PDS-E-BULLETIN

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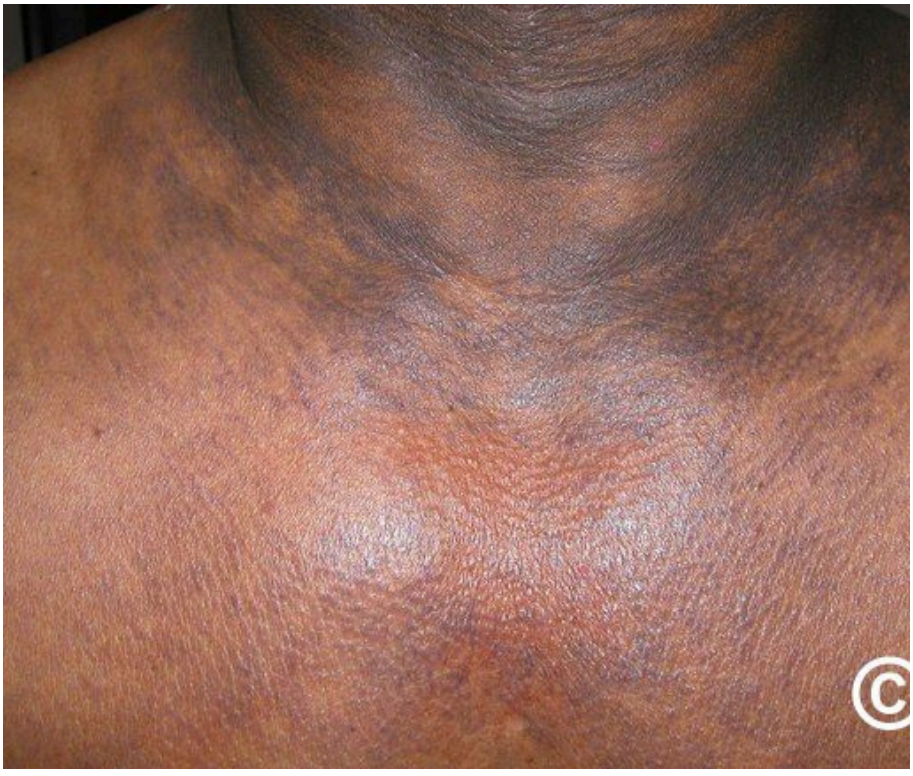

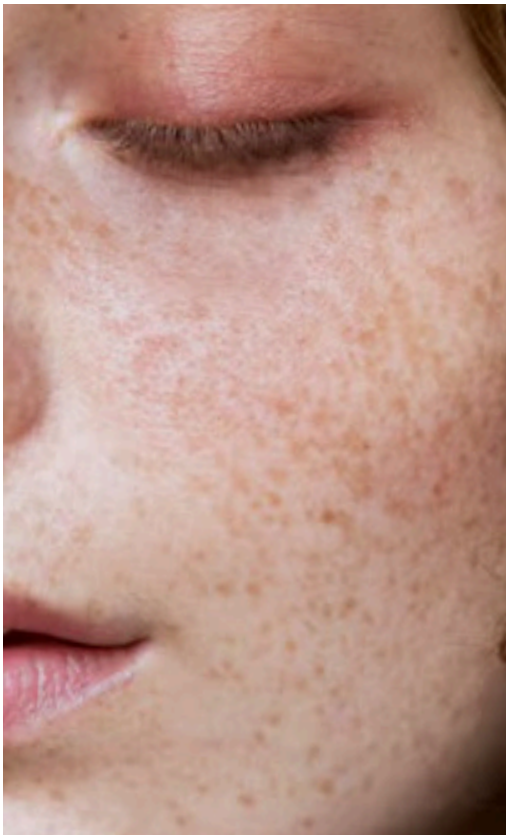

INDEX

EDITORIAL MESSAGE

Dear Colleagues and Members of the Pigmentary Disorder Society,

It is with great pleasure that I introduce the first issue of our E-bulletin, a platform dedicated to sharing knowledge, research, and experiences related to pigmentary disorders of the skin. As the Editor-in-Chief, I am honored to be a part of this initiative.

Pigmentary disorders, such as vitiligo, melasma, and albinism, affect millions worldwide, causing not only physical discomfort but also emotional distress due to the associated stigma. It is essential to address these concerns, promote awareness, and support those affected.

I extend my heartfelt gratitude to Dr. Rashmi Sarkar and Dr. Sunil Dogra, pioneers in the field, for their tireless efforts in establishing the Pigmentary Disorder Society. Your dedication has paved the way for this E-bulletin.

I also thank Dr. Surabhi, Academy Chair, for her enthusiasm in bringing forth the academy, which will be instrumental in educating and training professionals.

To all contributors of this first issue, I express my sincere appreciation for your valuable insights and expertise.

Through this E-bulletin, we aim to:

- Share latest research and advancements
- Promote awareness and understanding
- Support patients and families affected
- Foster collaboration and knowledge sharing

I look forward to your continued support and contributions.

Prof. (Dr.) Sunil Kumar Gupta
Editor-in-Chief
Head of the Department of Dermatology & Venereology
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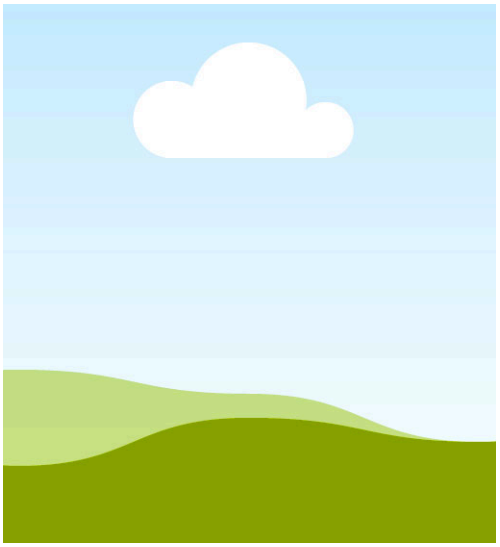
MESSAGE FROM ACADEMY CHAIR



LICHEN PLANUS PIGMENTOSUS

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A CONVERSATION WITH A VETERAN

Authored by Dr. Farkhanda Sofi
JR, Department of Dermatology & Venereology
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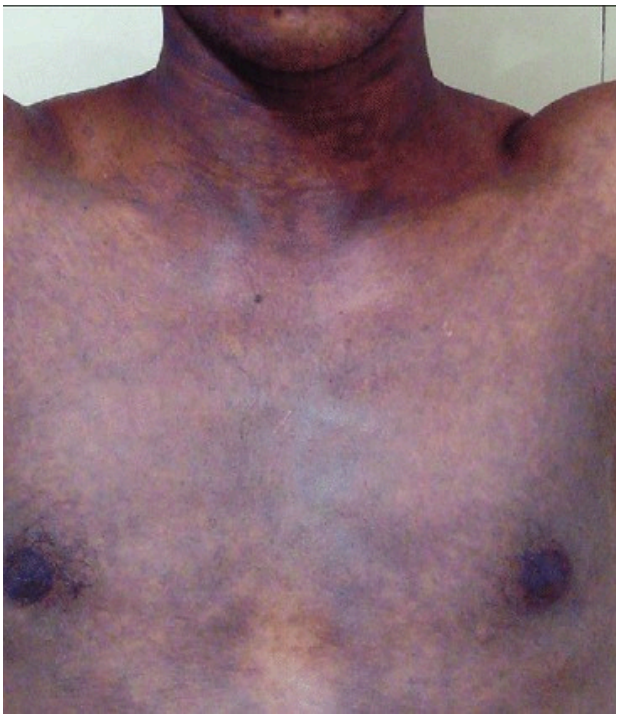


Q. What is lichen planus pigmentosus and how is it related to lichen planus?

Ans: Lichen planus pigmentosus is a disease which is a form of lichen planus, but this name of “lichen planus pigmentosus” originated in India and was given by late Dr. Bhutani and since then we understand that this is a disease, which is almost a macular form of lichen planus and is rather diffuse in its distribution. Having said that, it has a lot of features which seem to be common with conditions like ashy dermatosis, erythema dyschromicum perstans, pigmented contact dermatitis, riehl’s melanosis, and probably Idiopathic eruptive macular pigmentation. So it is a diffuse kind of pigmentation, and it can be a little pruritic sometimes and very difficult to treat.

Q. How commonly do you encounter this condition in your practice?

Ans: The fact is that it is anyway much less than melasma, as it is the commonest disorder we see in the facial pigmentation disorders, but even then probably out of the facial pigmentation conditions we encounter, it does come in the top five conditions, but definitely much less than melasma and post inflammatory hyper pigmentation.

Q: Literature points to the fact that some very common topical products like mustard oil etc may be responsible for this condition. What is your expert opinion with respect to the cases that are coming to the OPD regarding the same?

Ans: The aetiology is unknown, but one thing we know is that it is a dermal pigmentation, so something is causing an irritation to the basal melanocytes . It was long back that Dr. Bhutani had talked about mustard oil and there is a reason to it because we know that sunlight and cosmetics sometimes causes sensitisation in patients, which is not enough to cause contact dermatitis, but it may be enough to just cause some dermal pigmentation. There could be multiple reasons, but yes, we know that it can sometimes run in families, or can occur due to some cosmetics, mainly mustard oil as it is one of the commonest things used by both men and women in India.

Q: What is new in our understanding of pathogenesis of LPP ?

Ans: The pathogenesis is still very unclear, it is a dermal pigmentation and there could be several reasons for that. Of course for pigmented contact dermatitis, we are sure that it is due to cosmetics , hair dyes and oils, because there is a preceeding inflammation, but typically, when you are thinking of lichen planus pigmentosus or conditions like lichen planus pigmentosus, they are supposed to be non-inflammatory. So not much is known about it, like, for example, melasma or post inflammatory hyperpigmentation.

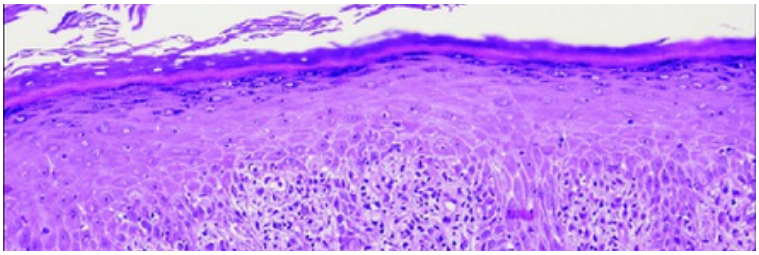
Q: What are the most commonly seen conditions that mimic LPP that we must keep in mind while making the diagnosis?

Ans: There is pigmented contact dermatitis/ riehls melanosis, ashy dermatosis, erythema dyschromicum perstans, then of course we can think of idiopathic eruptive macular pigmentation after we have ruled out everything. Of course, you also have to rule out common conditions like melasma, pigmentory demarcation lines too.

Q: LPP and Erythema dyschromicum perstans have been observed to closely resemble each other in terms of their appearance. How can a clinician solve this delemma?

Ans: Actually, they look pretty much alike and in practice it is really difficult,the only thing is that we tend to call it more LPP here in India and the same thing is called more of EDP in South America. As for the distribution, EDP vs LPP is more truncal and sometimes on upper limbs, whereas LPP involves the face and neck, and of course it can be either way also.And secondly, EDP is supposed to be having an erythematous halo or a border, but to be very frank, it can be present in very early stages, and you may not really be able to see it.

Then ofcourse LPP can be slightly pruritic which is usually not there in EDP. Otherwise, it is an overlap because histopathologic and other features are very much similar.



Q: What is the link between LPP and Frontal fibrosing alopecia?Is there any proven relationship between the two and what can be the underlying mechanism?

Ans: yes, we are seeing these two conditions occurring together, but there is no clear-cut evidence to that. It could be because the of the same etiology as lichen planus as we know that even lichen planus does cause cicatricial alopecia, so maybe that way there is a link, but as of now there is not much substantial evidence. I feel they could just be coexisting as they have a common disease with them, that is lichen planus.

Q: What should be the approach while treating this condition and please share your expertise on how to choose the best management according to patients presentation?

Ans: I think the most important cornerstone is counselling , you have to tell the patient that it is a very recalcitrant pigmentation which may take a very long time to go. so you have to prepare the patient beforehand and ask the patient to be using camouflage as camouflage is something you are really going to be needing. General majors, of course , you can tell them are avoiding using too much of chemicals like mustard oil but in general, I wouldn't say to say no to all cosmetics because sometimes these cosmetics themselves can be camouflage agents. Second thing will be photo protection like using sunscreen.

In the initial stages, when it is spreading, you might have to give a short course of oral corticosteroids just to control it ,if it is very spreading. Otherwise, if it is not so active, it is good to do a histopathology or dermoscopy to establish the diagnosis.
Once the diagnosis is established, you can give retinoid like isotretinoin , which works very well. It takes some time, but you can continue it after doing all the appropriate investigations.

In the topical medications, you can give topical steroids, triple combination therapy, or even tacrolimus, which is also very good for maintenance. Also in resource poor areas, you can think of giving vitamin A. Some other agents like dapsone, cyclosporine , antioxidants like vitamin C can be given. Clofazimine , mycophenolate mofetil and tofacitinib have also been tried. Colchicine has also been tried, but with cholchicine it seems that the results are also not very good. So, a huge number of drugs have been tried.

Q: What are the interventions that can be used and when should one start them?

Ans: As far as the intervention is concerned, you have to wait for disease burnout, for that you have to ask about the duration of the disease, and if the histopathology does not show too much infiltrate at the dermoepidermal junction, that's when you think that the disease is in a burnt out stage, and that's the time when you may think of doing a Q-switched Nd:YAG laser and I would say low fluence and larger spot size, but we don't have any standardisation yet.

Even chemical peels can be used in the burnt out stage like the glycolic acid peel or low concentration phenol peels which has medium depth and TCA peel. So, these things can be tried, but making sure that the disease is in the burnt out stage.

Q: In a recent case report published in Dec 2023, Ruxolitinib has been called a potentially compelling addition to a dermatologist's armamentarium. What is your expert opinion about Ruxolitinib regarding it's efficacy and safety?

Ans: See, we don't have topical ruxolitinib in India yet, so we can't comment on that, we have topical tofacitinib but I don't think there is enough evidence, but it's definitely something that could be used. Ruxolitinib again will have the same role because we are using JAK inhibitors. Safety, I don't think will be an issue, but whether it works or not is something to be seen. And we look forward to using ruxolitinib in the future once it is available in India.

Q: What is the psychological impact of this condition on the patient's mind and the importance of counselling in such patients?

Ans: There is a huge psychological impact because with that kind of a diffuse and dark pigmentation, it does affect the quality of life like anything, because people find it difficult to go out in social engagements and even their places of work. So there is definitely an impairment in the quality of life and self-esteem which is all the more reason that we need to find an effective treatment. Counselling, as I mentioned remains the cornerstone in management of such patients.

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NEW IN PIGMENT RESEARCH

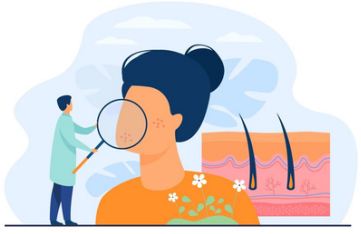
ADVANCEMENTS IN DIAGNOSTIC AND THERAPEUTIC DOMAINS

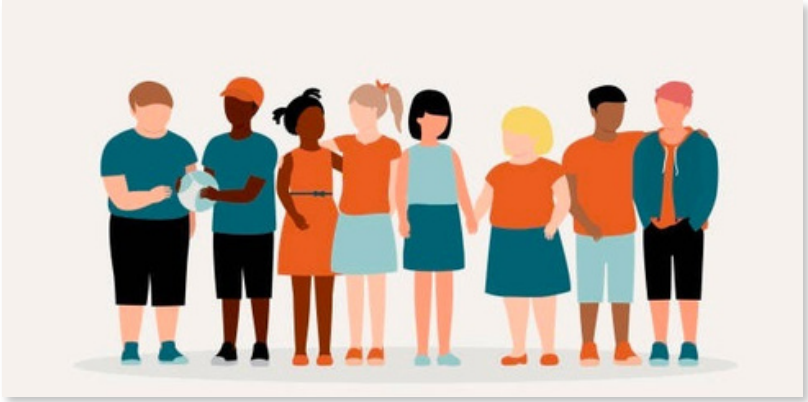
Treatment of infantile giant café au lait spot

Infantile giant café au lait spot (IGCALS) is a huge (diameter >20cm) irregular-shaped benign hyperpigmented patch that arises in infants.During a study it was found that early intervention before 12 months of age with golden parameter therapy using a high fluence 1064 nm Q- switched Nd:YAG laser is shown to be a safe, applicable and effective treatment for IGCALS, minimizing side effects without any recurrences.

GP100 new target for melanoma treatment

Drugs or cellular products that bind to gp100 are being investigated for treatment of cutaneous melanoma. The relative specificity of gp100 expression in melanocytes makes it an attractive target to harness for therapeutic intent. For example, Tebentafusp, a bispecific gp100 peptide-HLA-directed CD3 T cell engager, has generated significant enthusiasm in recent years due to its success in improving outcomes for uveal melanoma.





The possible role of Wnt/β-catenin signalling in vitiligo treatment

Treatment of vitiligo should control the exaggerated immune response to arrest the progress of active disease, and then promote melanocytes to repigmentation. Wnt/β-catenin signalling pathway is downregulated in vitiligo. Upregulation of Wnt/β-catenin signalling protects melanocyte from OS damage, inhibiting CD8+ T cell effector cell differentiation and enhancing Treg. Wnt/β-catenin signalling plays a critical role in the melanocyte regeneration by driving the differentiation of melanocyte stem cells (McSCs) into melanocytes. Promoting Wnt/β-catenin signalling can not only arrest the progression of active disease but also promote repigmentation. Some of the main effective therapies for vitiligo are likely to work by activating Wnt/β-catenin signalling.

Efficacy of topical gabapentin in women with primary macular amyloidosis

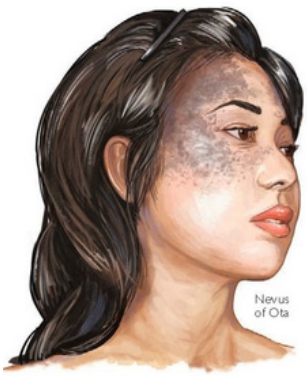
Primary cutaneous macular amyloidosis (PCMA) is a chronic pruritic cutaneous disease characterized by heterogeneous extracellular deposition of amyloid protein in the skin. During a side-by-side triple-blinded randomized clinical trial aimed to evaluate the efficacy of topical 6% gabapentin cream for the treatment of patients with PCMA it was seen that topical gabapentin cream may be effective as a topical agent in the treatment of pruritus associated with PCMA without any significant adverse effects.

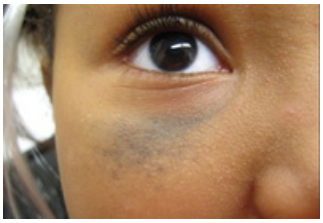
Up-and-coming drugs for the treatment of vitiligo

Vitiligo is a chronic autoimmune disease that causes depigmented patches on the skin. It affects 0.5%–2.0% of the global population. Current treatments focus on topical steroids and tacrolimus, systemic steroids, and phototherapies, but their efficacy remains suboptimal necessitating the development of new therapeutic options

Table 1. Clinical trials of emerging treatments in vitiligo

NCT ID	Treatments	Classification	Type of vitiligo	Phase	Status
NCT05750823	Ruxolitinib	JAK 1/2 inhibitor	Nonsegmental vitiligo with genital involvement	2	Recruiting
NCT05247489	Ruxolitinib and Phototherapy	JAK 1/2 inhibitor	Nonsegmental vitiligo	2	Completed
NCT05293119	Tofacitinib	JAK 1/3 inhibitor	Nonsegmental vitiligo	1	Not yet recruiting
NCT04822584	Baricitinib and Phototherapy	JAK 1/2 inhibitor	Active nonsegmental vitiligo	2	Completed
NCT06118411	Upadacitinib	JAK 1 inhibitor	Nonsegmental vitiligo	3	Enrolling by invitation
NCT05583526	Ritlecitinib	JAK 3 and TEC inhibitor	Nonsegmental vitiligo (active and stable)	3	Recruiting
NCT03715829	Ritlecitinib and Brepocitinib	JAK 3 and TEC inhibitor and JAK1 and TYK2 inhibitor	Active nonsegmental vitiligo	2	Completed
NCT03468855	Ifidancitinib	JAK 1/3 inhibitor	Active nonsegmental vitiligo	2	Completed
NCT06113445 NCT06113471	Povorcitinib	JAK 1 inhibitor	Nonsegmental vitiligo	3	Recruiting
NCT05917561	Anifrolumab	Anti-IFN-α monoclonal antibody	Active nonsegmental vitiligo	2	Recruiting
NCT04338581	AMG 714	Anti-IL-15 monoclonal antibody	Nonsegmental vitiligo (active and stable)	2	Recruiting
NCT06113328	MK-6194	IL-2 mutein Fc fusion protein	Nonsegmental vitiligo	2	Recruiting
NCT02281058	Abatacept	Immunoglobulin G1 fusion protein (CTLA-4)	Active nonsegmental vitiligo	1	Unknown status
NCT05298033	Crisaborole	PDE4 inhibitor	Nonsegmental vitiligo (active and stable)	2	Active, not recruiting
NCT05210582	Afamelanotide	α-MSH analog	Stable of slowly progressive nonsegmental vitiligo, Fitzpatrick skin types IV–VI	2	Recruiting
NCT06109649	Afamelanotide and Phototherapy	α-MSH analog	Active or stable vitiligo, Fitzpatrick skin types IV–VI	3	Recruiting
NCT05342519	Rapamycin	mTOR inhibitor	Nonsegmental vitiligo	2	Active, not recruiting
NCT05607316	Metformin	Mitochondrial metabolism inhibitor (dimethyl biguanide)	Stable vitiligo	2	Recruiting





Picosecond alexandrite laser treatment of nevus of Ota in children

The picosecond alexandrite laser has been safely and effectively used to treat the nevus of Ota in adults. However, limited data are available for children. On retrospective analysis in Chinese children with nevus of Ota who received a 755nm picosecond alexandrite laser treatment in a tertiary dermatological hospital. It was found that 755nm picosecond alexandrite laser is safe and effective in treating nevus of Ota in children.

Efficacy, safety, tolerability and treatment durability of microneedling plus topical tranexamic acid in combination with topical modified Kligman lightening formula for melasma: A l

Treating melasma with conventional therapies has been challenging with a high risk of recurrence.But during a four-arm assessor and analyst blinded randomized controlled clinical trial it has been found that the modified Kligman formula outperformes microneedling-TA alone. However, with optimal patient selection, particularly targeting those at lower risk for PIH with lighter skin phototypes and scheduling treatments during less-sunny seasons, combining microneedling with 4% or 10% TA and the modified Kligman formula significantly enhances efficacy and satisfaction rates compared to conventional topical treatment

Efficacy of isobutylamido thiazolyl resorcinol for prevention of laser-induced post-inflammatory hyperpigmentation

Q-switched (QS) Nd: YAG laser is one of the treatment options for solar lentigines (SLs). However, the incidence of post-inflammatory hyperpigmentation (PIH) is a common complication, especially in dark-complexioned skin. Isobutylamido thiazolyl resorcinol (ITR) has been reported as a preventive modality for ultraviolet B (UVB)-induced hyperpigmentation.Two-week application of ITR prior to QS: Nd YAG laser treatment may potentially reduce the incidence of PIH. A longer duration of application, including after the laser procedure, may be more beneficial for the prevention of laser-induced PIH.