Epidemiologic and Clinical Differences Between Classic and Hypertrophic Lichen Planus in Nigeria

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UDC 616.516-036.22(669)

Abstract

Introduction. Lichen planus is a chronic inflammatory skin disease known to have several clinical variants with attended variable clinical outcomes. Certain complications have been observed in the hypertrophic type, which were not found in association with the classic variant. **Objective:** To identify the epidemiologic and clinical differences between the classic and hypertrophic lichen planus and clinical correlates. **Material and Methods.** Of 104 participants with lichen planus included in the study, 49 had classic and 55 hypertrophic lichen planus. Demographic and clinical information was obtained. Diagnosis of lichen planus was made clinically and confirmed with histology. The participants were screened for metabolic syndrome, hepatitis B, and C. **Results:** Mean age of all patients was 37.20 ± 13.39 years, with no age and gender differences between the participants with classic and hypertrophic lichen planus. Classic lichen planus was more likely to be painful, (8.2% vs 0.0, $p=0.046$), generalized (95.9% vs 16.4%, $p<0.001$), involve the oral mucosa (38.8% vs 0.0, $p<0.001$), the nails (38.8% vs 1.8, $p<0.001$), present with kobnerisation (55.1% vs 5.5%, $p<0.001$), Wickham striae (69.4% vs 16.4%, $p<0.001$), associated with Hepatitis B vaccination (16.3% vs 3.6%, $p<0.028$) and anti HCV positivity (16.3% vs 0.0%, $p=0.002$). Hypertrophic lichen planus was significantly associated with impaired glucose tolerance/diabetes mellitus (16.4% vs 2.0%, $p=0.013$), dyslipidemia (74.5% vs 40.8%, $p=0.001$) and saw-tooth histologic appearance compared to classic type. **Conclusion:** Hypertrophic lichen planus is more likely to be associated with metabolic complications compared to the classic type. Further studies are needed to link this difference to chronic inflammation.

Key words: Lichen Planus; Comorbidity; Signs and Symptoms; Lichen Planus, Oral, Diabetes Mellitus; Diagnosis; Epidemiologic Studies; Nigeria

Introduction

Lichen planus (LP) is an idiopathic, inflammatory skin disease with unique clinical and histologic features (1–3). The LP commonly affects the skin and the mucous membrane but may also affect the nails and hair (1–3). Clinically, the classic LP is characterized by scaly, flat-topped, polygonal, shining and violaceous papules with reticular, lacy, white lines known as Wickham's striae; however, these papules may appear bluish-grey in individuals with dark skin (1–3). Lichen planus lesions may appear linearly, following the lines of trauma referred to as Koebner phe-

nomenon (4); other variants of LP may include annular LP, atrophic LP, hypertrophic LP, vesiculobullous LP, erosive/ulcerative LP, LP pigmentosus, and lichen planopilaris. Other nomenclature of LP includes mucosal LP, nail LP, inverse LP, LP pemphigoides, lichen planus-lupus erythematosus overlap syndrome and drug-induced LP (1–5).

Classic LP (CLP) typically presents with the four P's: purplish, pruritus, polygonal, and papules and/or plaques. It is usually symmetric, and it favors flexural surfaces, sacral region, and oral mucosa; the scalp, hair, nails, and other mucosal surfaces could be involved

as well but the face is typically spared (1–3, 5, 6). The hypertrophic type of LP (HLP), however, is a distinct type of LP that presents with pruritic hyperpigmented thickened papules and plaques with a preference for the pretibial area of the lower extremities and the ankles (1–7). Typically, HLP is more chronic and pruritic and could rarely become generalized (7, 8). HLP could also infrequently become a disseminated disease (8). The etiology of HLP has been related to the eosinophils (9) and Koebner phenomenon (5). In recent time, HLP has been associated or called a mimicker of squamous cell carcinoma (10–12).

Few Nigerian studies have detailed the epidemiology of LP (13–17), but none has examined the differences or peculiarities of CLP and HLP. The main aim of this study is to research into any existing demographic, clinical and histologic differences between CLP and HLP and to determine the clinical correlates of both types of LP among patients attending the Dermatology Clinics of two Nigerian Teaching Hospitals located in southeastern and southwestern Nigeria.

Methodology

This cross-sectional study was conducted at the Dermatology Clinics of Nnamdi Azikiwe Teaching Hospital, Nnewi and LAUTECH Teaching Hospital, (LTH), Ogbomoso, Nigeria between December 2014 and February 2016. The study population consisted of 104 patients with CLP and HLP. The diagnosis of LP was made clinically and confirmed by histology via skin biopsies obtained from a fresh lesion. According to the inclusion criteria the sample included adult patients with clinical presentation in keeping with classic and hypertrophic types of LP and confirmed by histology. The patients below the age of 18 years, other variants of LP and those with history and clinical features suggestive of lichenoid drug eruptions and other types of LP were excluded. Ethical approval for the study was obtained from the ethical committee of Nnamdi Azikiwe and LAUTECH Teaching Hospitals and informed written consent was taken from all the patients before they were included in the study.

Data of all participants were obtained using an interview-administered questionnaire. The data collected included sociodemo-

graphic characteristics such as age, gender, occupation, marital status, and educational level attained. The survey also included the clinical history such as pruritus, pain, previous episode of LP, site of onset, treatment sought, smoking and alcohol intake. We asked for a family history of similar disease, hypertension, diabetes mellitus, and cardiovascular events.

Physical examination: The entire skin, hair, nails, and the mucous membrane were examined in bright daylight. The morphology, arrangement, distribution, and site of the lesions were documented. Wickham striae were examined after the application of mineral oil using the hand-held dermoscopy (RA Bock Diagnostic Pro-Physician 3.5V Dermatolight -LED) to observe the presence of Wickham striae. Other clinical signs, such as the Koebner phenomenon, were noted.

A localized lesion was defined as a LP lesion restricted to a portion of the skin while the generalized cutaneous LP disease was defined as the involvement of the skin of the trunk, the upper and the lower limbs. The participants' body weight was examined using a weighing scale, height was assessed using clinic stadiometer, and body mass index (BMI) was calculated using the formulae weight/height squared.

Laboratory: twelve milliliters of venous blood were collected after 12 hour overnight fasting, twelve milliliters of venous blood were collected from a vein in the antecubital fossa. Serum samples were sent for the detection of anti-hepatitis C virus (HCV) antibody, hepatitis B virus surface antigen (HBsAg), fasting lipid profile [total cholesterol, high-density lipoprotein cholesterol (HDL-c), low-density lipoprotein (LDL-c) and triglyceride], and fasting blood glucose using standard methods (18–22). The diagnosis of the metabolic syndrome and dyslipidemia was based on the National Cholesterol Education Program Adult Treatment Panel III working definition (23). Skin biopsy was performed in the consulting room after obtaining consent using an appropriate size punch biopsy needle. The samples were sent to the histopathology laboratory of NAUTH and LAUTECH Teaching Hospital for histology.

Table 1. Sociodemographic Characteristics of Lichen Planus Patients

Characteristics of Lichen Planus	Total	Classic LP N=49	Hypertrophic LP N=55	p-value
Mean age (years) $\pm$ SD	37.20 $\pm$ 13.39	35.47 $\pm$ 12.32	38.75 $\pm$ 14.21	0.215
Gender				
Male	55 (52.9)	26 (53.1)	29 (52.7)	0.973
Female	49 (47.1)	23 (46.9)	26 (47.3)	
Occupation				
Civil Servant	29 (27.9)	13 (26.5)	16 (29.1)	0.023
Trading	32 (30.8)	14 (28.6)	18 (32.7)	
Clergy	5 (4.8)	5 (10.2)	0 (0.0)	
Schooling	4 (3.8)	1 (2.0)	3 (5.5)	
Artisan	2 (1.9)	2 (4.1)	0 (0.0)	
Unemployed	27 (26.0)	14 (28.6)	13 (23.6)	
Others	5 (4.8)	0(0.0)	5 (9.1)	
Marital Status				
Single	45 (43.3)	24 (49.0)	21 (38.2)	0.335
Married	56 (53.8)	25 (51.0)	31 (56.4)	
Separated	2 (1.9)	0 (0.0)	2 (3.6)	
Widowed	1 (1.0)	0 (0.0)	1 (0.0)	
Education				
None	3 (2.9)	3 (6.1)	0 (0.0)	0.016
Primary	6 (5.8)	0 (0.0)	6 (10.9)	
Secondary	31 (29.8)	17 (34.7)	14 (25.5)	
Tertiary	64 (61.5)	29 (59.2)	35 (63.6)	

Data analysis

All data of interest were analyzed using statistical package for social sciences (SPSS) version 18.0. Socio-demographic and clinical characteristics of the study participants were presented with simple descriptive statistics (including mean, mode and percentage). To compare continuous variables, Student t-test was used while the categorical variables were analyzed using chi-square test. All data of importance were represented in tables and bar chart. The p-values less than or equal to 0.05 were taken as significant level.

Results

One hundred and four participants with LP, 49 CLP, and 55 HLP, whose mean age was 37.20 $\pm$ 13.39 years, were enrolled into the

study; there were no significant age, gender or the marital status differences among the patients having two clinical variants of LP. While most of the participants had attained at least secondary or tertiary education ($p=0.016$), the majority of them were civil servants, traders or unemployed ($p=0.023$) (**Table 1**).

Although pruritus as a symptom was insignificantly commoner in HLP, CLP patients were more likely to present with a painful rash than HLP ($p=0.046$). The rate of treatment-seeking behavior from non-dermatologist was high (76.5%); there was no significant difference in the treatment-seeking behavior among CLP and HLP patients. Also, tobacco smoking, alcohol intake behavior, family history of hypertension, diabetes and cardiovascular events between the two groups were not different. The CLP is more likely to be generalised (95.9% vs 16.4%,

Table 2. Clinical Characteristics of Classic and Hypertrophic Lichen Planus

Characteristics of Lichen Planus	Total	Classic LP N=49	Hypertrophic LP N=55	p-value
Clinical history				
Pruritus	93 (89.4)	41 (83.7)	52 (94.5)	0.072
Pain	4 (3.8)	4 (8.2)	0 (0.0)	0.046
Previous history of lichen planus	12 (11.7)	8 (16.3)	4 (7.4)	0.159
Sought treatment from non-dermatologist	78 (76.5)	39 (79.6)	39 (73.6)	0.476
Smoking	4 (3.8)	2 (4.1)	2 (3.6)	1.000
Alcohol	31 (29.8)	15 (30.6)	16 (29.1)	0.866
Family history				
Family history of hypertension	24 (23.1)	11 (22.4)	13 (23.6)	0.866
Family history of diabetes	17 (16.5)	6 (12.5)	11 (20.0)	0.306
Family history of CVE	3 (2.9)	3 (6.1)	0 (0.0)	0.101
Body Area distribution				
Upper Limb distribution	77 (74.0)	47 (95.9)	30 (54.5)	<0.001
Lower Limb distribution	101 (97.1)	49 (100.0)	52 (94.5)	0.097
Chest distribution	21 (20.2)	19 (38.8)	2 (3.6)	<0.001
Abdomen distribution	29 (27.9)	26 (52.1)	3 (5.5)	<0.001
Generalized	56 (53.8)	47 (95.9)	9 (16.4)	<0.001
Sites of LP involvement: the skin, mucosa and nails				
Genital Mucosa	1 (1.0)	1 (2.0)	0 (0.0)	0.287
Oral Mucosa	19 (18.3)	19 (38.8)	0 (0.0)	<0.001
Nail Involvement	20 (19.2)	19 (38.8)	1 (1.8)	<0.001
Skin and nails	20 (19.2)	19 (38.8)	1 (1.8)	<0.001
Skin and Oral Mucosal	19 (18.3)	19 (38.8)	0 (0.0)	<0.001
Skin, Nail and Oral Mucosal	11 (10.6)	11 (22.4)	0 (0.0)	<0.001
Clinical Signs				
Koebnerization	30 (28.8)	27 (55.1)	3 (5.5)	<0.001
Wickham Striae	43 (41.3)	34 (69.4)	9 (16.4)	<0.001
Hepatitis Screening result and Vaccination history				
Hepatitis B vaccination	10 (9.6)	8 (16.3)	2 (3.6)	0.028
Anti HCV positivity	8 (7.7)	8 (16.3)	0 (0.0)	0.002
HBsAg	5 (4.8)	2 (4.1)	3 (5.5)	1.000
Comorbid Conditions				
Systemic Hypertension	27 (26.0)	12 (24.5)	15 (27.3)	0.747
Diabetes Mellitus	10 (9.6)	1 (2.0)	9 (16.4)	0.013
Dyslipidemia	61 (58.7)	20 (40.8)	41 (74.5)	0.001
Obesity	21 (20.2)	10 (20.4)	11 (20.0)	0.959
Metabolic Syndrome	16 (15.4)	5 (10.2)	11 (20.0)	0.186

CVE – Cardiovascular event like Myocardial Infarction, stroke, HCV – hepatitis C virus infection, LP – Lichen planus

$p < 0.001$), affect the upper limbs (95.9% vs. 54.5%, $p < 0.001$), the upper torso: chest (38.8% vs. 3.6%, $p < 0.001$); abdomen (52.1% vs. 5.5%), oral mucosa (38.8% vs. 0.0%, $p < 0.001$), and the nails (38.8% vs. 1.8%, $p < 0.001$) compared to HLP. In term of multiple involvement of body sites, CLP is more likely to significantly affect the combinations of the skin and the nails (38.8% vs. 1.8%), skin and oral mucosa (38.8% vs. 0.0%, $p < 0.001$) and the skin, nails and the oral mucosa (22.4% vs. 0.0%, $p < 0.001$) compared to HLP (**Table 2**). Similarly, Kobner's sign (55.1% vs. 5.5%, $p < 0.001$) and Wickham's striae (69.4% vs. 16.4%, $p < 0.001$) were significantly commoner in the patients with CLP compared to those with HLP. The patients with CLP had a history of Hepatitis B vaccination significantly more often (16.3% vs. 3.6%, $p = 0.028$), and anti HCV positivity (16.3% vs. 0%, $p = 0.002$) compared to HLP. However, diabetes mellitus (16.4% vs. 2.0%, $p = 0.013$) and dyslipidemia (74.5% vs. 40.8%, $p = 0.001$) were more likely to be associated with HLP (**Table 2**).

The peculiarities of lichen planus patients (classic and hypertrophic) were examined about mucosal and nails involvement. The involvement of the mouth or the nails in CLP and HLP had no association with the patients' age, metabolic syndrome, and dyslipidemia. Those LP patients with oral mucosa and nail involvement were more likely to have upper limb onset ($p < 0.001$ respectively), generalised LP ($p < 0.001$ respectively), kobnerization ($p < 0.001$ respectively), Wickham's striae ($p = 0.002$ and $p < 0.001$ respectively), and clas-

sic type of LP ($p < 0.001$ respectively). The lower limb onset of LP is less likely to be associated with oral and nail involvement, also, localized disease is likely to be associated with no nail and mucosa involvement (**Table 3**).

The histologic characteristics of CLP and HLP were not different in terms of the presence of dense band of lymphocytes infiltration, vacuolar degeneration of dermo-epidermal junction, hyperkeratosis, elongation of rete ridges, melanophage, and colloid body, but the presence of saw-tooth appearance (72.0% vs. 28.0%, $p = 0.028$) which was significantly associated with HLP compared to CLP (**Figure 1**).

The clinical pattern of the nail involvement in LP patients is shown in **Figure 2**. Twenty (19.23%) patients had nail changes. Longitudinal ridging was the most frequent pattern of nails affection as above 18 (17.3%), followed in that order by melanonychia 7 (6.7%), nail thinning 4 (3.8%), and pterygium 2 (1.9%). The CLP was significantly associated with longitudinal ridging (34.7% vs. 1.8%, $p < 0.001$) and melanonychia (14.3% vs. 0.0%, $p = 0.004$) as shown in **Figure 3**.

Discussion

The present study shows that CLP is more likely to have upper limb onset, oral involvement, nail involvement and the presence of the eponymous signs of LP such as the Kobner's phenomenon, and Wickham's striae when compared with the HLP. The CLP is also the variant that may be associated with upper limbs, and torso distribution, HCV antibody positivity and

Figure 1. Histological Characteristics of Classic and Hypertrophic Lichen Planus

Figure 2. Pattern of Nail Involvement among Patients with Lichen Planus In Nigeria

presents as a generalized LP disease. Furthermore, the cases of HLP are more likely to originate in the lower limbs, confine to the lower legs and have a significant association with metabolic comorbidities such as diabetes mellitus and dyslipidemia compared to those with CLP.

The mean age of LP patients in the present study was 37.20 ± 13.39 years, that being in accordance with the previously documented adult age range of 30-60 years (24, 25). Similarly, the mean age of patients with LP in this study was very close to 37.13 ± 12.8 years as documented by Daramola et al. previously in a similar environment (15–17) and 38.8 years as documented in India by Bhattacharya et al. (26). There was no age difference between CLP and HLP patients. However, contrary to Daramola et al. (16) findings, the present study has not confirmed the female predominance of LP, as both sexes were almost

equally affected by CLP and HLP. This observation is consistent with the findings of other studies as well (25, 26). Studies have described the CLP as a non-gender, non-racial prevalent disease with tendencies to involve the skin, nails, hair, and mucosal sites (5, 25). As found in the present study, limb onset of 93.2% of cases is higher than 55.6% as observed by Bhattacharya et al. (26). The CLP demonstrated tendencies to start in the upper limbs, to be widespread with the involvement of oral and nail sites (5). Nakamura et al. (27) showed that both oral mucosa and nail association in LP are manifestations of a disseminated LP disease.

Similarly, a positive antibody to HCV in the present study is significantly associated with CLP. Contrary to our finding, Daramola et al. found an increased frequency of association between HCV infection and HLP, as more than

Figure 3. Pattern of Nail involvement: Classic and Hypertrophic Lichen Planus

Table 3. Peculiarities of lichen planus (classic and hypertrophic) in relation to mucosal and the nail involvement

Characteristics of Patients	Total N=104	Oral Mucosal Involvement Present N=19	Oral Mucosal Involvement Absent N=85	p-value	LP with Nail Involvement N=20	LP without Nail Involvement N=84	Nailp-value
Mean Age (years) $\pm$ SD	37.44 $\pm$ 13.88	34.10 $\pm$ 11.45	37.89 $\pm$ 13.75	0.267	33.55 $\pm$ 15.46	38.07 $\pm$ 12.80	0.176
Metabolic Syndrome	16 (15.4)	1 (5.3)	15 (17.6)	0.176	2 (10.0)	14 (16.7)	0.458
Dyslipidaemia	61 (58.7)	9 (47.4)	52 (61.2)	0.269	9 (45.0)	52 (61.9)	0.168
Onset of LP							
Predominantly Upper Limb onset	29 (27.9)	8 (40.0)	21 (25.0)	<0.001	8 (40.0)	21 (25.0)	<0.001
Predominantly Lower limb onset	68 (65.4)	7 (35.0)	61 (72.6)		7 (35.0)	61 (72.6)	
Predominantly Chest	3 (2.9)	3 (15.0)	0 (0.0)		3 (15.0)	0 (0.0)	
Predominantly Abdomen onset	4 (3.8)	2 (10.0)	2 (2.4)		2 (10.0)	2 (2.4)	
Extent of Lesion							
Localized	38 (36.5)	0 (0.0)	38 (44.7)	<0.001	0 (0.0)	38 (45.2)	<0.001
Generalized	66 (63.4)	19 (100.0)	47 (55.3)		20 (100.0)	46 (54.8)	
Clinical Signs							
Koebnerization	30 (28.8)	13 (68.4)	17 (20.0)	<0.001	15 (75.0)	15 (17.9)	<0.001
Wickham Striae	43 (41.3)	14 (73.7)	29 (34.1)	0.002	17 (85.0)	26 (31.0)	<0.001
Type of Skin Lesions							
Classic	49 (47.1)	19 (100.0)	30 (35.3)	<0.001	19 (95.0)	30 (35.7)	<0.001
Hypertrophic	55 (51.0)	0 (0.0)	55 (64.7)		1 (5.0)	54 (61.3)	

77.7% of their HCV antibody positive LP patients had HLP. It must be noted that HLP was the predominant variant of LP in their study and sampling method could have accounted for the difference observed. Despite numerous published studies, the link between LP and HCV remains controversial (16, 17, 28, 29). Some researchers demonstrated a positive relationship and recommended HCV screening tests for LP patients (29, 30), while others did not observe such association (17). The association between LP with HCV infection appears to be dependent on geographical heterogeneity (31). A previous study has shown the increased risk of HCV positivity in LP patients (30). We found no association between HBsAg positivity and LP like the Birkenfeld et al. (30) and a history of previous immunization against HBV appears predominant among CLP patients and might explain the protection against this virus.

Hypertrophic LP is a variant of LP also known as lichen planus verrucous or lichen planus hypertrophic whose etiology is not known (5). In the present study, we found no association between HLP and the Koebner phenomenon. A study found chronic rubbing of initial lesions following intense pruritus as implicated in the development of HLP lesions from papules to verrucous or plaques (5). Similarly, some authors have suggested that eosinophils play specific unknown roles in the etiology of HLP (5, 32). In the present study, eosinophils were seen in the histology of a single case of LP, which was diagnosed as CLP. A study has described rare or no eosinophil HLP similar to CLP and plenty eosinophil HLP that resemble lichenoid drug eruption and established no significant variation in the quantity of eosinophil in biopsies about the location of the lesions (9). We found the HLP is more likely to start and localize to the

lower limbs; this observation is in keeping with several isolated reports on HLP (8–12). The HLP involvement of the lower legs in the present study (94.5%) is close to 88.9% described by Alomari et al. (9). Some authors have attributed venous stasis as a possible reason for the high frequency of HLP in the lower limbs (2, 26). It is rare for HLP to present as a widespread disease, but a report of disseminated HLP has been documented in the literature (8).

Our study found significant associations between HLP and comorbidities such as diabetes mellitus and dyslipidemia, though no significant association was found with metabolic syndrome. Previous studies have shown an association among LP, dyslipidemia and glucose intolerance (32–34). Several studies have shown chronic induction of inflammation and generation of reactive oxygen species in LP as the link among dyslipidemia, glucose intolerance, and LP (32–35). The impaired fasting and diabetes were present (9.6%) in our study; this falls within the lower limit of 2.3–27.4% documented in previous studies (36, 37). Some studies established a close association between LP and carbohydrate dysmetabolism (36, 37). The insulin signaling effect of the inflammatory mediators and the inflammation-induced insulin resistance may be responsible for the development of the systemic insulin-resistant state in LP patients. Apart from dysmetabolism associated with the HLP, HLP has been associated with development of squamous cell carcinoma (SCC) (10–12). A study has shown an SCC incidence of 0.27% per annum in HLP lesions, and chronic inflammation (38, 39) explained the association between SCC and HLP.

There is a significant association between saw-tooth histologic appearance and HLP. Saw-tooth appearance is described as profound hyperplasia of the epidermis with invagination into the dermis. The classic pseudoepitheliomatous hyperplasia described in several reports (8–12) was not seen in the present histologic review. Other features of LP including a dense band of lymphocyte infiltration, vacuolar degeneration of dermo-epidermal junction, granular hyperkeratosis, and the presence of melanophages were observed but there were no differences in their occurrence in the variants.

Concerning the presenting symptoms, we found no difference between the frequency of pruritus in the patients with CLP and HLP, although HLP had an insignificantly higher rate

of pruritus compared to CLP. HLP has been documented in previous observation as the most pruritic variant (5, 25, 26). We also observed that CLP was more associated with pain than HLP. Bhattacharya et al. also found that 19.6% of their patients with oral LP experienced burning or pain while eating hot or spicy meals (26). It is not unusual in our environment to have more than 70% of our patients to have sought help from non-orthodox sources or self-help because LP is an annoying disease with the capacity to impair quality of life.

The prevalence of nail involvement (19.23%) is close to 15.17%, as observed by Bhattacharya et al. in India. We noted that longitudinal ridging was the most frequent nail changes while pterygium was the least type of involvement which was comparable with other published data (32). Longitudinal ridging of the nail characterizes nail involvement in LP, nail thinning, cuticular overgrowth (i. e., pterygium), atrophy of the nail bed, melanonychia, subungual keratosis, and hyperpigmentation (25).

Limitation and Conclusion

Limitations of the present study is that it is the observational single-center analysis. Also, the differences between two variants in metabolic markers and markers of chronic inflammation, thus limiting interpretation of results.

Finally, CLP is significantly associated with generalized LP disease, anti-HCV positivity, oral and nail involvement, Kobner's phenomenon, and Wickham's striae. The HLP is more likely to start and be localized to the lower limbs compared to the CLP. Impaired glucose tolerance/type 2 diabetes mellitus, dyslipidemia and histologic saw-tooth appearance were significantly associated with HLP compared to CLP. Further inferential studies are needed to elucidate the causal relationship between HLP/CLP, abnormal metabolism, and chronic inflammation.

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Epidemiološke i kliničke razlike između klasičnog i hipertrofičnog lihen planus u Nigeriji

Sažetak

Uvod. Lichen planus je inflamatorno oboljenje kože sa nekoliko kliničkih varijanti i različitim kliničkim ishodima. Primećene su neke komplikacije kod hipertrofičnog tipa koje se ne nalaze kod klasične varijante. **Cilj** je bio da se ustanove epidemiološke i kliničke razlike između klasičnog i hipertrofičnog lihen planus i kliničke povezanosti. **Materijal i metode.** Od 104 ispitanika sa lihenom planus, 49 su imali klasični a 55 hipertrofični lihen planus. Skupljeni su demografski i klinički podaci. Lichen planus je dijagnostikovao klinički i potvrđen histološki. Ispitanici su pregledani na metabolički sindrom, hepatitis B i C. **Rezultati.** Prosečna životna dob svih pacijenata bila je $37,20 \pm 13,39$ godina, bez starosnih i polnih razlika između ispitanika sa klasičnim i hipertrofičnim lihenom planus. Klasični lihen planus je češće bi bolan (8,2% vs

0,0, $p = 0,046$), generalizovan (95,9% vs 16,4%, $p < 0,001$), obuhvatao je usnu duplju (38,8% vs 0,0, $p < 0,001$), nokte (38,8% vs 1,8, $p < 0,001$), bio povezan sa vakcinom protiv hepatitisa B (16,3% vs 3,6%, $p < 0,028$) i anti-HCV pozitivnosti (16,3% vs 0,0%, $p = 0,002$). Hipertrofični lihen planus je bio značajno povezan sa poremećenom tolerancijom glukoze (16,4% vs 2,0%, $p = 0,013$), dislipidemijom (74,5% vs 40,8%, $p = 0,001$) i nazubljenim invaginacijama epiderma u derm na histologiji u poređenju sa klasičnim tipom. **Zaključak.** Hipertrofični lihen planus je uglavnom povezan sa metaboličkim komplikacijama za razliku od klasičnog tipa. Potrebno je izvesti dodatna istraživanja da se poveže ova razlika sa hroničnom inflamacijom.

Ključne reči: Lichen planus; Komorbiditet; Znaci i simptomi; Oralni lichen planus; Dijabetes melitus; Dijagnoza; Epidemiološke studije; Nigerija

Received 5.03.2019.

Accepted 9.07.2019.