

Frequency of anxiety and depression in patients with melasma

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Abstract

Background Melasma is a common acquired hypermelanosis characterized by irregular brown patches occurring primarily on the forehead, cheeks and chin in a mask-like distribution. Melasma most commonly affects women of reproductive age. This chronic and recurrent condition causes a deleterious impact on various domains of patients' quality of life.

Objective To determine the frequency of anxiety and depression in patients with melasma.

Methods A total of 195 cases of both gender with melasma and ages between 20-40 years were enrolled through non-probability consecutive sampling. Detailed history and examination were done. Hospital Anxiety and Depression Scale (HADS) was administered to all the patients. Scoring of anxiety and depression was done individually for each patient.

Results Out of 195 cases, 37% (n=73) were between 20-30 years of age and 63% (n=122) were of 31-40 years. Thirty-six patients (18.46%) were male and 159 (81%) were females. Frequency of anxiety in patients with melasma was recorded as 19.49% (n=38) and 10.77% (n=21) had depression.

Conclusion The frequency of anxiety and depression is high among patients with melasma. It is, therefore, recommended that patients who present with melasma may be evaluated for anxiety and depression severity and clinicians should have proper surveillance system to document the frequency of this problem.

Key words

Melasma, anxiety, depression.

Introduction

Melasma is a disorder of pigmentation in which acquired hypermelanosis of skin on sun exposed areas occurs. It is patchy brown discoloration of skin of face but can also affect forearms.¹ It can affect anyone but is particularly more common in women especially pregnant, those taking oral contraceptive pills or hormone replacement

therapy, and women with Fitzpatrick skin type IV or V living in regions with intense sun exposure.²

Melasma is derived from a Greek word "melas" used for black. It is also called chloasma faciei. It is most often symmetrical bilaterally. Melasma is diagnosed clinically and may be confirmed by wood's lamp examination.¹

There are countless factors involved in the etiology of the disease, but none of them can be mentioned as the only factor leading to its development. These include genetic influences,

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exposure to UVR, pregnancy, hormone therapy, cosmetics, phototoxic drugs, endocrinopathies, emotional factors, anti-convulsive drugs, etc. However, it seems that genetic predisposition and exposure to sun radiation play an important role, considering that melasma lesions are more evident during or shortly after periods of exposure to the sun.³

It is worth highlighting that melasma is one of the unaesthetic dermatoses that lead to great demand for specialized dermatological care even though they are just a common and benign pigmentation abnormality. This might be explained by its cosmetically compromising nature and the associated emotional and psychological effects in individuals affected by this problem, who often, because of dissatisfaction with their appearance, eventually reduce their social lives, even with cases of suicide reported.^{4,5}

Melasma does not cause any other symptoms besides skin discoloration but it is of great cosmetic concern. Burden of melasma on a patient's life is multidimensional including psychological, social and financial consequences on patient's life.²

Melasma can negatively impact many aspects of quality of life including stigmatization, embarrassment and social inhibition, in turn leading to depression and anxiety in the sufferers.⁶ As psychiatric co-morbidity in patients with melasma is very high, dermatologists should aim for improvement in their psychosomatic consultation and liaison services.⁷

Prevalence of anxiety is reported to be 16.27% and of depression is 8.69% among patients having melasma according to a study conducted in 2007.⁸ In this study, the aim was to find out frequency of anxiety and depression in our

patients with melasma.

The rationale of our study was to highlight the importance of recognition of magnitude of anxiety and depression in melasma, for dermatologists, as it can help improve patient care and outcomes in many ways and it can indicate a need for supportive or psychological intervention at correct time to ensure patient's compliance to therapy and to improve her/his social and psychological behavior and well-being.

Anxiety is usually defined as a feeling of worry, nervousness or unease about something with an uncertain outcome. It was assessed by Hospital Anxiety and Depression Scale (HADS) and was diagnosed if the score was more than 7 on this scale. Depression is defined as severe, typically prolonged, feelings of despondency and dejection. It was also assessed by HADS scale and labelled as if the score was more than 7.⁹

Material and Methods

The study was conducted in Out Patient Department (OPD) of Dermatology, Divisional Head Quarter (DHQ) Hospital, Faisalabad.

It was a Cross sectional study with non-probability consecutive sampling. One hundred ninety-five patients with melasma, age between 20-40 years, of both genders were included. Individuals with any other skin disease like Ashy Dermatitis, Lichen Pigmentosus, Lichen Planus Actinicus, Fixed Drug Eruption, Nevus spilus, Nevus of Ota, Post-inflammatory Hyperpigmentation and Photo-contact Dermatitis or medical problems like Systemic Lupus Erythematosus, Addison's disease, Hemochromatosis, etc. were excluded from the study.

After approval from hospital ethical committee, patients were enrolled through non-probability consecutive sampling and detailed history and examination was done. Hospital Anxiety and Depression Scale (HADS) was administered to all the included patients.⁹ Scoring of anxiety and depression was done for each patient individually and data were recorded on specially prepared proforma.

Data analysis was done by SPSS-10 computer software. Mean and standard deviation were calculated for quantitative variable like age, sex, and score for anxiety and/or depression. Frequency and percentage were calculated for all qualitative variables.

Results

A total of 195 cases fulfilling the inclusion/exclusion criteria were enrolled to determine the frequency of anxiety and depression in patients with melasma. Mean age of the patients in our study was 31.29 ± 5.34 years. 73 (37%) patients were between 20-30 years of age and 122 (63%) patients were of 31-40 years (**Figure 1**). There were 36 (18%) males and 159 (82%) female patients in our study (**Figure 2**). There were no drop out patients in the study.

Mean score of anxiety & depression was calculated; it was 8.43 ± 3.15 for anxiety and 7.34 ± 2.61 for depression (**Table 1**).

Frequency of anxiety in patients with melasma was recorded in 38 (19.49%) patients, whereas, 157 (80.51%) of patients had no findings of this morbidity (**Table 2**).

Frequency of depression in patients with melasma was observed in 21 (10.77%) patients and 174 (89.23%) had no findings of this illness (**Table 3**).

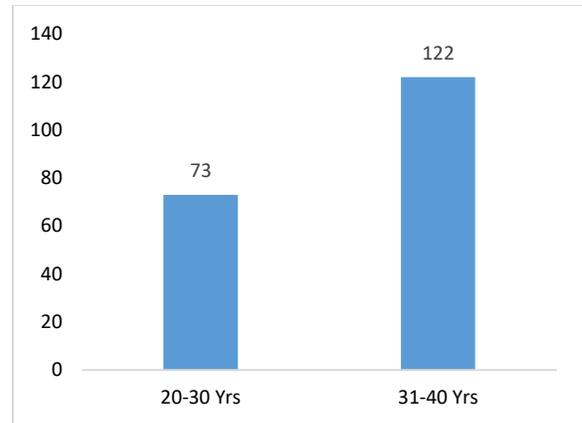


Figure 1 Age Distribution (n=195)

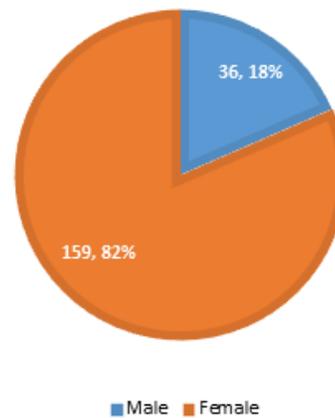


Figure 2 Gender Distribution (n=195)

Table 1 Mean Score of Anxiety and Depression

Morbidity	Mean	SD
Anxiety	8.43	3.15
Depression	7.34	2.61

Table 2 Frequency of Anxiety in Patients with Melasma

Anxiety	No. of patients	%
Yes	38	19.49
No	157	80.51
Total	195	100

Table 3 Frequency of Depression in Patients with Melasma

Depression	No. of patients	%
Yes	21	10.77
No	174	89.23
Total	195	100

Discussion

Anxiety and depressive disorders are highly

prevalent conditions that frequently co-occur. Individuals affected by both anxiety and depressive disorders concurrently have generally shown greater levels of functional impairment, reduced quality of life, and poorer treatment outcomes compared with individuals with only one disorder.

Study of the clinical presentation, course, assessment, and diagnosis of these conditions have largely focused on the co-occurrence of depression and generalized anxiety disorder. The diagnosis of these conditions is complicated by the presence of mixed anxiety and mood states as well as substantial overlap in physical and emotional symptoms of the disorders. Anxious distress was included as a subtype of major depression in DSM-5.¹⁰

A large group of dermatologic disorders have major impact on Health-related Quality of Life (HRQOL). Psychiatric disturbance and psychosocial impairment are reported in at least 30% of patients with dermatologic disorders.

In dermatology, the impact of melasma on psychological wellbeing is probably the most studied one. HRQOL impairment, assessed by the "SF-36 Health Survey," in patients with melasma is comparable to that of patients with chronic diseases such as cancer, arthritis, heart disease, and diabetes. Compared with the general population, the prevalence of depression was significantly higher in patients with melasma. A cross-sectional survey (response rate of 61%) noted depressive symptoms among 60% of the 2391 individuals with melasma. Lower educational levels, younger age, and the presence of itch were associated higher depressive symptoms.

Data on the exact prevalence of depression among patients with melasma are not available, since different depression scoring methods or self-reported data were used in the various studies on this association.¹¹

The current study was planned to find out frequency of anxiety and depression in patients with melasma. The need of the study was to highlight the importance of magnitude of anxiety and depression in melasma, for dermatologists, as it can help improve patients' care and outcome in many ways and it can indicate a need for supportive or psychological intervention at correct time to ensure patients' compliance to therapy and to improve his social and psychological behavior and well-being.

In our study, frequency of anxiety in patients with melasma was recorded as 19.49% and 10.77% patients had depression. The findings of our study agree with Aslam R. who recorded the prevalence of anxiety as 16.27% and of depression as 8.69% in patients with melasma.⁸

A few previous studies have reported characteristics of melasma and sun exposure was declared as the most important predisposing factor for it.^{3,4} A study conducted by Kanish B et al¹² on 123 patients of melasma showed that 34.96% of the patients had depression and 36.6% patients had anxiety. The study concluded that melasma is associated with depression and anxiety in approximately one third of the patients.¹²

Bashir K et al¹³ determined the frequency of depression in adult males presenting to dermatology outpatients. According to their findings, out of the 114 adult males with dermatological disorders, 39 (34.11%) had depression. The prevalence of depression in psych-cutaneous disorders was 100% (n=6), 66.6% (n=2) in urticaria, 66.6% (n=3) in

pruritis, 57.5% (n=7) in acne vulgaris, 50% (n=4) in psoriasis, 44.4% (n=4) in vitiligo, 37.5% (n=3) in melasma, 33.3% (n=1) each in hyperhidrosis and alopecia areata, and 20.4% (n=9) in eczema. They concluded that depressive symptoms should be specifically explored even at busy dermatology outdoors for early recognition and timely appropriate psychiatric treatment/referral.¹³

Our findings can help to improve patient care and outcomes in many ways. It indicates a need for supportive or psychological intervention at correct time to ensure patient's compliance to therapy and to improve his social and psychological behavior and well-being.

The limitation of the study was that there was no control group within the study and we did not stratify the morbidity according to age and gender. However, our results are primary in our targeted population and further larger trials are required to authenticate the findings of this study.

Conclusion

We concluded that the frequency of anxiety and depression is high among patients with melasma. It is therefore recommended that patients with melasma should be evaluated for anxiety and depression and psychological management can be offered accordingly.

References

1. Bandyopadhyay D. Topical treatment of melasma. *Ind J Dermatol*. 2009; 54(4): 303–9.
2. Passeron T. Melasma pathogenesis and influencing factors-an overview of the latest research. *J Eur Acad Dermatol Venereol*. 2013; 27: 5-6.
3. Ortonne JP, Arellano I, Berneburg M, Cestari T, Chan H, Grimes P et al. A global survey of the role of ultraviolet radiation and hormonal influences in the development of melasma. *J Eur Acad Dermatol Venereol*. 2009; 23(11): 1254-62.
4. Balkrishnan R, McMichael AJ, Camacho FT, Saltzberg F, Housman TS, Grummer S. Development and validation of a health-related quality of life instrument for women with melasma. *Br J Dermatol*. 2003; 149: 572-7.
5. Dominguez AR, Balkrishnan R, Ellzey AR, Pandya AG. Melasma in Latina patients: cross-cultural adaptation and validation of a quality-of-life questionnaire in Spanish language. *J Am Acad Dermatol*. 2006; 55: 59-66.
6. Purim KS, Avelar MF. Photoprotection, Melasma and quality of life in pregnant women. *Rev Bras Ginecol Obstet*. 2012; 34(5): 228-34.
7. Ali R, Aman S, Nadeem M, Kazmi AH. Quality of life in patients of melasma. *J Pak Assoc Dermatol*. 2013; 23: 143-8.
8. Aslam R, Qadir A, Asad F. Psychiatric morbidity in dermatological outpatients: an issue to be recognized. *J Pak Assoc Dermatol*. 2007; 17: 235-9.
9. Stern AF. The hospital anxiety and depression scale. *Occupational Med*. 2014; 64(5): 393-94.
10. Bystritsky A, Khalsa SS, Cameron ME, Schiffman J. Current diagnosis and treatment of anxiety disorders. *Pharm & Therapeutics*. 2013; 38(1): 30-57.
11. Sampogna F, Picardi A, Chren MM. Association between poorer quality of life and psychiatric morbidity in patients with different dermatological conditions. *Psychosom Med*. 2004; 66: 620–4.
12. Kanish B, Goyal SK, Thomas EA, Singla M, Kate P, Karma D. Depression and anxiety in melasma: prevalence and correlates in north India. *Ind J Clin Exp Dermatol*. 2017; 3(4): 167-71.
13. Bashir K, Dar NR, Rao SU. Depression in adult dermatology outpatients. *J Coll Physicians Surg Pak*. 2010; 20(12): 811-3.