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POPULATION BASED CLINICAL OBSERVATIONAL STUDY OF AUTOIMMUNE DISORDER LICHEN PLANUS

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ABSTRACT

Lichen planus (LP) is a recurrent, pruritic, inflammatory eruption characterized by small, discrete, polygonal, flat-topped, violaceous papules that may coalesce into rough scaly patches, often accompanied by oral lesions. Though the cause of lichen planus is unknown but it is thought that it is caused by T-cell mediated autoimmune reaction against the dermal–epidermal junction and induce apoptosis in basal keratinocytes in people with genetic predisposition. Both hepatitis B and C viruses may independently trigger or exacerbate Lichen planus. Signs and symptoms of LP vary depending on what part of the body affected. Mostly it affects skin, oral, scalp, nail, genital. Various medical therapies are used for the treatment of LP such as corticosteroids, non steroidal creams and ointments and phototherapy. Contrary to the allopathic treatment which is governed by the use of cortisone or steroids, homeopathic treatment for lichen planus is extremely curative, safe and long lasting. Homeopathy treatment boosts normal immune response and fight viruses and allergens. Lichen planus is not contagious and can not be passed to a sexual partner.

INTRODUCTION:

Lichen planus (LP) is an inflammatory dermatosis of the mucocutaneous surfaces that can present with a variety of clinical manifestations.[1] The typical rash of lichen planus is well-described by the "5 P's": well-defined pruritic, planar, purple, polygonal papules. It is an inflammatory skin disease which commonly causes an itchy rash of small purplish bumps. Often the arms, legs, back or inside of the mouth are affected; however it can also affect the genital area including the vagina or penis. Lichen planus may occasionally involve the nail, hair and scalp or the skin around the anus (back passage). Very rarely, it may involve the oesophagus or tear ducts. It is possible to have the disease in one area without ever having a problem elsewhere. The prevalence of LP is unknown. LP most commonly affects middle-aged people.[2] Although childhood-onset LP has also been well described. Women are affected as frequently as men. LP is a self-limited condition that, according to one epidemiologic study, may resolve after 1 month to 7 years. The pathogenesis of LP is not entirely understood. In general, activated T lymphocytes are recruited to the dermal–epidermal junction and induce apoptosis in basal keratinocytes. Both CD4 + and CD8 + T lymphocytes are found in the lichenoid infiltrate of an association between LP and hepatitis C has been well established. It has been opined that hepatitis C- induced LP, to the development of LP. Hepatitis B and C are viral infections that involve the liver, may result in chronic disease and may be associated with autoimmune disorders such as thyroiditis, immune complex nephritis.

The classic presentation of LP involves the appearance of polygonal, flat-topped, violaceous papules and plaques.[3] LP most commonly affects the extremities, particularly the flexural wrists and ankles.[4] Oral LP is the most common autoimmune condition of the oral mucosa,[5] and oral involvement is present in 30–70% of patients with LP.[6] Lesions of oral LP most commonly appear as asymptomatic or tender, white, reticulated patches or plaques (reticulated form), or as painful erosions and ulcers. Oral LP is more common in white women, tends to arise in the fourth and fifth decades of life, and presents most commonly on the buccal mucosa, followed by the alveolar mucosa and tongue.[5] Bullous oral LP, a subtype of LP distinct from LP pemphigoides and mucosal blistering conditions, has been reported to involve the lower mucosal lip.[7] Yeast infections are commonly found in association with lichen planus or can be triggered by topical steroids used to treat it. The treatment of the yeast infection sometimes improves the symptoms of oral lichen planus. Alcohol, tobacco, spicy

foods, peppermint, cinnamon, citrus type foods and stressful situations trigger the symptoms and should be avoided if possible.

When LP involves hair follicles in a condition known as lichen planopilaris (LPP), cicatrizing alopecia may result. Women are affected much more commonly than men.[8] Clinically, patients most frequently develop irregularly shaped patches of scarring alopecia on the parietal, frontal, or occipital scalp. Lesions tend to be painful or pruritic.[9] Several nail changes are observed in LP. The most specific nail abnormality in LP is the formation of wedge-shaped deformity of the nail bed. Longitudinal ridging, distal splitting, and thinning of the nail plate, are nonspecific. The differential diagnosis of nail changes may include idiopathic onychorrhexis, psoriasis, alopecia areata, nail–patella syndrome, or onychomycosis.[10] In women with LP of the genitalia, the vulva or vagina may be affected. Without adequate treatment, substantial erosion and anatomic disfigurement may occur.[11] In men with LP of the genitalia, the glans penis is most commonly involved. Bacterial or fungal super infection should be investigated and, where present, should be treated.[12]

MATERIAL AND METHODS:

For conducting the observational study of autoimmune disorder Lichen planus among the Aurangabad population the protocol was generated and submitted to the Institutional Review Board (IRB) of SRM Clinical Research Services Pvt. Ltd. After the protocol was approved by the IRB of SRM Clinical Research Services Pvt. Ltd, three clinical sites headed by the dermatologists were selected and the study was conducted at these sites. The clinical data regarding the LP from patients was collected after their informed consent. Total 108 patients were screened to be suffering from skin disease, out of which 20 patients were conformed to be suffering from Lichen planus disorder. The confirmation was by the discretion of the dermatologist physician. The case report form was duly filled for each patient, which included patient's medical history, age, gender, the body part affected by the LP disorder and the drugs prescribed by the dermatologist. Patients were categorically classified on the basis of body area affected by LP, the areas considered for the classification were scalp, underarm, oral cavity, genital area, skin and nails. Data collected was summarized and statistically analysed.

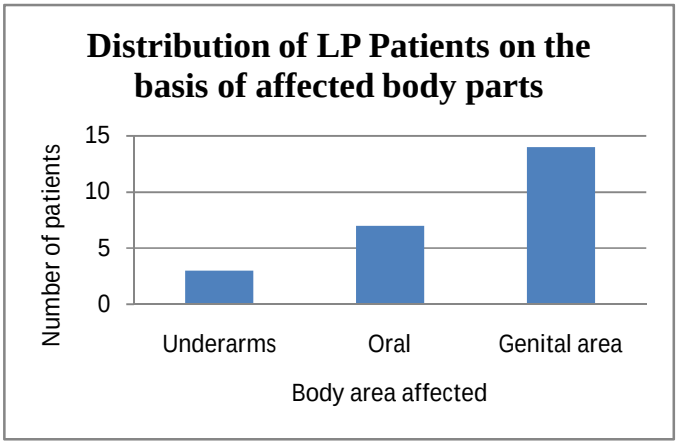
RESULT AND DISCUSSION:

Total number of screened patients those who were suffering from skin disease was 108 out of which only 20 patients were conformed to be suffering Lichen planus disorder after diagnosed by biopsy. Among these 20 patients average age of the male patients suffering from Lichen planus was found to be 35 years and that of female patients was 32 years. The body part mostly affected in males was oral and underarm region, whereas in female genital area is mostly affected by Lichen planus. Genital Lichen planus was observed to be more abundant in female patients than male patients. The medication prescribed to the patients by the dermatologist was mostly antifungal agents, but it is also evident that, all the patients were referred to Homeopathy, for the case that, it is believed to be highly effective in LP cases. Most of the male patients were observed to be the diabetes patients and the females were seen to be hypertensive. This being a observational study, the prescription of the drug was left to the sole decision of the dermatologist.

CONCLUSION:

From the observational study of the Lichen planus disorder among the Aurangabad population it was concluded that the female patients are more affected by Lichen planus as compare to the male patients. The area mostly affected in males was oral and underarm region where as in females, genital area is mostly affected. Homeopathy treatment is more recommended to Lichen planus patients as it is considered to be more curative as compare to the allopathy treatment. The common brands of drugs prescribed by the dermatologist were Demazole, Pethex, Clotrimazole and BCG creams and treatment period was observed to be ranging between 6 months to 3 years.

Figure 1: Classification of LP patients on the basis of the body part affected



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