EPIDEMIOLOGICAL AND CLINICAL FEATURES OF LICHEN PLANUS IN JORDANIAN PATIENTS

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ABSTRACT

Objectives: To study the epidemiological and clinical features of LP in Jordanian patients. *Patients and Methods:* A retrospective study was done. The files of 167 patients with LP, who attended the Dermatology Clinic, Queen Alia Military Hospital, Amman, Jordan, from January 2003 to December 2005, were analyzed.

Results: The 167 patients with LP formed 0.73% of the total number of new dermatology outpatients. The male: female ratio was 1: 1.1. The patient ages ranged from 6 to 73 years, most being in the age range from 34 to 59 years (mean, 39.7 years). No familial cases were seen. No precipitating factors were detected. The majority of the patients (57.7%) showed classical lesions followed by hypertrophic type next in frequency. Most patients (83.6%) had pruritus. Limbs were the most common site to be involved at onset (61.3%). Mucous membranes were involved along with skin in 48.5%. Nail changes were observed in 9% of patients and hair affection in 1.2%.

Conclusion: The epidemiological and clinical features of the disease in Jordan are similar to those mentioned in literature, with higher prevalence of actinic type which is the case in most countries of Middle East.

KEY WORDS: Lichen Planus, Epidemiology, Clinical, Cutaneous, Mucosal.

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INTRODUCTION

Lichen planus (LP) was first described in 1869 by Erasmus Wilson.^{1,2} It is an idiopathic, non-infectious, pruritic, clinically and histologically typical dermatosis that affects the skin, mucous membranes, and less commonly hair and nails.¹⁻³ Many factors were suggested to be involved in the etiology of LP, including HLA association, infectious agents, drugs, diabetes, hepatic diseases, graft versus host disease, and

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psychological factors, but none of these was proved.⁴⁷ It is now believed to be an immune-mediated disease.^{3,4} It is characterized by violaceous, scaly, flat-topped, polygonal papules commonly involving the flexor aspects of the wrists, legs, and oral and genital mucous membranes. It usually resolves after a variable period of time, ranging from a few months to years, leaving behind a postinflammatory hyperpigmentation and/or scarring.¹⁻³ In most studies, around 1% of patients visiting dermatology clinics are affected with no significant racial variation. The average age of onset is about 40 years with, possibly, slight female predominance.⁸

PATIENTS AND METHODS

We analyzed the records of patients who attended the Dermatology Clinic, Queen Alia Military Hospital, Jordanian Royal Medical Services, Amman, Jordan, from January 2003 to December 2005. All patients affected by LP,

167 patients, were included in the analysis. Information regarding the age, sex, family history, morphology and distribution of lesions, duration of illness, concomitant use of drugs, associated diseases, and histopathology was obtained from the clinical records. A record of associated affection of the mucosae, nails, and hair was also made.

RESULTS

The 167 patients with LP formed 0.73% of the total number of new dermatology outpatients in our study. Eighty nine patients (53.3%) were females and 78(46.7%) were males (male: female ratio=1:1.1). The age of onset was between 6 and 73 years (most patients were in the age group between 34 and 59 years, mean 39.7 years). Family history of similar disease was negative for all patients. There was no history of any precipitating factors.

The involvement of skin alone was observed in 68 (40.7%) patients. Concomitant involvement of both skin and mucous membranes was seen in 81 (48.5%) patients. The majority of the patients (57.7%) showed classical lesions followed, in order of frequency, by hypertrophic, actinic, eruptive, follicular, and atrophic types (17.8, 16.1, 6.7, 1.2 and 0.5% respectively). No erosive or bollous lesions were seen. A histopathologic examination was performed in five (3%) patients to confirm the clinical diagnosis, showing findings consistent with classical LP. Limbs were the commonest site to be involved at onset (103 patients, 61.3%), especially the lower ones (76 patients, 45.5%). Other sites at onset, in order of frequency, were: the face in 23 patients (13.8%), mouth in 21 (12.9%), trunk in 18 (10.8%), and scalp in 2 (1.2%). Most patients (83.6%) had pruritus. Clearance of lesions occurred within 9 months in most cases (73%) with mild to moderate postinflammatory hyperpigmentation in only 15.9% of patients. No malignant transformation was noted. Hair involvement was detected in 2 (1.2%) patients in the form of cicatricial-alopecia patches involving the scalp (lichen planopilaris). Nail changes were present in 15 (9%) patients. Longitudinal ridging was the commonest change

(in 4 cases) followed, in order of frequency, by discoloration, splitting, loss of nail plate and pterygium. In patients with oral LP (23 patients); buccal mucosa was the commonest area to be involved (11 patients), followed by lips (5 patients), tongue (4 patients) and hard palate (3 patients). A reticular pattern was seen in 16 patients, atrophic in 5 patients, and erosive in 2 patients. Lichenoid papules with annular configuration were seen on glans penis in 9 men and macerated lichenoid patch was seen on labia majora in one female patient.

DISCUSSION

In our study, the prevalence of LP was 0.73% with almost equal involvement of both sexes. The most age group to be affected by LP in our study was 34-59 years. No familial cases were noticed. These epidemiological data are consistent with other studies held in other countries. 8-13 No factors were noted to be significantly associated with LP, which confirms the idiopathic nature of this disease, so far. 1-3

Our study showed the limbs (61.3%); especially lower limbs (45.5%), to be mostly involved at onset with the classical type being the most common morphologic type (57.7%). These results are consistent with literature. 1-3,8 Actinic LP showed higher prevalence (16.1%) than most international figures, which is the case in most Middle East countries, mostly due to higher sun exposure.8-14 Association of mucosal and skin diseases was seen in 48.5% of patients. Buccal mucosa was the commonest mucosal surface to be involved with the reticular type being the commonest morphologic subtype. Genital LP was encountered in about 6% of cases. These results are consistent with the epidemiological and clinical features of mucosal LP in most studies.8,9,15 Hair and nail involvement was seen in 1.2% and 9% respectively, which is the case with other studies. 16-18 The disease, in our study runs a course of few months (9 months in average) in most cases (73%) leaving behind a minimal pigmentation, which is the usual course of this disease.¹⁹ No

malignant transformation was noted. The epidemiological and clinical setup of LP in our study, among Jordanians, did not show significant differences from that written in literature.

The hospital in which this study was carried out, is one of the biggest three hospitals in the capital Amman (middle sector of Jordan), which caters for of about 63% of Jordan population. So, this hospital based study may give good idea about the features of LP in our Country. However, there is a need for further studies, in other hospitals and provinces of Jordan to give better idea about the features of the disease in Jordan. This study showeds that the epidemiological and clinical features of the disease in Jordan are similar to those mentioned in literature, with higher prevalence of actinic type which is the case in most countries of Middle East.

REFERENCES

- Black MM. Lichen planus and lichenoid disorders. In: Textbook Of Dermatology. RH Champion, JL Burton and FJG Ebling (eds.), 5th ed., vol 3, Blackwell Scientific Publications, Oxford 1992;1675.
- Arndt KA. Lichen planus. In: Dermatology In General Medicine. TB Fitzpatrick, AZ Eisen, K Wolff, et al. (eds.), 3rd ed., McGraw-Hill, New York 1987; 967.
- 3. Boyed AS, Neldner KH. Lichen planus. J Am Acad Dermatol 1991;25:593-619.
- 4. Soliman M, El-Zawahry B, Rateb A. Immunological study of lichen planus. Egypt J Derm Ven 1993;13:15-9.
- 5. White AG, Rostom AI. HLA antigens in Arabs with lichen planus. Clin Exp Dermatol 1994;19:236-7.

- 6. El-Tonsy MH, Anber TE, El-Domyati MM. Lichen planus-a histopathological and immunohistochemical study. Egypt J Derm Ven 1995;15:45-50.
- 7. Ibrahim HA, Baddour MM, Morsi MG. Should we routinely check for hepatitis B and C in patients with lichen planus or cutaneous vasculitis? East Mediterr Health J 1999;5:71-8.
- Bhattacharya M, Kaur I, Kumar B. Lichen planus: A clinical and epidemiological study. J Dermatol 2000;27:576-82.
- Kanwar AJ, Belhaj MS. Lichen planus among Arabs-a study from Libya. J Dermatol 1984;11:93-6.
- Dostrovsky A, Sagher F. Lichen planus in subtropical countries. Arch Dermatol Syphilol 1949;59:308-28.
- 11. Katzenelson V, Lotem M, Sandbank M. Familial lichen planus. Dermatologica 1990;180:166-8.
- 12. Singh OP, Kanwar AJ. Lichen planus in India: an appraisal of 441 cases. Int J Dermatol 1976;15:752-6.
- 13. Vijayasingam SM, Lim KB, Yeoh KH. Lichen planus: a study of 72 cases in Singapore. Ann Acad Med Singapore 1988;17:541-4.
- El-Zawahry M. Lichen planus tropicus. Dermatol Int 1965;4:92-5.
- Salem G. Oral LP among 4277 patients from Gizan, Saudi Arabia. Community Dent Oral Epidemiol 1989;17:322-4.
- Matta M, Kibbi AG, Khattar J. Lichen planopilaris: A clinicopathologic study. J Am Acad Dermatol 1990;22:594-8.
- 17. Mehregan DA, Van Hale HM, Muller SA. Lichen planopilaris: Clinical and pathologic study of forty-five patients. J Am Acad Dermatol 1992; 27: 935-42.
- 18. Samman PS. The nails in lichen planus. Br J Dermatol 1961;73:288-92.
- 19. Altman J, Perry HO. The variation and course of lichen planus. Arch Dermatol 1961;84:179-91.