

Primary Cutaneous Lymphomas at A Moroccan Referral Hospital

Hasna Kerrouch*, Meryem Khalidi, Youssef Zemmez, Rachid Frikh and Naoufal Hjira

Dermatology Venerology Department, Military Hospital Instruction Mohammed V, University Mohammed V, Rabat, Morocco

ABSTRACT

Primary cutaneous lymphomas (PCL) are the second most frequent form of extra-nodal lymphomas with a broad clinical, histological, phenotypic, genetic, and prognostic spectrum. The aim of this study was to describe the epidemiological, clinical, histopathological, immunohistochemical funding, treatment outcomes and follow up in patients with PCL within Moroccan population.

*Corresponding author

Hasna Kerrouch, Dermatology Venerology Department, Military Hospital Instruction Mohammed V, University Mohammed V, Rabat, Morocco.

Received: February 10, 2023; **Accepted:** February 17, 2023; **Published:** February 24, 2023

Introduction

Primary cutaneous lymphomas (PCL) are the second most frequent form of extra-nodal lymphomas with a broad clinical, histological, phenotypic, genetic, and prognostic spectrum. PCL are an extranodal lymphomas presented initially in the skin with no evidence of extracutaneous disease at the time of diagnosis [1,2].

The classification of PCL was introduced in 2005 by the World Health Organization and the European Organization for Research and Treatment of Cancer (WHO-EORTC) and been updated in 2018.

PCLs are a clinical disorders including cutaneous T-cell lymphoma (CTCL) account for about 71–77% and cutaneous B-cell lymphoma (CBCL) for about 23–29% of PCL [1,3].

Among CTCL, Mycosis fungoides (MF) is the most common entity with a frequency of 50%. To date, few studies have reported characteristics of PCL in morocco.

Therefore, the aim of this study was to describe the epidemiological, clinical, histopathological, immunohistochemical funding, treatment outcomes and follow up in patients with PCL within Moroccan population.

Materials and Methods

An analytical monocentric study led on a retrospective cohort of patients with PCL and followed up at dermatology department of Rabat Military Hospital. Data collected from medical records included: Age, gender, date of symptom onset, comorbidities, coexistence of previous dermatitis, malignancies, diagnosis, tumor stage, treatment, and follow up information.

We included in this study all patients with confirmed diagnoses of PCL. We excluded patients Without available medical records for clinical course.

Data collection and statistical analysis were done using JAMOVI 2.2.5 current. Descriptive statistics were performed.

Results

A total of forty eight PCL patients including 47(98%) of CTCL, and 1(2%) of CBCL were enrolled.

Among CTCL MF was the most common subtype with 42 cases (88%). In the group of BCL, primary cutaneous diffuse large B-cell lymphoma accounted for 1(2%) (Table1). The mean age of the total study group (n = 48) was 55,2 +/- 15,5years, consisting of 35 (73%) men and 13 (27%) women, the male-to-female ratio was 2,69.

Patients with CTCL (n = 47) had a mean age of 55,1 +/-15,7years and CBCL 63 years. MF patients had mean age of 55,3 +/-15,8 years and SS 52,8 +/-19 years.

In our study population, 27 patients had comorbidities such : diabetes, high blood pressure, cardiac and renal diseases.

Table 2 shows the time in months since onset of lesion and diagnosis and characteristics of each PCL type identified in the sample.

Stage distribution at time of first diagnosis is presented in Table 3. Approximately 72% of patients had early-stage conditions.

Of 37patients presenting with early stage MF only two patient showed progression to advanced stage disease.

Of the four patients with SS, one died and three are still alive. The patient with primary cutaneous diffuse large B-cell lymphoma died.

Table 1 : Patients Characteristics (n=48)

Features	Values(N=48)
Age in years, mean (SD)	55,2 +/- 15,5
Gender	
Male	35(73%)
Females	13(27%)
CTCL, n (%)	
MF	42(88%)
SS	4(8%)
Lymphomatoid papulosis	1(2%)
CBCL, n (%)	
Primary cutaneous diffuse large B-cell lymphoma	1(2%)

Table 2: Clinical Immunohistochemistry Profile and Treatment of Patients with Cutaneous lymphoma

Classification	Time in months since onset of lesion and diagnosis	Skin lesions	Lesion sites	Immunohistochemistry	Treatment
CTCL MF	24[15-69]	Erythematous scaly and infiltrated plaques,tumors, erythroderma	Diffuse trunk limbs	CD2+CD3+CD4+CD5+CD7+CD8+CD20-CD30+	Topical corticosteroid, Phototherapy, Methotrexate, Chemotherapy
SS	11[3,7-19]	Erythematous infiltrated plaques,tumors, erythroderma	Diffuse	CD2+CD3+CD4+CD5+CD7+CD8+CD20-CD30+	Systemic corticosteroid, Phototherapy, Chemotherapy
LP	6[4-54]	Erythematous papules, nodules, crusts	Diffuse	CD2+CD3+CD4+CD5+CD7+CD8+CD20-CD30+	Topical corticosteroid, Phototherapy, Chemotherapy
CBCL Primary cutaneous diffuse large B-cell lymphoma	10[9-17]	Nodules, Tumors, ulcers	Limbs	CD3+ CD5+CD20+ CD30+CD79a+	Radiotherapy, Chemotherapy

Table 3 :Stages of Mycosis Fungoides/Sezary Syndrome for 47 Patients

Stage	n(%)
IA	18(40%)
IB	8(18%)
IIA	6(13%)
IIB	7(14%)
IIIA	3(6%)
IIIB	1(2%)
IVA	2(4%)
IVB	1(2%)

Discussion

The frequencies of different subgroups of PCL in our series were nearly similar to previous studies from Austria, the US and Europe [1,3-7].

In our cohort, we found a male predominance with male-to-female ratio of 2,69 which consistent nearly with previous studies [1,3-5,7].

MF was the most comun type of PCL (88%) followed by SS (8%) and primary cutaneous CD30+ lymphoproliferative disorders (2%) wich consistent with those reported in the literature [8].

72% patients were diagnosed in early stages and 28% in advanced stages which matches with The US, Germany, Japan and Austria

studies [4, 5, 7, 9, 10]. In our study, the frequency of CBCL (2%) was lower than that reported in other studies [3,7]. This heterogeneity in the cutaneous lymphoma incidence suggests a probably environmental cause.

According to tumor evaluation and the type of PCL, several treatment options has been proposed to our patients with variable response rates.

Conclusion

In this study, CTCL was more prevalent than CBCL. Clinical, immunohistochemical findings, and treatment were similar to those described in previous reports.

References

1. Willemze R, Cerroni L, Kempf W, Berti E, Facchetti F, et al. (2019) The 2018 update of the WHO- EORTC classification for primary cutaneous lymphomas. *Blood* 133: 1703-1714.
2. Dummer R, Asagoe K, Cozzio A, Burg G, Doebbeling U, et al. (2007) Recent advances in cutaneous lymphomas. *J Dermatol Sci* 48: 157-167.
3. Bradford PT, Devesa SS, Anderson WF, Toro JR (2009) Cutaneous lymphoma incidence patterns in the United States: a population-based study of 3884 cases. *Blood* 113: 5064-5073.
4. Eder J, Kern A, Moser J, Kitzwögerer M, Sedivy R, et al. (2015) Frequency of primary cutaneous lymphoma variants in Austria: retrospective data from a dermatology referral centre between 2006 and 2013. *JEADV* 29 : 1517-1523.
5. Jenni D, Karpova MB, Seifert B, Golling P, Cozzio A, et al. (2011) Primary cutaneous lymphoma: twodecade comparison in a population of 263 cases from a Swiss tertiary referral centre. *Br J Dermatol* 164: 1071-1077.
6. Dores GM, Anderson WF, Devesa SS (2005) Cutaneous lymphomas reported to the National Cancer Institute's surveillance, epidemiology, and end results program: applying the new WHO-European Organisation for Research and Treatment of Cancer classification system. *J Clin Oncol* 23: 7246-7248.
7. Assaf C, Gellrich S, Steinhoff M, Nashan D, Weisse F, et al. (2007) Cutaneous lymphomas in Germany: an analysis of the Central Cutaneous Lymphoma Registry of the German Society of Dermatology (DDG). *J Dtsch Dermatol Ges* 5: 662-668.
8. Nudelmann LM, Bonamigo R (2015) Primary cutaneous lymphoma in southern Brazil: a 12-year single-center experience. *International Journal of Dermatology* 54 : e512-e520.
9. Fujita A, Hamada T, Iwatsuki K (2011) Retrospective analysis of 133 patients with cutaneous lymphomas from a single Japanese medical center between 1995 and 2008. *J Dermatol* 38: 524-530.
10. Kim YH, Liu HL, Mraz-Gernhard S, Varghese A, Hoppe RT (2003) Long-term outcome of 525 patients with mycosis fungoides and Sezary syndrome: clinical prognostic factors and risk for disease progression. *Arch Dermatol* 139: 857-866.

Copyright: ©2023 Hasna Kerrouch, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.