AB0733

PSORIATIC ARTHRITIS IN NIGERIAN PSORIASIS PATIENTS - MYTH OR A MISSING LINK?

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Background: Beyond true arthritis, Psoriatic arthritis (PsA) is known with dactylitis and enthesitis. Enthesitis is postulated as the central pathogenic process in seronegative spondyloarthritis[1], and the primary finding in psoriatic arthritis[2]. Psoriasis (and more so PsA) were initially thought to be rare in West Africa. Psoriasis (Ps) is now reported increasingly in Nigeria. But the notion of the rarity of PsA still remains in the absence of systematic documentation of PsA among psoriasis patients, with few cases reported from Rheumatology clinics[3].

Objectives: This study set out to determine the prevalence of PsA among Nigerian Ps patients using the Classification for Psoriatic Arthritis (CASPAR) criteria, and to evaluate enthesitis amongst them.

Methods: This hospital-based, cross-sectional study was carried out at the dermatology clinic over an 18-month period. All patients seen within the study period with biopsy-established Ps were recruited. Fifty-three (53) Ps patients, 16 years or older, were enrolled. The CASPAR criteria was used to diagnose PsA. A modified Spondyloarthritis Research Consortium of Canada (SPARCC) enthesitis chart was used to document entheseal inflammation sites. Diagnosis of enthesitis was made by clinical examination.

Results: Fourteen participants fulfilled the CASPAR criteria (8 females, 6 males, F:M = 1.3:1) giving a PsA prevalence of **26.4%**. Using the Moll & Wright clinical classification, Oligo/Mono-articular pattern was the most documented (Fig 1). No patient had arthritis mutilans. Enthesitis was found in **ALL(100%)** PsA patients (Table 1). Highest frequencies were found in the right iliac, right patella and both plantar fascia (Fig 2). Multiple sites were involved in 87.5% of patients.

Conclusion: Psoriatic arthritis can not be considered rare among Nigerian Ps patients. Enthesitis has been suggested as the primary finding, and the initial site of inflammation in PsA[2,4]. Our findings reinforce these theories in an African population. Whilst other studies reported occurence of enthesitis in 30-50% of PsA patients[5], our study found 100%. Admittedly though a small study population, it suggests that enthesitis may well be the missing link to finding more PsA patients in Nigeria and Psoriasis patients of West African descent.

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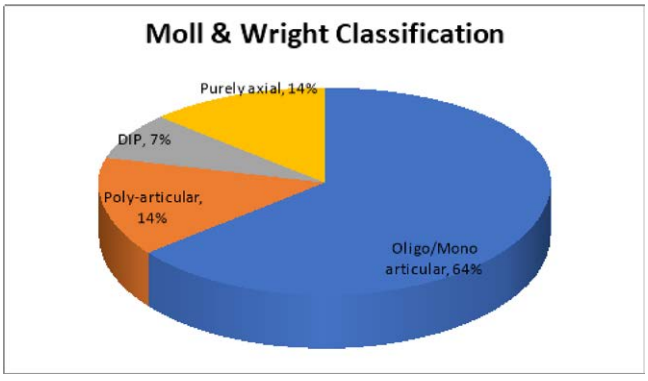

Fig 1. Moll & Wright articular patterns.

Table 1.

VARIABLE	PsA, n=14	No PsA, n=39	Sig
	n (%)	n (%)	
Inflammatory Eye Disease			
Yes	4 (28.6)	1 (2.6)	0.014f
No	10 (71.4)	38 (97.4)	

Table 1.

VARIABLE	PsA, n=14	No PsA, n=39	Sig
	n (%)	n (%)	
Nail Involvement			
Yes	8 (57.1)	13 (33.3)	0.066*
No	6 (42.9)	26 (66.7)	
Dactylitis			
Yes	3 (21.4)	0 (0)	0.016f
No	11 (78.6)	39 (100.0)	
Enthesitis			
Yes	14 (100)	1 (2.6)	0.000f
No	0 (0)	38 (97.4)	

PsA=psoriatic arthritis, f=Fischer's exact, *=Pearson's chi-square, sig=significance level.

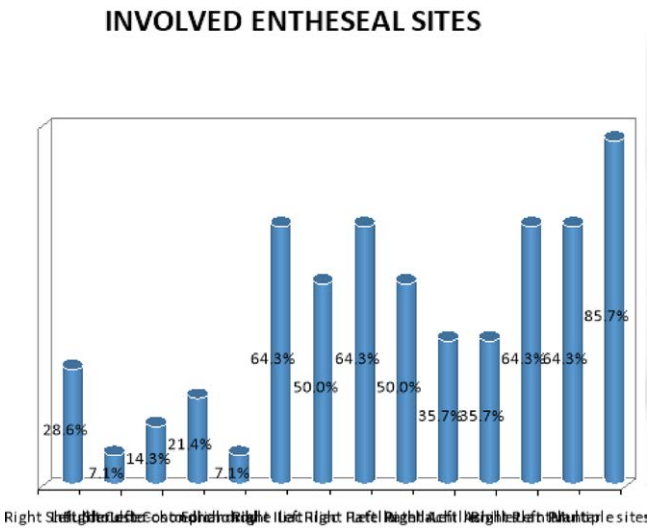

Fig 2. Enthesitis Distribution

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AB0734

EFFICACY AND SURVIVAL OF APREMILAST IN PATIENTS WITH PSORIATIC ARTHRITIS AND PSORIASIS IN REAL CLINICAL PRACTICE

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Background: Apremilast (APR) is a phosphodiesterase 4 Inhibitor. APR has been demonstrated to be an effective and safe therapy in the treatment of active psoriatic arthritis (PsA) and psoriasis in patients who were intolerant of or unresponsive to synthetic Disease-modifying Antirheumatic Drugs (DMARDs).

Objectives: To assess the effectiveness and survival rates of APR in a cohort of patients diagnosed with PsA and psoriasis with arthritis in real clinical practice.

Methods: An open, longitudinal, prospective, descriptive study. A total of 80 patients diagnosed with PsA or psoriasis with arthritis were included. All patients received the starting dose of oral APR as per the Summary of Product Characteristics and a maintenance dose of 30mg every 12 hours. The following variables were collected: age, gender, years of evolution, prior treatment with DMARDs, swollen and tender joint counts (SJC, TJC), C-Reactive Protein (CRP), and presence of dactylitis, enthesitis and cutaneous psoriasis. Treatment response was evaluated in all patients at 6, 12 and 18 months follow-ups. Efficacy in patients with PsA was evaluated using the Disease Activity in Psoriatic Arthritis (DAPSA)-based criteria: low activity (DAPSA 5-14) and clinical remission (DAPSA 0-4). To assess the level of enthesitis, Maastricht Ankylosing Spondylitis Enthesitis Score (MASES) index was used. Efficacy in patients with psoriasis was evaluated using the Psoriasis Area and Severity Index (PASI)-based criteria: PASI-75 (improvement ≥ 75% of the baseline PASI). Kaplan-Meier method was used for survival analysis.

Results: Of the 80 patients included in our cohort: 42 patients were diagnosed with PsA and 38 with psoriasis. 57,1% of patients with PsA and 63,2% of patients with psoriasis were men with a mean age of 48.2 ± 11.1 and 48.2 ± 14.8 and mean duration of disease 3.5 ± 1.4 and 3.2 ± 2.6 years respectively. Most of

the patients with PsA (93%) had cutaneous disease and enthesitis and dactylitis were present in 45% and 31% respectively. 95% of patients with PsA had received prior treatment with Metotrexate. At 6, 12 and 18 months, there was a statistically significant decrease from baseline in TJC, SJC and DAPSA scores. The decrease in the MASES index and the levels of PCR were not statistically significant (Table 2). According to DAPSA, at 18 months follow-ups, clinical remission rate was 77.8%, and low activity rate was 22.2%. 55% of patients with psoriasis reached PASI-75 at 18 months. APR survival rates at 6, 12 and 18 months was 67,85 %, 56,45% and 50,2 % in patients with ApS and 74,8%, 70,4% and 65,1 % in patients wiyh psoriasis.

Conclusion: APR is an effective drug for the treatment of psoriatic arthritis and psoriasis, reaching statistical significance according to DAPSA, and with a high survival rate after 18 months of treatment.

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Table 1. Disease characteristics in patients with PsA receiving APR

PATIENTS WITH PsA	Basal, mean±SD	6 Months, mean±SD	12 Months, mean±SD	18 Months, mean±SD	"p" value
TJC	3.3 ± 2.0	1.2 ± 2.3	1.1 ± 1.6	0.7 ± 1.1	*p=0.002
SJC	2.4 ± 1.6	0.4 ± 0.9	1.0 ± 2.0	0.3 ± 1.0	***p=0.001**
CRP	6.8 ± 6.3	3.5 ± 3.8	3.4 ± 3.9	2.7 ± 4.1	p=0.062
DAPSA	21.1 ± 5.6	5.6 ± 7.2	6.5 ± 8.5	2.9 ± 4.1	*p=0.000
MASES	1 ± 1.4	0.1 ± 0.5	0 ± 0	0 ± 0	p=0.16

Table 2. Disease characteristics in patients with Psoriasis receiving APR

PATIENTS WITH PSORIASIS	Basal, mean±SD	6 Months, mean±SD	12 Months, mean±SD	18 Months, mean±SD	"p" value
PASI	9.5 ± 6.6	4.1 ± 4.7	2.2 ± 2.6	3.4 ± 3.8	p=0.072

Disclosure of Interests: None declared

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AB0735

SEVERITY OF NAIL PSORIASIS SCORE (SNAPS) DEMONSTRATES LONGITUDINAL CONSTRUCT VALIDITY AGAINST THE MODIFIED NAIL PSORIASIS SEVERITY INDEX (MNAPSI) IN AN OBSERVATIONAL COHORT OF PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Longitudinal observational data on psoriatic nail dystrophy is scarce, in part due to the lack of a validated outcome measure that is feasible in routine care. The Severity of Nail Psoriasis Score (SNAPS; range 0-40: scored one point each for the presence of pitting, onycholysis, hyperkeratosis and/or severe nail disease[#] in each fingernail) has face validity and has recently demonstrated feasibility, reliability and cross-sectional construct validity against the modified Nail Psoriasis Severity Index (mNAPSI; range 0-130)[1].

Objectives: We aimed to assess the longitudinal construct validity of SNAPS against the mNAPSI and physician nail VAS (PhNVAS), and to determine the effect size and measurement error of these tools.

Methods: Consenting consecutive patients enrolled in the Bath Psoriatic Arthritis (PsA) longitudinal cohort underwent photography of their fingernails at baseline[1] and 6 months alongside routine clinical assessments. Dorsal images of individual fingernails were acquired using a tripod mounted DSLR camera. An angled mirror positioned distally aided identification of hyperkeratosis. Photograps were scored using SNAPS, mNAPSI and PhNVAS[1]. Paired statistical analyses were conducted to assess for change in scores from baseline to follow-up. Pairwise correlations between change in SNAPS and change in mNAPSI and PhyNVAS were assessed using Spearman's rho. Effect sizes and measurement error were calculated.

Results: Fifteen patients with a mean (±SD) age of 54.5 (±10.59) were assessed at 6 months. There was a significant reduction in both the mNAPSI and SNAPS scores (p<0.005), with improvements in the most frequently-observed manifestations[1] i.e. pitting, onycholysis, hyperkeratosis and crumbling (Table 1). No other feature specific to mNAPSI improved over time. There was no significant change using the PhyNVAS. There was a strong correlation between changes in SNAPS and the mNAPSI (Figure 1; rho = 0.838, p<0.001). The correlation between change in SNAPS and PhyNVAS was not statistically significant (rho =0.45, p=0.095) (Figure 1). The change in mNAPSI correlated moderately with the PhNVAS (rho = 0.540, p=0.038). mNAPSI was superior to SNAPS in most parameters of measurement error (Table 2). The mNAPSI and SNAPS had similar effect sizes as measured by the SRM (Table 2).

Conclusion: SNAPS demonstrates longitudinal construct validity against the mNAPSI in a small observational cohort of PsA patients as evidenced by a strong correlation between the measures, comparable effect sizes and sensitivity to change over time. Whilst measurement error parameters favored the mNAPSI, SNAPS may be a more feasible measure for studying nail disease in cohort studies.

References:

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Table 1. Outcomes at Baseline and at Follow-Up:

Outcome	Mean (SD) or Median (IQR) N=15		t-test or Wilcoxon Sign Rank test (p-value)
	Baseline	Follow-up	
SNAPS	13.0 [8.00-21.00]	5.0 [2.00-11.00]	0.002*
mNAPSI	22.0 [12.00-35.00]	6.0 [4.00-15.00]	0.001*
Physician Nail VAS	23.3 (22.90)	15.8 (15.22)	0.147
Physician Global VAS	18.0 [10.75-32.75]	15.0 [10.00-30.00]	0.455

Table 2. Measurement error of SNAPS, mNAPSI, PtNVAS and PhyNVAS

	SRM	SEM	SDC	SDC % (% of total score)	SDD	SDD% (% of total score)
SNAPS	1.15	1.71	6.72	16.79	3.36	8.40
mNAPSI	1.15	3.51	13.74	10.57	6.87	5.29
Physician Nail VAS	0.40	4.71	18.47	14.21	9.23	7.10

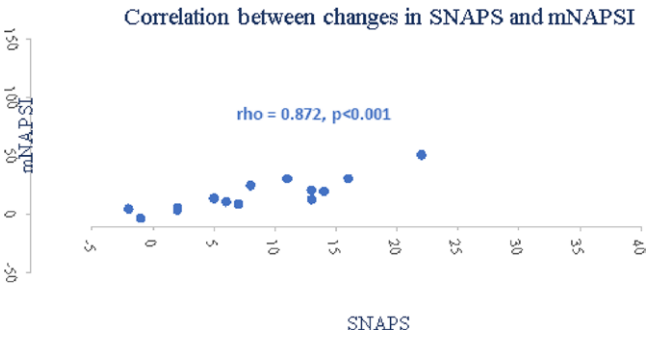

Figure 1. Correlation between changes in SNAPS and changes in mNAPSI

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AB0736

SEVERITY OF NAIL PSORIASIS SCORE (SNAPS) IS SENSITIVE TO CHANGE IN A COHORT OF PATIENTS WITH PSORIATIC ARTHRITIS TREATED WITH ETANERCEPT

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