

A Study in Psoriasis of Nails-Severity Scoring System

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ABSTRACT

Males were more commonly affected with nail psoriasis than females. Subungual hyperkeratosis and pitting was the common nail changes observed. Toe nails were commonly affected than the fingernails. There was no correlation between the nail changes and psoriatic arthritis. There was positive correlation between the N-NAIL score and PASI score. Although NAPSI score is the most widely used method to diagnose nail psoriasis is, we found that N-NAIL score has few advantages over NAPSI score as it takes only few minutes to calculate and it includes only five nail changes. Nail psoriasis seems to be an overlooked feature of the disease and hence adequate nail psoriasis scoring system is necessary to evaluate nail psoriasis.

Key words: Psoriasis, NAPSI, PASI

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INTRODUCTION

Psoriasis is an inflammatory dermatitis which forms scaly plaques on skin; the symptoms are from mild lesions to deadly pustular. It is seen to affect any part of the body even nails. This topic on nail psoriasis is seeking attention over the past few years.

Scoring systems for the same is also introduced. The severity of the disease may depend on the type of scoring, presences or absences of nail and will be assessed with Nijmegen-Nail Psoriasis Activity Index tool (N-NAIL) [1-3]. This study was done to observe nail changes in all the psoriasis patients and interpret according to Nijmegen (N-NAIL).

METHODOLOGY

All types of psoriasis including pustular and erythrodermic psoriasis were taken for the study. 300 patients were taken for the study. Thorough general dermatological examination. Difference between Nijmegen score & PASI score was analyzed using student independent t-test. The obtained data were analyzed using the statistical package for the social sciences (SPSS) software.

RESULTS AND DISCUSSION

The results prove that the more severe psoriasis seems to

be related to a higher prevalence of nail psoriasis. NAPSI index is the most widely accepted tool to analyse the severity. From this study it was observed that, males (55.7%) were more commonly affected than females (44.3%). This was in concurrence with the previous study.

Out of 300 patients the maximum nail changes were associated with Psoriasis vulgaris 100(59.5%) followed by palmoplantar psoriasis 34(66.7%), plantar psoriasis 14(46.7%), scalp psoriasis 10(32.3%), nail psoriasis 4(100%) and palmar psoriasis 2(12.5%) which is similar to the previous study which is similar to work done by Augustin et al [4].

In our study, one or more nail changes were found in the same patient. 46% patients had no nail changes and among, 1e nail changes, subungual hyperkeratosis is the most common nail change observed (21.7%) followed by pitting (19.3%), onycholysis (17.0%), beau's lines (14.7%) and crumbling (6.7%). These findings are similar to the results of previous studies.

In this study nail changes were very common Pitting (53.7%) and onycholysis (31.5%) were commonly observed in the fingernails. Subungual hyperkeratosis (43.0%), beau's lines (31.6%) and crumbling (16.7%), were observed in the toe nails.

Table 1 summarizes the scores of nail severity and there was positive correlation between the N-NAIL score and PASI score [5-8].

Table 1: Comparison between types of Psoriasis with the N-NAIL score & PASI score.

| | Type of psoriasis | N | Mean | Std. Deviation | One way ANOVA F-test |
|--------------|------------------------|-----|-------|----------------|---------------------------|
| N-Nail score | Nail psoriasis | 4 | 27.25 | 9.142 | F=8.08 |
| | Psoriasis vulgaris | 168 | 0.35 | 9.225 | p=0.001 *** (significant) |
| | Palmoplantar psoriasis | 52 | 5.02 | 6.551 | |
| | Plantar psoriasis | 32 | 3.97 | 8.301 | |
| | Palmar psoriasis | 13 | 1.92 | 4.132 | |
| | Scalp psoriasis | 31 | 1.61 | 2.642 | |
| PASI score | Nail psoriasis | 4 | 0 | 0 | F=8.64 |
| | Psoriasis vulgaris | 168 | 8.87 | 7.7665 | p=0.001 *** (significant) |
| | Palmoplantar psoriasis | 52 | 4.45 | 5.7824 | |
| | Plantar psoriasis | 32 | 4.59 | 6.0313 | |
| | Palmar psoriasis | 13 | 0.91 | 0.819 | |
| | Scalp psoriasis | 31 | 1.09 | 0.659 | |

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