Original Research Article

Pattern of skin diseases among dental and nursing students in a tertiary care centre

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A R T I C L E   I N F O

Article history:
Received 21-07-2019
Accepted 02-08-2019
Available online 14-09-2019

Keywords:
Seborrheic dermatitis
Screening
Acne vulgaris

A B S T R A C T

Introduction: Adolescents bother more about their appearance. Certain skin diseases are common in this particular population (seborrheic dermatitis, acne vulgaris and hair fall etc.) which led them to worry and upset. To assess the integrity of the problem we conducted a study among the students of dental and nursing college adjacent to our institution.

Aims and Objectives: To find out the pattern of occurrence of skin diseases among dental and nursing students in a tertiary care centre.

Materials and Methods: A cross sectional study was conducted among nursing and dental students adjacent to our institution. Full screening for skin lesion was done among the study subjects.

Results: Out of the 561 study subjects 423 had skin lesions: In these majority of the subjects had seborrhoeic dermatitis (including scalp and face).

Conclusion: This study help to assess their general health status as skin is the mirror of systemic diseases and also to frame the guidelines and hygienic measures be followed by the students in similar situation in future.

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factors like the environmental, genetic, and immunological factors it can change itself into the pathogenic hyphal form. Pityriasis versicolor have a characteristic rash that is well demarcated, thin, scaly plaques that can be hypopigmented, hyperpigmented, or erythematous. It is a mild chronic superficial fungal infection of the stratum corneum that is characterized by discoloration of skin that is patchy and scaly. The organism that is responsible for the disease is Malassezia fur fur also known as the pityrosporum which is yeast like lipophilic fungus. The main lesion is a macule that is variable in nature, either hypopigmented or hyperpigmented with a characteristic covering of branny scales Deep palmoplantar warts also are termed myrmecia. It starts with small shiny papules and progress to deep entophytic, well defined, round lesions; with a rough keratotic surface. They tend to be more painful because they grow deeper than common warts. Myrmecia warts are usually found on weight-bearing areas, such as the metatarsal head and heel. On the hand, they tend to be subungual or periungual warts.

2. Aims and Objectives
To assess the pattern of occurrence of skin diseases among dental and nursing students in a tertiary care centre.

3. Materials and methods
3.1. Study design
Cross sectional study

3.2. Study setting
Department of Dermatology Venereology and Leprosy, Sree Mookambika Institute of Medical Sciences, Kulasekharam.

3.3. Study population
Five hundred and sixty one students from a dental college and a nursing institution adjacent to our institution of Sree Mookambika Institute of Medical Sciences, Kulasekharam. All of them are in the age group of 17-22 years of age.

3.4. Study period
10 days between 16/03/2019 to 25/03/2019
Sample size : 561
Sampling Technique: Convenient sampling
Study Procedure: Complete history and thorough clinical examination was done.
Following parameters were assessed:
Skin, Hair and Nail inspection
1. Site
2. Number of lesions
3. Pattern

4. Type
5. Scaling
6. Colour change
7. Distribution

4. Method(s)/technique(s)/instrument(s) etc.
4.1. Clinical examination
By Inspection
1. Site of the lesion
2. Number of the lesion
3. Type of the lesion
4. Colour change
5. Scaling if present

4.2. Direct examination
1. For fungal infections-KOH scrapping
2. For parasitic infection-Demonstration of organism
3. For bacterial infection-Culture, grams stain
4. For viral infection–Tzanck’s test
5. For nevus- Diascopy
6. Woods lamp examination

4.3. Instruments
1. Hand lens
2. Torch, hand lens

Data entry and Analysis: Data was entered in Microsoft excel sheet and was analysed using Spss version 16.0

5. Results
Out of five hundred and sixty one students screened in this study, only fifty (8.9%) were boys and five hundred and eleven were girls (91%) (1:11 ratio). So it is a female preponderance study. Out of the 561 study subjects 423 had skin lesions: In these adolescents and young adults seborrhoeic dermatitis (including scalp and face) tops the list with 272 cases.(48.5%). Incidence of pediculosis among this population was found with 98 students in 3 boys and 77 girls (17.5%). Acne vulgaris was present with 65 students (8 males and 57 females) and constitutes 11.6% in this study. Palmoplantar warts were present with 37 students which come around 6.6% in this study. Pityriasis versicolor was present with 12 students (2.1%).138 students among these 561 who were screened, remained dermatologically healthy and were having no complaints
Conditions like hyperhidrosis, dermatophytic infections, polymorphous light eruption, contact dermatitis, eczema were other disorders found among small number of students...
6. Discussion

The students were screened for skin diseases are between the age group of 17-22. (Adolescent and young adult period). This is the period in which lots of interplay of hormones, appearance of secondary sexual characteristics occur. These alterations may be the cause of certain types of skin diseases during this stage.

It is mainly a female preponderance study. So diseases like pediculosis were in an increased incidence (17.5%) owing to female population and their long and dense hair and difficulties in cleaning their head regularly. Incidence of pediculosis was seen in 5 boy students also.

These hormones are responsible for increased sebaceous activities. This could be the reason for the increased incidence of seborrhoeic dermatitis in this population to the extent of 48.5%. This is far high than the previous studies.2,3

Next to seborrhoeic dermatitis and pediculosis, Acne vulgaris was present in 65 students with an 11.6% incidence (6 male and 49 female). Acne vulgaris is also due to increased sebaceous activity and secondary bacterial infection. So one could expect a raised incidence of acne vulgaris in this adolescent and young adult population. The incidence of acne vulgaris is lesser than the Nigerian study.3

Three of these boys recently tested for scabies before this screening. Programme. Pityriasis versicolor was found with 2.1% among these students. Other conditions like dermatophyte infections, hyperhidrosis, contact dermatitis, polymorphous light eruptions and eczema were found among few students. This was also similar to other studies.4,10

Conditions like seborrhoeic dermatitis and acne vulgaris have a predilection for adolescence and young adults owing to their hormonal activity. Infestation like pediculosis and scabies can be expected in a living condition where sharing of fomites which is prevalent in a hostel situation as well as dermatophyte infection. But unusually a high prevalence of palmoplantar warts (6.6%) was seen among this population. This prevalence is far exceeding than the studies among students elsewhere and not mentioned in other studies.11–14

7. Conclusion

This type of studies reveals the dermatological condition of the adolescents and young adults in a hostel setup. This will help to assess their general health status as skin is the mirror of systemic diseases and also to frame the guidelines and hygienic measures be followed by the students in similar situation in future.

8. Source of Funding

None.

9. Conflict of Interest

None.

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