

# A Study of Co-Morbid Conditions Associated with Psoriasis

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## ABSTRACT

Psoriasis is a chronic inflammatory disease which affects 1-3 % of world's population. There is a slight male preponderance noted in this study, 93 patients (62%) were in the age group of more than 40 years of age. Psoriasis vulgaris, palmo plantar psoriasis, palmar psoriasis, plantar psoriasis, and scalp psoriasis are the clinical types encountered in this study. Among these, psoriasis vulgaris was the commonest type noted in this study. Almost 79 patients (52.7%) had one or other co-morbid disease. Hypertension was found to be more common in this study followed by diabetes mellitus, dyslipidemia, thyroid disorder and ischemic heart disease. It was observed that patients who had co-morbidities have developed it within 5 years of onset of psoriasis and it is found to be significant.

**Key words:** Psoriasis, Dyslipidemia

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## INTRODUCTION

Psoriasis is proved to be a genetic disease-causing inflammation on the skin. It's a condition when the epidermal cells and nucleated cells proliferates more than seven folds before forming a horny layer. It's also associated with other Common co-morbidities like diabetes, hypertension, and metabolic syndromes. Psoriasis patients are reported to have over production of some inflammatory factors like helper T cells, TNF- $\alpha$  and depression and anxiety is also associated with this [1-2]. Hence this study aims to measure the association between duration of psoriasis and co-morbid illness and test for its statistical significance.

## METHODOLOGY

Sample size: 150 patients.

### Materials used for data collection

A pre-structured and pre-tested Proforma was used to collect the data. Baseline data including age and sex, detailed medical history including conventional risk factors, clinical examinations and relevant investigations were included.

Study period: September 2010 to August 2011 (12 MONTHS).

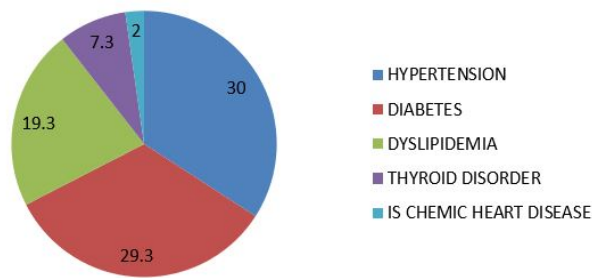
150 consecutive patients clinically diagnosed as psoriasis were included in the study. Patients with all types of psoriasis were taken up. A structured proforma was used

for data collection, using personal interview method after taking written informed consent.

Patients with all types of psoriasis were taken up for the study (150 Nos). Complete physical examination was carried out in all patients like thyroid, hypertension, cholesterol & triglyceride levels.

## RESULTS

Duration of the disease ranged from 8 months to 30 years with the mean duration of 3.4 years. Psoriasis vulgaris is found to be the most common type (47.3%) of psoriasis among the 150 patients studied and scalp psoriasis is the least common (6.7%) type of psoriasis. The percentage of co-morbidities associated with Psoriasis is depicted in Figure 1. Among the 44 patients who had psoriasis and diabetes, 25 patients (34.2%) were females and 19 (24.7%) were males. Among the 45 patients who had psoriasis and hypertension (HT), 25 (34.2%) were females and 20 (26.0%) were males. 31 (68.8%) patients had developed HT within 5 years of onset of psoriasis and 14 (31.2%) patients had developed HT after 5 years of the disease. Only 11 (7.3%) patients out of the 150 studied had ischemic heart disease (IHD), Out of which 6 (8.2%) were females and 5 (6.5%) were males. There is no significant association between the onset of IHD and psoriasis in this study. 29 (19.3%) patients out of the 150 studied had dyslipidemia, among them 12 (16.4%) patients were females and 17 (22.1%) were males.



**Figure 1: Psoriasis & co-morbidities.**

### DISCUSSION

From the results its very evident that Psoriasis is associated with other diseases like Diabetes mellitus, hypertension, obesity, dyslipidemia, thyroid disorder, cardiovascular diseases, metabolic syndromes. Psoriasis vulgaris, palmo plantar psonas1s, palmar psoriasis, plantar psoriasis, and scalp psonas1s are the clinical types encountered in this study. In this study hypertension was found to be more common in followed by diabetes mellitus, dyslipidemia, thyroid disorder and ischemic heart disease. Whereas the study done by Nisa et al. in the year 2010 [3-4], observed diabetes mellitus and obesity to be more commonly associated with psoriasis. Dyslipidemia, thyroid abnormalities and ischemic heart disease does not show any statistical significance in this study [5-10].

### CONCLUSION

Many studies have been conducted by various authors across the world to find the association of psoriasis with metabolic syndromes. But what has been observed in this study was that, not only there is a significant association between psoriasis and other co-morbid illness but also early onset of the co-morbid disease in psoriatic patients. Hence it is necessary to closely monitor psoriatic patients with the focus on risk factors and co-morbid diseases. This will help to adopt treatment regimens not only to provide clearing of skin lesion but also for effective management of co-morbid diseases. Such an integrated approach targeting both cutaneous and systemic inflammation will decrease the burden of the disease and improve the quality of life of the patients in the long run.

### FUNDING

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### ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

### CONFLICT OF INTEREST

The authors declare no conflict of interest.

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