Editors Desk

Dear Readers,

It is with great pleasure that we bring you the third edition of Skintellect.

The month of June has been vibrant and academically rewarding, marked by engaging scientific interactions and meaningful collaborations. One of the major highlights was Midcuticon 2026, hosted at Bankura Medical college and hospital ,the conference brought together renowned dermatologists from across the state, fostering insightful discussions, knowledge exchange, and an atmosphere of enthusiastic learning, making it a truly memorable academic gathering.

June 25, observed globally as World Vitiligo Day, serves as an important reminder of our collective responsibility to promote awareness and dispel the misconceptions surrounding vitiligo. In keeping with this commitment, IADVL West Bengal organized several awareness initiatives across the state, culminating in a dedicated CME. The program offered comprehensive discussions on evolving concepts, recent therapeutic advances, and multidisciplinary perspectives, with eminent experts enriching the scientific deliberations.

In this issue's Dermatologist in Spotlight, we are privileged to feature Dr. Sumit Sen , an accomplished clinician, teacher, and mentor whose dedication to dermatology has inspired generations of students and colleagues alike.

Our DermBuzz section brings an informative article by Dr. Shreya Poddar highlighting the expanding role of mesotherapy in aesthetic dermatology and its emerging clinical applications.

A very interstesing case of purpura fulminans has been presented by Dr Sudip Kumar Ghosh , who is a renowed proffesor and an excellent teacher.

Adding further academic depth, Dr. Sneha Khatun has enriched our knowledge about biomarkers in leprosy. Dr. Mukti Halder has made a thoughtful painting of a girl with vitiligo.

As always, our regular features—including the monthly quiz, crossword, and riddle—are designed to make learning both enjoyable and intellectually stimulating.

At Skintellect, we remain dedicated to creating a platform that celebrates academic excellence, encourages creative expression, and strengthens the bonds within our dermatology fraternity. Your unwavering support, valuable contributions, and enthusiastic participation continue to inspire us to grow with every edition.

We hope you enjoy reading this issue as much as we enjoyed bringing it to you.

Happy Reading!

Warm regards,

Dr. Ameli Sarkar
Editor, Skintellect,
The IADVL WB Monthly Newsletter

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DERMATOLOGIST SPOTLIGHT: DR. SUMIT SEN

1. ***Sir, it is an honor to have you with us this month. What really inspired you to choose dermatology as your specialty & how has your relationship with this field evolved over the years?***

- *Dermatology is almost like mathematics—you either arrive at the correct diagnosis, or you do not, and often you must do so quickly. This combination of precision and speed is what makes it so challenging, and it was what made me choose dermatology as my specialty. When we entered this field, it was entirely clinical, but now cosmetology is gradually pushing core dermatology to the second spot. This is perhaps not the right perspective, as the skin is the largest organ of the body and, besides having its own numerous intriguing disorders, it can also offer valuable clues to internal disease. An astute clinician can often "see through" the skin and predict many internal conditions by following the hints scattered across a patient's surface.*

2. ***Sir, looking back at your career, what moments do you consider defining milestones in your academic & clinical journey?***

- *The defining moments in my career have been my posting at IPGMER, Kolkata, and my subsequent promotion to the post of Professor of Dermatology. It was at this institute that I was able to follow my passion for teaching my students.*

3. ***Sir, as you are aware that psoriasis management has evolved dramatically in recent years, which advances do you think have truly influenced patient outcomes in real-world practice?***

- *As far as treatment of psoriasis is concerned, biologics have made a significant real- world difference. They have emerged as highly effective therapeutic options, particularly for patients with associated comorbidities. Biologics have also proven invaluable in managing resistant forms of psoriasis, as well as severe & complicated cases, leading to improved disease control & quality of life.*

4. ***You are one of the pioneers in developing validated facial aging scale for the Indian population. What really inspired this research & how do you think our understanding of facial aging in Indian skin differs from that in western population?***

- *People nowadays are very concerned about their appearance, how they present themselves to others, how young they look, and how fresh they appear. Hence, the long queues in cosmetic clinics. However, I felt that there was no reliable way to quantify a person's appearance or put a number to one's face in terms of how young or old he or she looked. Hence came the idea of a validated facial aging scale and its advent.*

  Our facial aging scale can be used to compare different skin types across India. It can also be used by cosmetologists to assess a person's face, determine the number of facial rejuvenation treatments that may be required, and monitor the progress of ongoing aesthetic treatments. In fact, this scale has many exciting applications, both in clinical practice and for research purposes, as is already being demonstrated.

  Indian skin is different from that of Western populations, who generally live in milder, temperate climates. The sun is perhaps harsher in our country, making the use of sunscreens particularly important for Indians. Facial aging scales are available for Western populations; however, those scales may not be directly applicable to our population.

  Our scale incorporated 13 parameters, including bony prominence of the cheeks, forehead wrinkling, descent of the corner of the mouth, neck volume at rest, and pigmented spots on facial skin, among others. Western facial skin differs naturally from Indian skin in many of these aspects, as well as in complexion, making the development of an India-specific scale both relevant and necessary.

5. ***In the era of artificial intelligence & digital pathology, how do you foresee the future role of dermatopathology evolving?***

- *In the coming days, AI will make dermatopathology more challenging for dermatopathologists, whose intuitive skills as expert dermatopathologists will be tested. However, AI and digital tools will also make learning dermatopathology easier and more accessible. They will also enhance a clinician's ability to reach a diagnosis by assisting in the interpretation and integration of findings presented in dermatopathology reports.*

6. ***Sir, as a teacher with decades of experience in postgraduate teaching, what are the common gaps you see in postgraduate training today?***

- *In my view, postgraduate training should place greater emphasis on clinically oriented teaching, especially through bedside learning and case-based discussions. More structured and meaningful training in aesthetics is also needed, with adequate exposure to this increasingly important subspecialty.*

7. ***Travel often broadens perspectives. Have your journey across India & abroad influenced your understanding of patients, cultures & medicine in any meaningful way?***

- *Yes, India is a wonderfully diverse country, with a wide range of habits, cultures, climates, and lifestyles. Skin diseases vary according to climate and the local way of life, which makes the practice of dermatology in India especially interesting.*

8. ***Finally, Sir, how would you like your students & colleagues to remember your contributions to dermatology?***

- *I have always cherished teaching. I love my students, and each one has been like a beautiful painting that enriches the canvas of my life. It would bring me great joy if any of my students were to call me someday simply to have a chat. To be remembered by a student is something I would always treasure.*

  Lastly, I thank IADVL WB and Team Skintellect for featuring me in their newsletter. I usually prefer to remain in the background, so being highlighted in this way feels a little awkward, though I am truly happy and grateful. Thank you.

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DERMBUZZ :
MESOTHERAPY: EXPANDING HORIZONS IN SKIN AND HAIR REJUVENATION

Dr. Shreya Poddar
Founder & Consultant Dermatologist
Astra Skin Clinic, Kolkata

Mesotherapy, first introduced by Michel Pistor in 1952, involves the intradermal delivery of bioactive substances to achieve localized therapeutic effects. Initially employed for pain management, it has evolved into a valuable adjunct in aesthetic and regenerative dermatology, with applications in skin rejuvenation and hair restoration.

Mesotherapy for Skin Rejuvenation

1. ***Hyaluronic Acid (HA) Skin Boosters***
   - *Improve hydration and skin quality.*
   - *Enhance elasticity and luminosity.*
   - *Stimulate collagen synthesis through fibroblast activation.*
   - *Commonly used for face, neck, décolletage, and hands.*
2. ***Vitamins and Antioxidants***
   - *Contain combinations of vitamins A, C, E, B-complex, amino acids, minerals, and coenzymes.*
   - *Aim to combat oxidative stress and improve cellular metabolism.*
   - *Often used for dull, photoaged skin, though evidence remains limited.*
3. ***Biomimetic Peptides***
   - *Mimic endogenous signalling molecules.*
   - *Promote collagen and elastin synthesis.*
   - *Useful in skin rejuvenation, fine lines, and periocular aging.*
   - *May act synergistically with other regenerative therapies.*
4. ***Polynucleotides (PN/PDRN)***
   - *Derived from purified DNA fragments.*
   - *Stimulate fibroblast proliferation and extracellular matrix remodelling.*
   - *Possess anti-inflammatory and tissue repair properties.*
   - *Improve skin texture, hydration, elasticity, and acne scars.*
5. ***Growth Factors and PRP-Based Mesotherapy***
   - *Deliver platelet-derived growth factors to enhance tissue regeneration.*
   - *Promote angiogenesis and collagen synthesis.*
   - *Useful in photoaging and scar remodelling.*
6. ***Exosome-Based Therapy***
   - *Contains extracellular vesicles rich in proteins, cytokines, and nucleic acids.*
   - *Potentially stimulates tissue repair and rejuvenation.*
   - *Currently considered an emerging modality with evolving evidence and regulatory concerns.*

7. ***Tranexamic Acid Mesotherapy***
   - *Used as an adjunctive treatment for melasma and post-inflammatory hyperpigmentation.*
   - *Inhibits plasmin-mediated melanogenesis.*
   - *Usually combined with topical therapy and photoprotection.*
8. ***Lipodissolve injections***
   - *Employs agents such as deoxycholic acid, phosphatidylcholine-deoxycholate combinations, L-carnitine, and organic silica compounds.*
   - *Produces adipocytolysis and facilitates fat metabolism.*
   - *Common indications:*
     - *Submental fullness (double chin)*
     - *Jowls*
     - *Bra fat and axillary fat pads*
     - *Abdomen and flanks*
     - *Inner thighs and knees*
   - *May also improve cellulite when combined with other modalities.*
   - *Common adverse effects include pain, edema, ecchymosis, nodules, and transient neuropraxia.*
   - *Evidence is variable, with deoxycholic acid having the strongest support among lipolytic agents.*

Mesotherapy for Hair Rejuvenation

1. ***Dutasteride Mesotherapy***
   - *Inhibits type I and II 5α-reductase enzymes.*
   - *Reduces follicular DHT levels.*
   - *Effective adjunct in androgenetic alopecia.*
   - *Allows localized drug delivery with potentially reduced systemic exposure.*
2. ***Peptide-Based Hair Mesotherapy***
   - *Contains biomimetic peptides that target follicular stem cells.*
   - *Improves follicular metabolism and prolongs anagen.*
   - *Commonly employed in early androgenetic alopecia.*
3. ***Platelet-Rich Plasma (PRP)***
   - *Rich source of growth factors including PDGF, VEGF, and TGF-β.*
   - *Stimulates dermal papilla cells and angiogenesis.*
   - *Widely used as monotherapy or in combination with mesotherapy.*
4. ***Exosome Therapy***
   - *Emerging regenerative approach.*
   - *Promotes dermal papilla cell proliferation and activates Wnt/β-catenin pathways.*
   - *Requires further validation and standardization.*

5. ***Growth Factor Concentrates***
   - *Deliver cytokines and signaling molecules directly to the follicular environment.*
   - *Aim to improve hair density and shaft caliber.*
6. ***Nutraceutical/Vitamin Cocktails***
   - *Combinations of biotin, amino acids, trace elements, dexpanthenol, and vitamins.*
   - *Widely used in practice, especially in telogen effluvium.*
   - *Scientific evidence supporting efficacy is limited.*
7. ***Botulinum toxin A***
   - *Recently been explored to treat hair loss.*
   - *It is typically administered due to its vasodilatory effect*
   - *Hypothesized to relax the scalp and thereby increase blood flow and oxygenation, resulting in the reduction of hair loss and regrowth of hair*
8. ***Stem cells***
   - *Stem cells, pluripotent or multipotent depending on their source, are able to regenerate and differentiate into a variety of cell types.*
   - *Being explored to treat PHL*
   - *Have potential to differentiate into dermal papilla cells leading to hair follicle regeneration and hair regrowth*

Expanding Applications

Beyond facial rejuvenation and hair loss, mesotherapy has been explored in melasma, acne scars, striae, periorbital rejuvenation, and scar modulation. Its effects are mediated not only by the pharmacological action of injected agents but also by the regenerative response induced by controlled microtrauma. Combination protocols integrating HA + Polynucleotides, PRP + Exosomes, and Dutasteride + Exosomes are gaining popularity.

Current Challenges and Future Perspectives

Despite increasing popularity, mesotherapy remains limited by heterogeneity in formulations, injection techniques, and a paucity of high-quality randomized controlled trials. The field is gradually transitioning from empirical "cocktail therapy" toward evidence-based regenerative medicine, with advances in polynucleotides, peptides, and cell-derived products likely to shape future applications.

Conclusion

Mesotherapy represents a minimally invasive and versatile modality in modern dermatology. While advances in regenerative injectables have expanded its scope in skin and hair rejuvenation, greater standardization and stronger clinical evidence are required to define its precise role in routine practice.

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RESIDENT'S CORNER:
MODERN BIOMARKERS IN LEPROSY : TOOLS BEYOND THE SLIT SKIN SMEAR

Dr. Sneha Khatun
S R,
Sagore Dutta MCH

1. INTRODUCTION

Leprosy is one of the oldest diseases known to humanity and is considered the second most serious mycobacterial illness after tuberculosis (TB). The disease is caused by Mycobacterium leprae, which primarily affects skin and peripheral nerves. The nerve damage resulting from M leprae infection often leads to significant, lifelong disabilities. Currently, over 4 million individuals continue to experience disabilities associated with leprosy. In addition to the physical challenges, leprosy not only profoundly affects the individuals and their families economically but also impacts their social standing due to the stigma associated with the disease.[1]

Novel effective molecular markers are desperately needed because leprosy has a high risk of cripplehood and there are currently no early effective diagnosis tools for prevention and treatment.

Traditional diagnosis relies heavily on clinical signs and symptoms, which can be subtle or delayed. Biomarkers could help detect infection earlier, improve diagnosis in endemic areas and distinguish different forms of disease.[2]

2. CURRENT AND EMERGING BIOMARKERS IN INDIA INCLUDE:

i)Antibody biomarkers

The most studied marker is the antibody response against PGL-I (phenolic glycolipid-I), a molecule specific to M. leprae.

Good for detecting MB leprosy.

Poor for detecting PB leprosy.[1]

Anti-LID-1 & ND-O-HAS - Recombinant proteins used alongside PGL-1[3]

Therefore, antibody tests alone cannot detect all cases.

ii)Cellular immune-response biomarkers

Researchers have investigated the cytokines and chemokines that are released when immune cells interact with M. leprae antigens. Key candidate biomarkers consist of: Cytokines - IFN-γ (interferon-gamma), TNF-α, IL-15, IL-17, IL-1β, IL-10, along with chemokines such as CXCL10 (IP-10), CCL2, CCL3 (MIP-1α), CCL4 (MIP-1β), IL-1Ra, CRP, S100A12, and ApoA1.

Among these:

αPGL-I IgM, IP-10, and CRP were useful for detecting MB disease.

IL-1Ra and CCL4 showed promise for detecting PB disease.

IL-10, S100A12, and ApoA1 appeared to indicate infection/exposure more generally.

CCL3- helps classifying L(PB) VS L(MB)[1]

Early Infection: Where Does M. leprae Enter?

Possible entry routes are:

**Nasal epithelium*

Airway epithelial cells can harbor M. leprae. Salivary IgA antibodies may reflect protective mucosal immunity. Household contacts often have elevated anti-M. leprae IgA.

**Skin*

Possible entry through minor skin injuries involving keratinocytes, fibroblasts, ndothelial cells[1]

Cell Types of Interest for New Biomarkers

**Epithelial cells*

**Keratinocytes*

**Fibroblasts*

**Macrophages*

**Dendritic cells*

**Various T-cell subsets (Th1, Th2, Th9, Th17, Th22, Treg)*

**Schwann Cells (Nerve Damage)*

M. leprae specifically targets Schwann cells through PGL-I.

It inhibits apoptosis and autophagy, facilitating bacterial persistence. This leads to demyelination and nerve injury by diminishing myelin proteins (MBP, MPZ, Krox-20).

Biomarkers include: CD206, PPAR-γ, IGF-I, OASL, MMP2, MMP9, IP-10, CCL2.[1]

Macrophages

M1 macrophages (IFN-γ, vitamin D pathway) kill bacteria → associated with PB/TT leprosy.

M2 macrophages (IL-10, TGF-β) support bacterial survival → associated with MB/LL leprosy.

M. leprae promotes M2 polarization, inhibits apoptosis and autophagy.

Biomarkers: IL-10, IL-1Ra, IP-10, CCL2, IFN-β, OAS1, IL-27.[1]

Dendritic Cells (Dcs)

Present M. leprae antigens to T cells, thereby initiating adaptive immunity. M. leprae diminishes DC maturation and MHC expression, which in turn weakens T-cell activation. IL-32 and IL-12 are instrumental in promoting effective protective immunity. Conversely, IL-10 inhibits DC differentiation and supports disease progression.[1]

Complement System

Genetic variations in complement proteins affect susceptibility to leprosy. The activation of the complement system aids in bacterial uptake but may also lead to nerve damage.

Potential biomarkers include: CR1, MASP-3, C3d, MAC.

Lymphocytes in Leprosy

Protective (PB/TT) response: Th1, Th9, Th17 cells → generate IFN-γ, TNF-α, IL-17, IL-9.

Disease-promoting (MB/LL) response: Th2 and Treg cells → generate IL-4, IL-10, TGF-β.

CD8 cytotoxic T cells (granulysin, perforin, granzyme B) assist in eliminating infected cells and are linked to PB leprosy.

Natural killer T cells produce IFN-γ and play a role in protection, particularly in tuberculoid leprosy.

IL-10–producing CD8 Tregs and Bregs inhibit immunity and promote bacterial persistence in MB leprosy.[1,8]

Key biomarkers: IFN-γ, TNF-α, IL-17, IL-9, IL-10, TGF-β, granulysin, perforin, granzyme B.[1]

Immunometabolism

Foamy macrophages in MB leprosy exhibit modified lipid metabolism that aids bacterial survival.

ApoA1 (HDL protein) is a potential biomarker associated with lipid metabolism and possibly nerve damage.

Mitochondrial dysfunction plays a role in nerve injury and chronic inflammation.

Biomarkers: ApoA1, mitochondrial/oxidative stress indicators.[1]

Iii)Transcriptomic & Molecular Biomarkers:

- *Multi-gene expression profiles, such as the RISK4LEP whole-blood signature, aim to identify which infected individuals (for instance, household contacts) are most likely to progress to clinical leprosy.*
- *qPCR for M. leprae DNA: PCR tests targeting the RLEP repetitive element and sodA mRNA in skin biopsies remain the molecular gold standard*
- *MicroRNAs (miRNAs): The investigation of circulating miRNAs (such as hsa-miR-16-5p, hsa-miR-106b-5p, and hsa-miR-1291) is growing as they are considered potential non-invasive biomarkers for the early diagnosis and classification of different types of leprosy.[4]*

The study used WGCNA (Weighted Gene Co-expression Network Analysis) &

DEG (Differentially Expressed Gene) analysis to identify 10 key immune-related genes (ITK, CD48, IL2RG, CCR5, FGR, JAK3, STAT1, LCK, PTPRC, and CXCR4) and 6 major immune pathways that play central roles in leprosy:

Chemokine signaling pathway

Th1 and Th2 cell differentiation

Th17 cell differentiation

T-cell receptor signaling pathway

Natural killer cell-mediated cytotoxicity

Leukocyte transendothelial migration.[2]

Biomarkers of Subclinical Infection in Household Contacts

Candidate biomarkers

IL-6, TNF-α, IL-10 , IL-17, CXCL8, CCL2

Significance:Detection of silent infection[7]

Transcriptomic Biomarkers in Pure Neural Leprosy

Potential biomarkers, NLRP3 pathway genes, autophagy-related genes, neuroinflammatory signatures

Clinical application:Early diagnosis of pure neural leprosy[7]

Biomarkers for Type 2 Reaction (ENL)

Biomarkers associated with ENL

IFN-γ, TNF-α, CXCL10 , IL-17, G-CSF, IL-15.

Importance

These biomarkers may help predict:

Severe ENL episodes,IFN-γ levels increased 9.7× in the T2RL group[6]

CONCLUSION

A reliable diagnostic test should identify individuals infected with M. leprae who are at risk of developing diseases or

contributing to their transmission. Therefore, discovering new blood-based biomarkers for leprosy is essential for transitioning from managing the disease to preventing infection.Recent studies indicate that the most promising contemporary biomarkers for leprosy include the RISK4LEP transcriptomic signature, non-coding RNA biomarkers, IFN-γ, TNF-α, IL-17, CXCL10, CCL3, CCL4, and newly identified proteomic markers like A1BG and Haptoglobin-1. Among these, RISK4LEP stands out as the leading candidate for the prediction of leprosy prior to the onset of clinical symptoms, while panels of immune mediators are emerging as important tools for classifying disease types and forecasting lepra reactions.[5]

Conflict of interest:Nil

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CASE-PODIUM: PURPURA FULMINANS: A CUTANEOUS MARKER OF LIFE-THREATENING SYSTEMIC ILLNESS

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Prof. & HODDermatology
R.G. Kar MCH, Kolkata

A previously healthy 30-year-old woman presented to the emergency department with high-grade fever, cough, dyspnea, and chest radiographic findings consistent with right lobar pneumonia. Dermatological examination demonstrated purpuric lesions with retiform ecchymosis with skin necrosis involving the left thigh. ***(Figure 1)*** *She appeared critically ill, exhibiting hypotension, tachycardia, tachypnea, and oliguria, without evidence of external bleeding. Laboratory evaluation revealed leukocytosis (14,176/cmm) with 30% band forms, thrombocytopenia (platelet count 26,200/per microliter), and a markedly elevated erythrocyte sedimentation rate (89 mm/hour). Coagulation studies showed prolonged prothrombin time (PT) and activated partial thromboplastin time (aPTT), accompanied by markedly elevated fibrin degradation products. Blood cultures isolated group A streptococci. Based on the clinical presentation and laboratory findings, a diagnosis of acute infectious purpura fulminans secondary to septic shock was established. A lesional skin biopsy demonstrating suggestive histopathological features further reinforced the diagnosis. The patient was treated with aggressive fluid resuscitation, intravenous antimicrobial therapy, and platelet transfusions, resulting in clinical recovery over two weeks.*

Purpura fulminans (PF) is a rare but life-threatening dermatologic and hematologic emergency characterized by rapidly progressive intravascular thrombosis and hemorrhagic cutaneous infarction, often associated with substantial mortality. Patients typically present with acute systemic illness marked by high fever, circulatory instability, hemorrhagic manifestations, and progressive shock.

PF is broadly categorized into four etiological groups: neonatal, idiopathic (acquired), acute infectious, and miscellaneous forms. Despite differing triggers, all variants share a final common pathway of severe coagulation dysregulation and profound hypercoagulability. Neonatal PF generally occurs within the first few days of life and is most commonly associated with inherited deficiencies of protein C, protein S, or antithrombin III. Idiopathic or acquired PF usually develops as a post-infectious autoimmune phenomenon leading to transient deficiency of natural anticoagulants. Acute infectious PF, the most frequent subtype, Develops during severe infection or sepsis and is characterized by consumptive depletion of anticoagulants and disseminated intravascular coagulation (DIC).

Clinically, PF manifests with rapidly evolving cutaneous and systemic findings. Skin lesions typically begin as painful erythematous macules or petechiae that progress over hours into ecchymotic purpura with central hemorrhagic necrosis. Within a couple of days, lesions may evolve into vesicles, hemorrhagic bullae, skin necrosis, and eschar formation. The lesions often display a retiform pattern and predominantly affect distal extremities, occasionally extending into deeper tissues including subcutaneous fat, muscle, and bone. Secondary infection is a recognized complication.

Systemic manifestations commonly include sepsis, hypotension, circulatory collapse, and DIC, resulting in simultaneous bleeding and widespread thrombosis. Multiorgan dysfunction involving the kidneys, lungs, adrenal glands, and central nervous system frequently contributes to disease severity and mortality.

Diagnosis is primarily clinical and supported by laboratory evidence of consumptive coagulopathy. Typical findings include thrombocytopenia, prolonged PT and aPTT, reduced fibrinogen levels, and elevated D-dimer or fibrin degradation products. Evaluation of protein C, protein S, and antithrombin III levels is important, particularly in neonatal and congenital forms, although interpretation should consider prior plasma transfusions and age-specific reference values. Histopathological examination generally reveals dermal vascular thrombosis with hemorrhhagic necrosis and pauci-inflammatory thrombotic vasculopathy, assisting in differentiation from inflammatory vasculitides and other purpuric disorders.

The differential diagnosis includes immune thrombocytopenic purpura, thrombotic thrombocytopenic purpura, and different vasculitic conditions involving the skin. A distinguishing feature of PF is the rapid progression of lesions to hemorrhagic necrosis. Definitive diagnosis requires integration of clinical findings, laboratory evaluation, skin biopsy, and assessment for infection and DIC.

Management requires immediate, aggressive, and multidisciplinary intervention directed at both hemodynamic stabilization and correction of coagulopathy. Treatment includes fluid resuscitation, oxygen therapy, vasopressor and ventilatory support when required, and early initiation of broad-spectrum antibiotics in infectious cases. Anticoagulation

with unfractionated or low-molecular-weight heparin is frequently employed to control ongoing thrombosis. Protein C replacement therapy, particularly in congenital deficiency, may be administered through protein C concentrate or fresh frozen plasma. Additional supportive measures include platelet and cryoprecipitate transfusions. Surgical intervention, including debridement, fasciotomy, amputation, and reconstructive procedures, may be necessary in advanced disease.

PF remains associated with high mortality rates ranging from 20–60%, with outcomes largely determined by the extent of microvascular thrombosis and multiorgan dysfunction. Survivors often experience substantial long-term morbidity, including amputations, extensive scarring, chronic organ impairment, neurological deficits, and requirement of prolonged rehabilitation.

Recent advances in PF management emphasize early diagnosis, individualized anticoagulation strategies, protein C replacement, and precision-based approaches. Emerging therapies targeting thromboinflammation, together with advances in molecular diagnostics, genetic testing, gene therapy, and CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats)-mediated genome editing, offer promising future directions, particularly for congenital forms. These developments may ultimately shift treatment from supportive care toward personalized and potentially curative interventions.

Suggested reading:

1. *Ghosh SK, Bandyopadhyay D, Dutta A, Jane EP, Biswas SK. A Profile of 23 Indian Patients with Purpura Fulminans: A Retrospective, Descriptive Study. Indian J Dermatol. 2020; 65(5):381-387.*
2. *Davis MD, Dy KM, Nelson S. Presentation and outcome of purpura fulminans associated with peripheral gangrene in 12 patients at Mayo Clinic. J Am Acad Dermatol. 2007; 57(6):944-56.*
3. *Abdul Gafoor SM, Gelson Thomas A, Boissiere J, Roberts L, Bernal W, Creamer D. Purpura fulminans: a dermatological emergency revisited. Clin Exp Dermatol. 2026; 51(2):212-219.*

***Legend: Figure 1**: Retiform ecchymosis with skin necrosis involving the left thigh*

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Monthly Clinical Meeting of IADVL WB on 10/06/2026 at College of Medicine & Sagore Dutta Hospital, Kolkata

On June 10, 2026, College of Medicine and Sagore Dutta Hospital hosted the monthly clinical meeting, a valuable educational initiative organized by IADVL West Bengal. The session was chaired by Dr. Gangadhar Swarnakar, Ex-President of IADVL West Bengal. Key faculty members, including Dr. Nilay Kanti Das, Head of the Dermatology Department at College of Medicine and Sagore Dutta Hospital, Dr. Sudip Ghosh, Dr. Chinmay Kar, Dr. Indrashis Poddder were also in attendance to guide the academic discussions.

The gathering was especially beneficial for the Post Graduate Trainees , giving them a great platform to learn, review challenging skin conditions, and discuss practical patient management with senior experts.

The following cases were presented during the session:

- *Primary Cutaneous Nodular Amyloidosis, Pheohyphomycosis, and Cutaneous T-Cell Lymphoma — presented by Dr. Biswarup Oraon*
- *Rosacea with Demodex mite infestation showing a granulomatous reaction pattern, an uncommon presentation of Lupus Vulgaris, and Post-Kala-Azar Dermal Leishmaniasis — presented by Dr. Imran Laskar*
- *Xanthoma of Bilateral Breasts, Erythroderma in Crusted Scabies, Lepromatous Leprosy, and Histoid Hansen's disease — presented by Dr. Shreyashi Majumder*

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VITILIGO DAY: 25th June 2025
Awareness drives by different Medical Colleges in West Bengal

World Vitiligo Day, observed annually on 25th June, serves as a global platform to raise awareness about vitiligo—a benign depigmenting disorder that continues to be burdened by significant social stigma and misconceptions. While advances in treatment have improved patient outcomes, the role of dermatologists extends far beyond clinical care. They play a pivotal role in educating patients and the public, providing empathetic counseling, and advocating for greater social acceptance, thereby improving the overall quality of life of individuals living with vitiligo.

In keeping with this commitment, dermatologists across West Bengal, particularly in various medical colleges and healthcare institutions, observed World Vitiligo Day through a range of awareness activities. These included patient education programmes, counseling sessions, interactive discussions, and initiatives highlighting available treatment options. Such collective efforts underscore the dermatology community's dedication to fostering awareness, dispelling myths, reducing stigma, and building a more informed, compassionate, and inclusive society for people affected by vitiligo.

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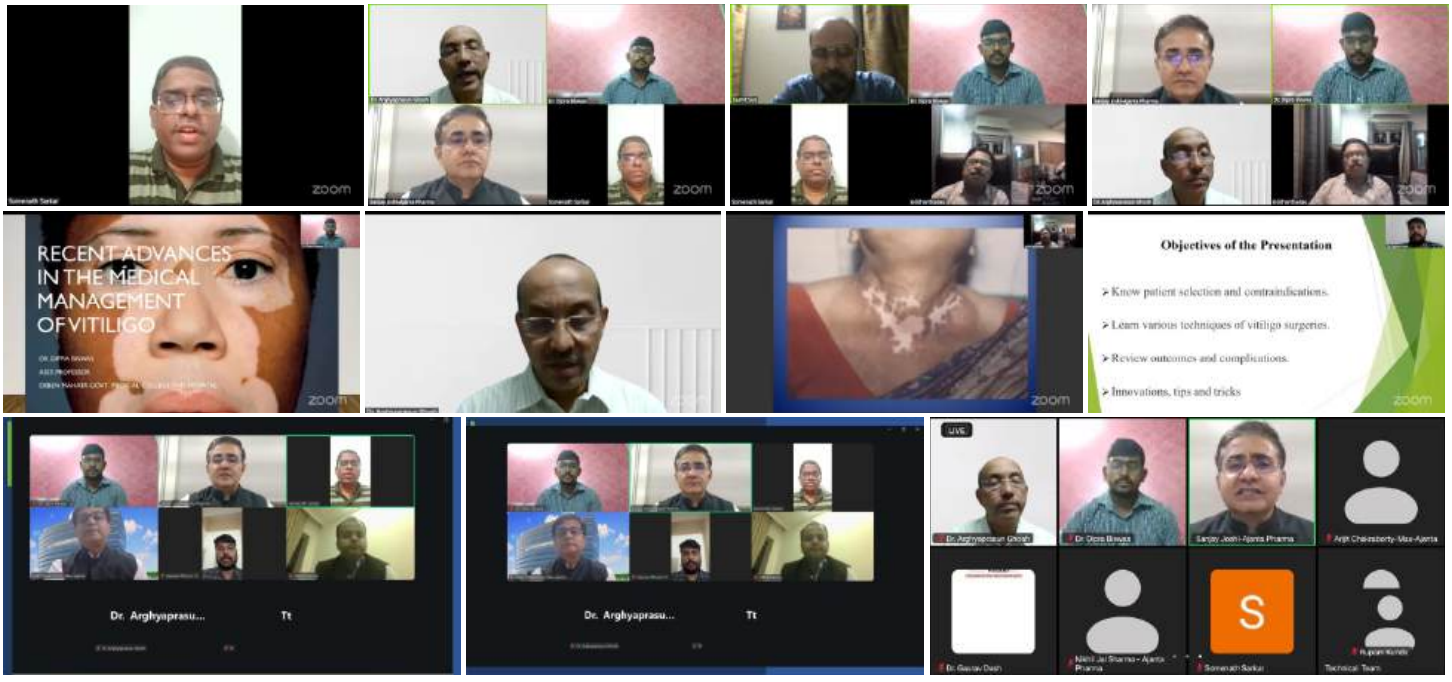
Webinar on DERMA Abahan: Season 2 Episode 2 on 25/06/2026
VITILIGO

Observing World Vitiligo Day with IADVL WB Academy's "Abahan"

To commemorate World Vitiligo Day with high-level academic discourse, the IADVL WB Academy successfully presented Season 2, Episode 2 of "Derma Abahan: The Scientific Reckoner", an initiative designed specifically to enrich the clinical knowledge of postgraduate trainees and practicing dermatologists. This focused virtual webinar, dedicated entirely to the clinical and surgical nuances of vitiligo, was held on Thursday, 25th June 2026.The event served as a cornerstone for advanced professional training. The evening's proceedings were formally introduced by Dr. Arghyaprasun Ghosh, President of IADVL WB. The core of the program featured highly anticipated lectures from esteemed experts. Dr. Dipra Biswas took the digital stage to explore the recent advances in the medical management of vitiligo, followed by Dr. Gaurav Dash, who provided a vital update on the surgical management of the condition. To complete the scientific presentations, Dr. Siddhartha Das guided the attending PGTs and dermatologists through difficult case scenarios and practical management approaches in vitiligo. This comprehensive educational evening was then brought to a close with concluding remarks by Dr. Sumit Sen, Academy Chairperson of IADVL WB, and a final vote of thanks delivered by the Hony. Secretary, Dr. Somenath Sarkar. By aligning expert clinical insights with the occasion of World Vitiligo Day, this event stood as a powerful educational platform, directly empowering the dermatology fraternity with the latest evidence-based tools to optimize patient care.



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14th Mid-Term Conference of IADVL WB State Branch
Venue: Anticlock Suites & Resorts, Bankura| Date: 27th & 28th June 2026

The Mid-Term Conference 2026 of the IADVL West Bengal Branch was held on June 27th and 28th at Bankura, featuring a structured scientific programme that elegantly spanned clinical and procedural dermatology. The inaugural ceremony was graced by Chief Guest Dr. (Prof.) Panchanan Kundu, Principal of Bankura Sammilani Medical College, and Guest of Honour Dr. Arpan Kumar Goswami, MSVP of BSMCH, and was beautifully complemented by a traditional cultural performance by the Rangamati Baul Sampraday from Santiniketan. The academic deliberations commenced with sessions on ethics, featuring Dr. Amrita Sil on artificial intelligence in biomedical research and Dr. Sonai Mondal on commercialism in aesthetic dermatology. Dr. Nilav Kanti Das presented on new and emerging STIs, followed by an interactive, case-based panel discussion moderated by Dr. Jayanti Datta. Therapeutic approaches to specialized areas were thoroughly explored, with Dr. Somenath Sarkar offering updates on chromonychiasis alongside a nail disorders panel moderated by Dr. Sisir Das, while hair loss therapies were updated by Dr. Surajit Gorai alongside a difficult case-based panel moderated by Dr. Anupam Das. The scientific agenda also featured algorithmic approach to adult generalized pustular lesions by Dr. Sudip Kr Ghosh—complemented by a panel moderated by Dr. Partha Mukhopadhyay—and latest leprosy guidelines from Dr. Nilendu Sarma, which paired with a reactions-focused panel moderated by Dr. Animesh Biswas. A key highlight of the event was the prestigious Dr. B C Lahiri Memorial Oration, elegantly delivered by Dr. Manas Chatterjee, who shared insights from his extensive journey in procedural dermatology. Additional high-yield clinical updates included an overview of biologics in psoriasis by Dr. Abhishek De and an insightful urticaria panel moderated by Dr. Indrasish Podder. Designed to foster dermatological expertise at every professional tier, the conference featured a rapid-fire Young Dermatologist Forum for early-career specialists, dedicated free paper sessions for Life Members, and a rich array of activities for postgraduate residents, who enthusiastically engaged in a comprehensive poster walk, award paper presentations, and a dynamic IADVL WB Quiz steered by Quiz Master Dr. Deblina Bhunia and Assistant Quiz Master Dr. Pratik Dey. Following the Valedictory Session, this highly successful gathering concluded seamlessly with a formal vote of thanks and closing remarks from the branch leadership, including Hony. Secretary Dr. Somenath Sarkar, President Dr. Arghyaprasun Ghosh, and Dr. Manas Chatterjee.

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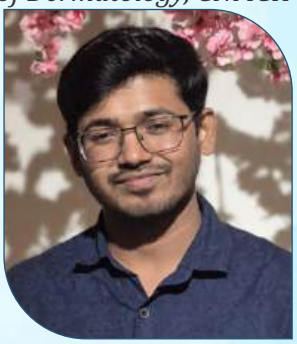
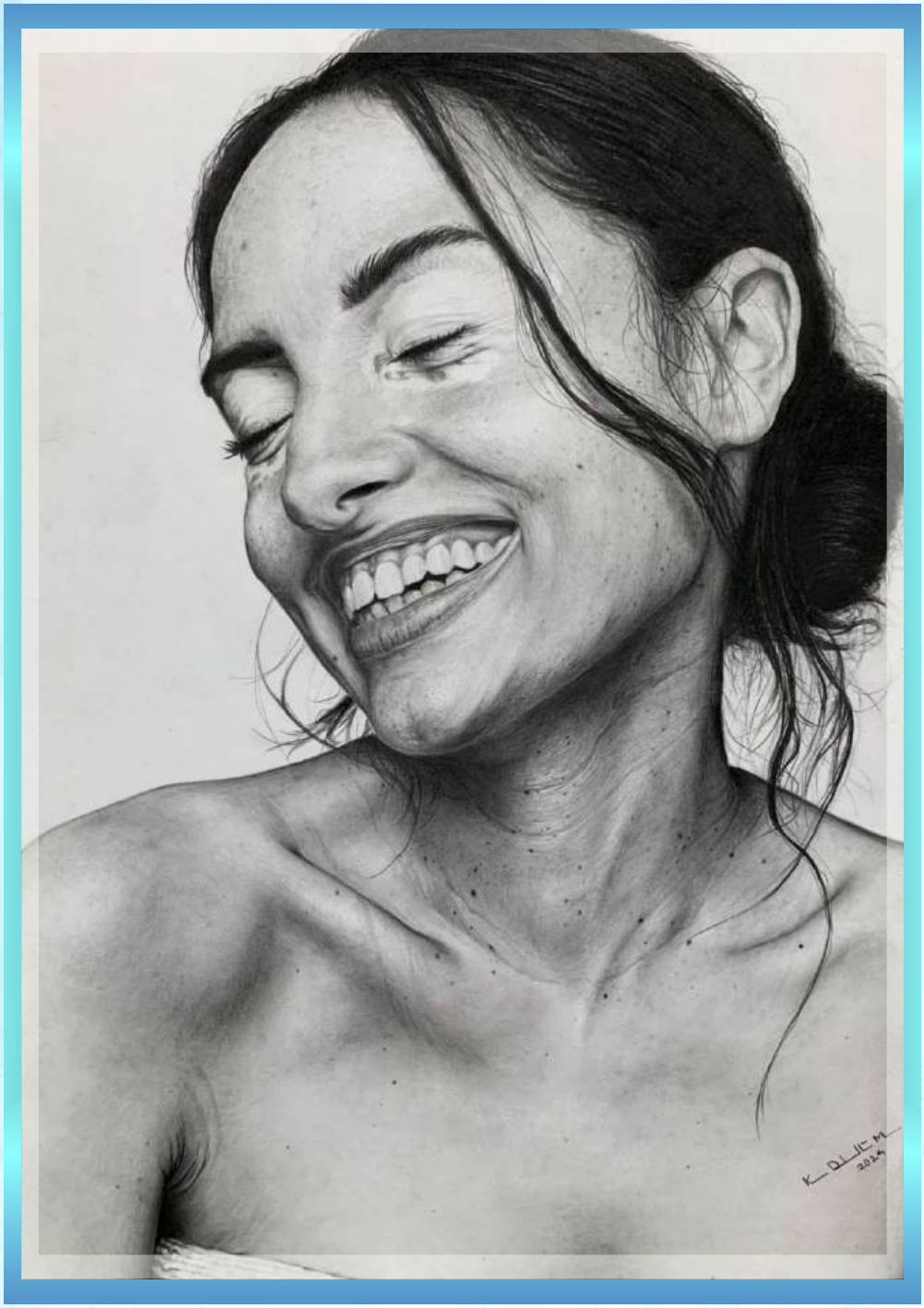
DERMAGINATIONS: PAGING PASSION BEYOND PRACTICE

Dr. Mukti Halder
3rd Year PGT,
Deprt of Dermatology, CNMCH





Courtesy by Dr. KDM

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Derma Times

News, Trends & Developments

The FDA has approved Skinvive for the treatment of neck wrinkles in adults aged 21 years and older, making it the first hyaluronic injectable specifically acid approved for this indication. Skinvive works by enhancing the skin's ability to retain moisture, thereby improving softness, smoothness, and the appearance of neck lines. The approval expands nonsurgical treatment options for neck rejuvenation and offers a targeted approach to addressing age-related skin changes in the neck area.

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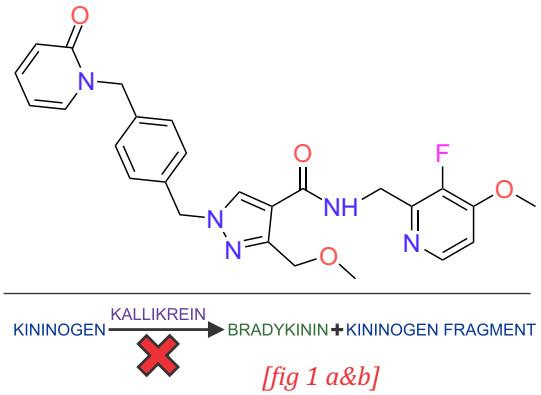
Quiz Zone

Q1. *A 19-year-old woman presented with sudden onset non-pruritic swelling of lip, face & extremities associated with severe abdominal pain. She reported similar episodes in past. On enquiry, her mother had similar history. Laboratory evaluation revealed low C4 level. She was urgently started on an oral medication by the treating physician. Fig. 1a & b depict the molecular structure & mechanism of action.*

- *Identify the drug.*



[fig 1 a&b]

Q2. *Fig. 2a depicts a disease & fig. 2b highlights a thematic representation of a clinical trial for this disease.*

- *Name the drug tested in that trial.*

Q3. *A 35-year-old woman presented with intensely pruritic, hyperpigmented, rippled plaque over the interscapular region of upper back for the past 3 years. Punch biopsy from lesion shows homogeneous eosinophilic deposits in papillary dermis (Fig. 3). She also reports episodic palpitation, headache & diarrhoea. On examination, a thyroid nodule was palpable. Her father died of thyroid cancer at the age of 46 years.*

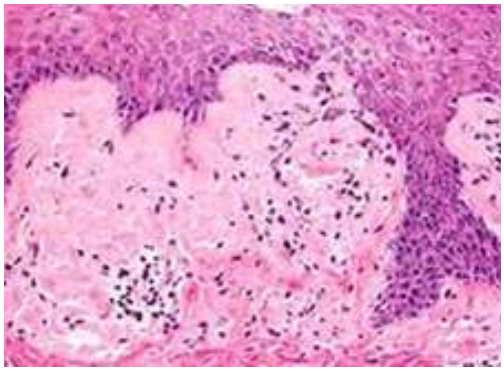
A. *What is the most likely underlying diagnosis?*

B. *Which gene is implicated in its pathogenesis?*

[fig 2 a&b]

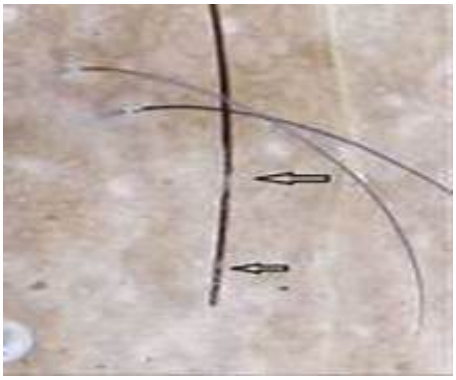
Q4. *These two German Dermatologists (Fig. 4) are credited with discovery of which organism?*

Q5. *Name the dermoscopic sign & underlying disease? (Fig. 5)*



[fig 3]

[fig 4]



[fig 5]

The correct response given: Dr. Shatanik Bhattacharya for Quiz & Crossword

Thank You for your answer and happy reading

Kindly send your entry to iadvlwb@gmail.com with 'Skintellect Quiz' as subject.
The correct response of each month gets acknowledged in the next issue.
Send your entries now!
Good luck from Team Skintellect.

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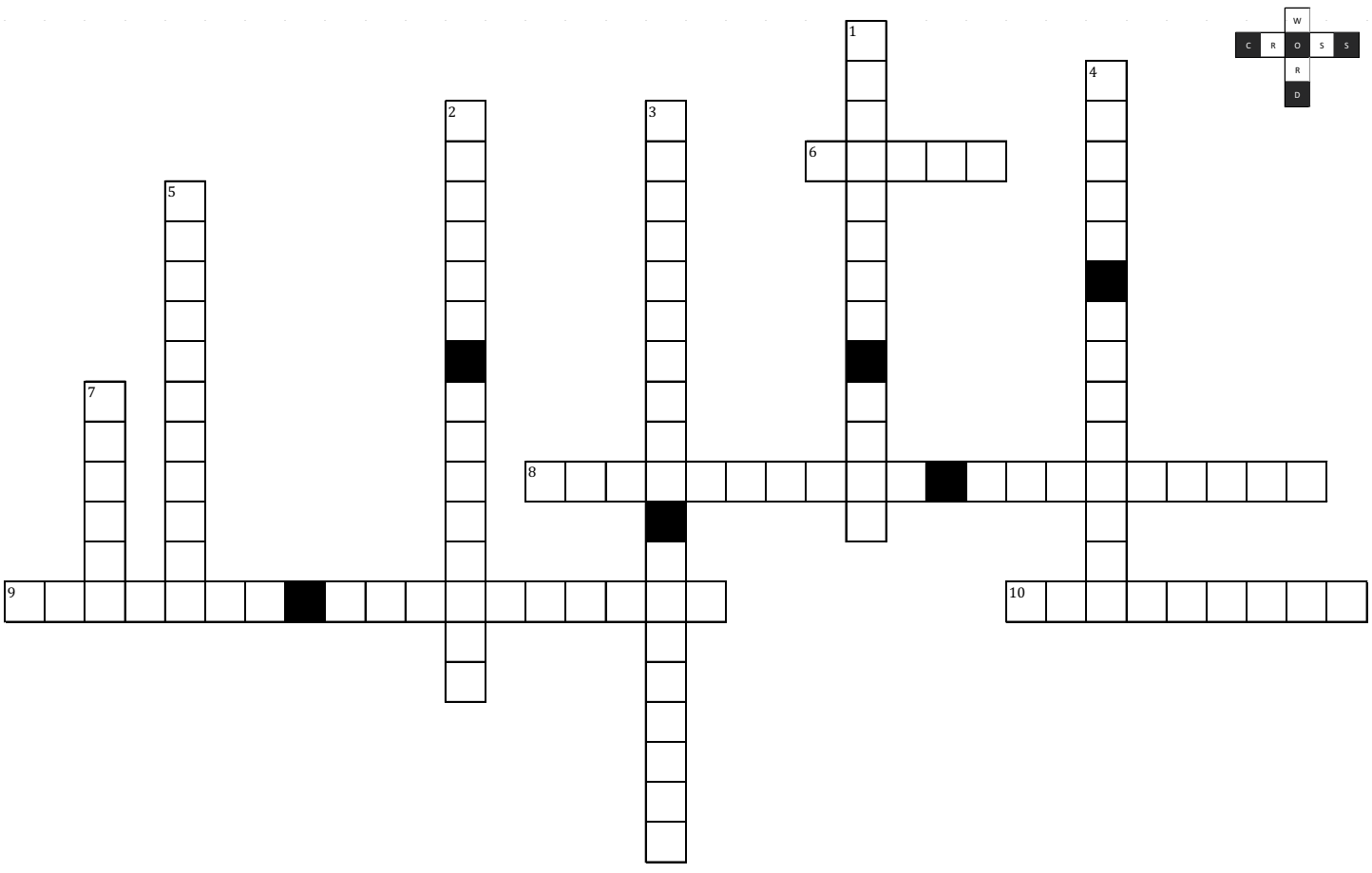
Brainstorm

Across

6. Initial presentation of Finkelstein–Seidlmayer disease
8. Dermoscopy: Cristae and Sulci
9. Hypothesis related to neuropathogenesis in leprosy
10. P in EMPACT

Down

1. Apricots source of which peel
2. Muscle segment homeobox 1 genetic mutation seen in
3. Fusion protein of Diphtheria toxin and IL2
4. Albinism with deafness
5. Recent FDA-approved IL23 antagonist for moderate to severe plaque psoriasis
7. Sensitizer: Mercapto mix



Quiz Answer Volume-4, Issue-2

1. *Eccrine Angiomatous Hamartoma*
2. *Niels Ryberg Finsen*
3. *Yesudian Sign- palmar freckling in Nf1*
4. *Antler like buckshot pattern Dowling degos disease*
5. *White dermographism*

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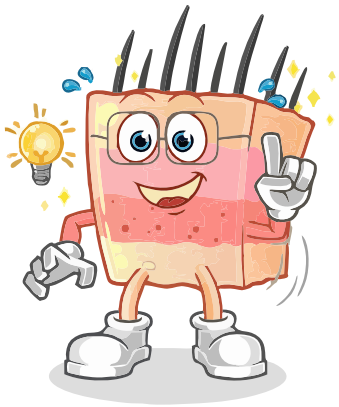
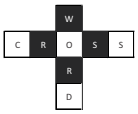
Dermwiz

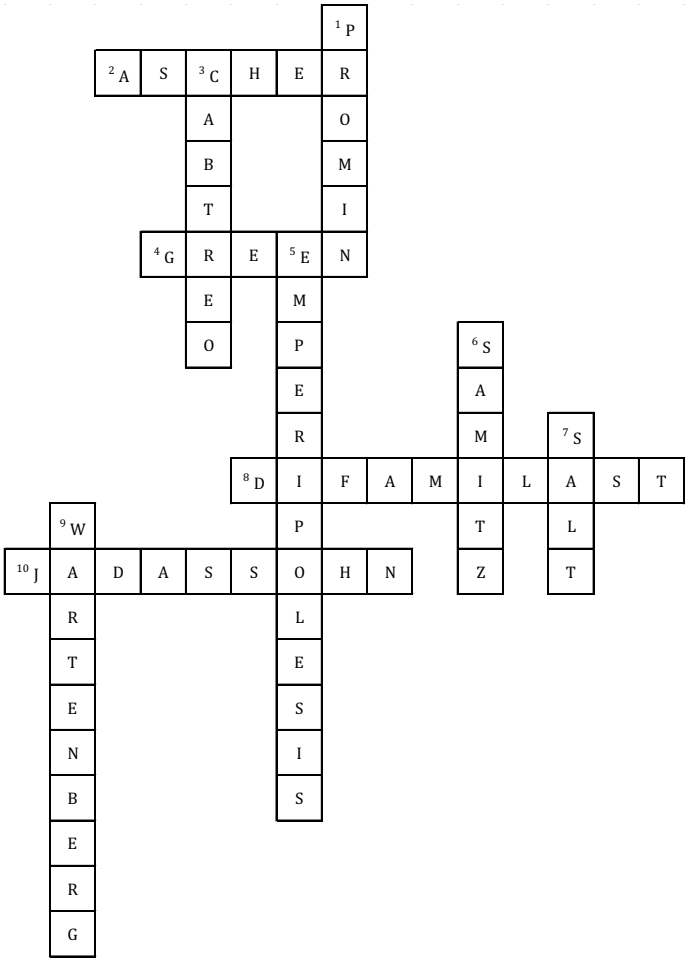
A
minor wound, a
surgeon's trace,
May unexpectedly set the pace.
Where others heal, I deepen fast,
Expanding far beyond the past.
I often start as tender red,
A pustule where few fears are bred.
But soon my edges undermine,
With violaceous, irregular line.
Though cultures fail to name a foe,
Immunity drives the damage's flow.
The gut may ache, the joints complain,
Their hidden battles feed my flame.
Debridement's blade may worsen fate,
For injury can accelerate.
Not every ulcer is infection's game—
Tell me, what disease bears this
name?



Dermwiz Answer
Volume-4, Issue-2

Delusional Parasitosis





Answer
Volume-4, Issue-2

Save the Date

ermazone east
uticon wb
2026

32nd Zonal Conference of IADVL & 29th Annual State Conference of IADVL WB

27th, 28th & 29th November 2026

BBCC, Kolkata

DERMAZONE EAST

32nd East Zonal Conference of IADVL **&** **29th Annual State Conference of IADVL WB Branch**

CUTICON WB 2026

Theme:
NextGen Dermatology
Clinical Mastery Meets Innovation

Program Highlights

- Aesthetic Dermatology
- AI in Dermatology
- Allergic Skin Disorders
- Behavioural Patterns in STI
- Clinicopathological Correlation
- Dermatoeconomics
- Dermatology & Internal Medicine
- Dermato-Oncology
- Emerging Cutaneous Infections
- Geriatric Dermatology
- Microbiome in Dermatology
- Neglected Tropical Diseases
- Pediatric Dermatology
- Precision Medicine in Dermatology
- Psychodermatology
- Regenerative Medicine
- Robotics in Dermatology
- Therapeutic Updates