

*Davinder Parsad*

I must thank Prof. D. M. Thappa for preparing this issue focusing on vitiligo. Vitiligo is the most common depigmenting disorder having a major impact on the quality of life of patients. Despite continued progress toward an elucidation of the biochemical, genetic and immunopathological pathways in vitiligo, a definitive cure remains elusive. Although much research is ongoing in this field, there are still major limitations in current vitiligo research that are reflected in current treatment strategies. In this special issue, there are nine papers on vitiligo that review some of the crucial elements currently being investigated in this field, including three original articles.

Vitiligo has a profound effect on the quality of life of vitiligo patients, many of whom feel distressed and stigmatized by their condition. Ramam and Krishna emphasize in their editorial the need for a composite severity scale that should include psychosocial impact apart from disease progression and repigmentation potential. Focusing on enhancing self-esteem and improving quality of life in vitiligo patients should be an important part of the management of vitiligo. Camouflage has been shown to improve the quality of life in patients with vitiligo. Kaliyadan and Kumar provide a broad review on the different camouflage options available in vitiligo – products and techniques with their relative advantages and disadvantages.

Department of Dermatology, PGIMER, Chandigarh, India

**Address for correspondence:**

Dr. Davinder Parsad, Department of Dermatology, PGIMER, Chandigarh, India. E-mail: [parsad@me.com](mailto:parsad@me.com)

Access this article online	
Quick Response Code:	Website: <a href="http://www.ijdvl.com">www.ijdvl.com</a>
	DOI: 10.4103/0378-6323.90941

Several theories have been proposed about the pathogenesis of vitiligo, but the precise cause behind melanocyte destruction remains unknown. Theories regarding the destruction of melanocytes include autoimmune mechanisms, cytotoxic mechanisms, an intrinsic defect of melanocytes, oxidant–antioxidant mechanisms and neural mechanisms. Recently, a new theory, melanocytorrhagy, has been proposed. According to this theory, depigmentation in vitiligo patches results from a chronic detachment of melanocytes called melanocytorrhagy, which is possibly related to increased susceptibility to mechanical and other types of stresses like chemical stress. Kumar and Parsad explore the relationship between apoptosis and melanocytorrhagy in the pathogenesis of vitiligo. In this review, they summarized all the theories for vitiligo with a focus on a new integrated theory that takes into account melanocyte detachment and transepidermal elimination, neural–biochemical and autoimmune hypotheses. The authors conclude that as there can be different pathomechanisms for different subtypes of vitiligo, melanocytorrhagy can play an important role in some subsets of vitiligo.

Boissy *et al.* describe an overview of the pathomechanism of vitiligo, emphasizing on the complex of vitiligo susceptibility genes that influence the autoimmune response and environmental or physiological factor(s) that activates the genetic program for melanocyte destruction. They further review how oxidative stress can come into play in the final removal of melanocytes. The authors point out that starting from the overlapping but distinct pathomechanisms, treatment should be finalized to the cellular targets and possibly related to the disease phase.

Childhood vitiligo deserves special attention as, frequently, the disease onset is before 20 years of age. Palit and Inamadar provide a comprehensive review on childhood vitiligo describing the epidemiology, clinical features, differential diagnosis and various

**How to cite this article:** Parsad D. Vitiligo: Emerging paradigms. Indian J Dermatol Venereol Leprol 2012;78:17-8.

**Received:** December, 2011. **Accepted:** December, 2011. **Source of Support:** Nil. **Conflict of Interest:** None declared.

treatment modalities, including surgical modalities. They also give due attention to vitiligo as a component of hereditary syndrome.

A critical appraisal of the current available treatment modalities of vitiligo points that we are still far away from an ideal weapon for vitiligo treatment. In the present era, we have a wide spectrum of many effective treatments for vitiligo; however, as an average and considering all affected anatomical locations, the best repigmentation rates do not reach figures beyond 70%, with acral regions and lesions with leucotrichia being the most difficult to repigment. Possibly, a combination of various treatment modalities could be a solution. Because the type, speed and stability of repigmentation in vitiliginous patches seem to depend on the type of treatment given, a combination of various available treatment options is indicated for therapeutically and cosmetically effective results.

Ultraviolet (UV) light-based therapy has been a mainstay of therapy for vitiligo for many decades. The earliest form was psoralen and UVA (PUVA) photochemotherapy. Currently, the most commonly used form is narrow-band ultraviolet B (NB-UVB) and, for limited areas, targeted phototherapy (excimer laser or excimer lamp). Hamzavi *et al.* provide a broad overview of phototherapy-based treatment modalities in vitiligo. They discuss the role of PUVA, NB-UVB and targeted therapy in vitiligo. They nicely cover this topic with patient selection, optimal dosing and recommendation.

Depigmentation therapy in vitiligo is an option in those with extensive vitiligo who have failed to respond to medical therapy and have obvious cosmetic disfigurement due to intervening patchy pigmented

areas. Gupta *et al.* have written a review on the various depigmenting therapies, with an emphasis on patient selection, as various aspects of these therapies, such as the cost, treatment time, course, permanency of depigmentation, side-effects and the possibility of repigmentation, should first be discussed with the patient.

Non-cultured epidermal suspension (NCES) is emerging as the treatment of choice for surgical management of vitiligo because it can treat a large area with good color match and without any laboratory facilities. Gauthier and Benzekri describe the detailed method of NCES in the surgical management of vitiligo. They provide insight into several modifications that have been made to this procedure in order to make it faster, simpler and more effective. These modifications included use of DMEM media, hyaluronic acid, 6-well technique and cold trypsinization vs. hot trypsinization.

Kathuria *et al.* report a randomized trial of 60 patients with segmental vitiligo treated with tacrolimus 0.1% ointment twice daily or with 0.05% fluticasone cream once daily for 6 months. They found that both tacrolimus and fluticasone propionate produce variable but overall unsatisfactory repigmentation in segmental vitiligo.

To explore the details of phototherapy practices for vitiligo among dermatologists, Alghamdi *et al.* conducted a survey of dermatologists' phototherapy practice. They observed that several variations exist in the approaches to and practice of phototherapy for vitiligo, including the types of phototherapy used for different types of vitiligo, dosage schedules, photoprotection, comparisons of different modalities and dermatologists' management of adverse events.

#### Announcement

##### **"Quick Response Code" link for full text articles**

The journal issue has a unique new feature for reaching to the journal's website without typing a single letter. Each article on its first page has a "Quick Response Code". Using any mobile or other hand-held device with camera and GPRS/other internet source, one can reach to the full text of that particular article on the journal's website. Start a QR-code reading software (see list of free applications from <http://tinyurl.com/yzh2tc>) and point the camera to the QR-code printed in the journal. It will automatically take you to the HTML full text of that article. One can also use a desktop or laptop with web camera for similar functionality. See <http://tinyurl.com/2bw7fn3> or <http://tinyurl.com/3ysr3me> for the free applications.