



## Introduction

- Vitiligo is characterized by development of white macules resulting from loss of epidermal melanocytes.
- The cornerstone of management in vitiligo is assessment of stability as it is very crucial in deciding treatment and prognosis.
- This assessment is currently, primarily clinical (IADVL criteria, VIDA scoring etc.).
- The drawbacks of clinical assessment are subjectivity and dependence on patient history.
- Thus, there is a need for objective assessment, and histopathology, the role of which is currently less explored, may provide this.
- In order to assess the prevalent histopathological practices in vitiligo, this study was conducted.

## Materials and methods

- This is a cross sectional observational study done at VMMC and Safdarjung hospital.
- A questionnaire (MCQ) based survey was conducted at two academic events convened at state level and national level respectively.
- Statistical analysis was done to compare the proportions using Chi-square test in SPSS software version 21.

## Results

- A total of 79 participants (12 dermatologists and 67 pathologists) including trainees and practicing physicians took part in the study.
- 57% were from centers catering to >2000 dermatopathology samples a year.
- The awareness regarding the significance of grading vitiligo was present in 100% dermatologists and in 30% pathologists (Fig. 1.a).
- Amongst the dermatologists, 33% were using clinical grading (Fig. 1.b), while none were aware of the role of histology to grade vitiligo.
- Only 13% pathologists were using histological grading (Fig. 2.a).
- The utilization of IHC markers by these pathologists is shown in Fig. 2.b.

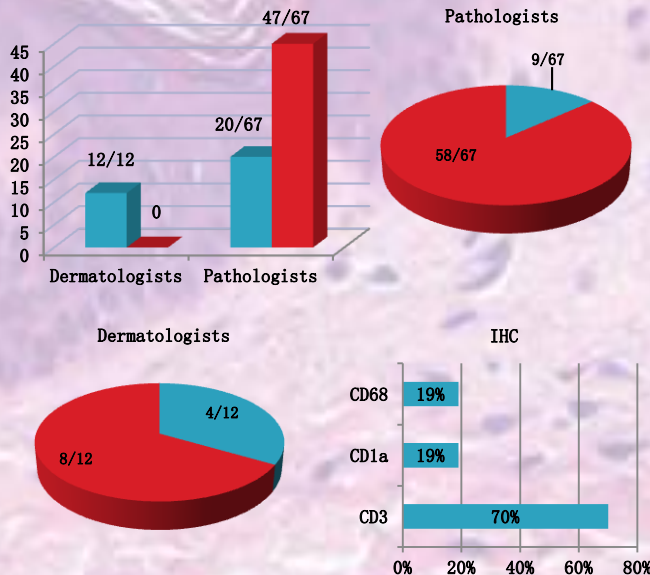


Fig. 1.a The awareness (blue) regarding the significance of grading vitiligo;  
b. Dermatologists using (blue) clinical criteria for grading vitiligo.

Fig. 2.a. Pathologists using histological criteria to grade vitiligo ( $p < 0.05$ );  
b. IHC markers being used in vitiligo.

- The difference of proportions amongst the participant pathologists using a histological grading criteria versus those not using was found to be statistically significant ( $p < 0.05$ ).

## Discussion

- The present study assessed prevalent histopathological practices in assessment of vitiligo.
- Overall, a very low awareness (9/79, 11%) regarding objective histological criteria was observed.
- All of the participants who were using histological scoring were pathologists.
- This low level of awareness needs to be addressed.
- A previous study by Yadav et al<sup>1</sup> has devised a simple, objective and reproducible histopathological scoring system using presence or absence of five features viz spongiosis, epidermal lymphocytes, basal vacuolation, dermal lymphocytes >100 and melanophages.
- Amongst pathologists, a low level of awareness (30%) was seen regarding clinical assessment of stability.
- IHC was being utilised by all pathologists (100%), who were aware of histological criteria. The use of IHC in responders of repigmentation has been studied by Rao et al.<sup>2</sup>
- The use of objective criteria in assessing stability in vitiligo, will lead to further improvement in assessment of vitiligo patients.
- This survey based study regarding practices in vitiligo has surfaced the lacunae in knowledge among both, dermatologists and pathologists and attempts to highlight the role of using objective criteria to grade vitiligo.
- Effective communication in the form of surveys, conference talks, journal articles, book chapters and use of social media can help fill the lacunae in current histopathological practices in vitiligo, thereby leading to further improvement in patient management.

## Conclusion

- There is an overall lack of awareness regarding objective assessment of stability in vitiligo among dermatologists and pathologists.
- Therefore, there is a need to raise awareness about these objective assessment methods.

## References:

1. Yadav AK, Singh P, Khunger N. Clinicopathologic analysis of stable and unstable vitiligo: a study of 66 cases. The American Journal of Dermatopathology. 2016 Aug 1;38(8):608-13.
2. Rao A, Gupta S, Dinda AK, Sharma A, Sharma VK, Kumar G, Mitra DK, Prashant CK, Singh G. Study of clinical, biochemical and immunological factors determining stability of disease in patients with generalized vitiligo undergoing melanocyte transplantation. British Journal of Dermatology. 2012 Jun;166(6):1230-6.