CASE REPORT

LICHEN SIMPLEX CHRONICUS

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ABSTRACT

Lichen simplex chronicus (LSC) is a cutaneous disorder characterized by epidermal hypertrophy due to chronic scratching. This disease is most common in adults, and is usually localized. Histopathological examination is similar to prurigo nodularis. Clinically, lesions appear as erythematous/lichenified plaques, with well-difinied edges, usually located on ankles, feet, arms, forarms, neck, occipital scalp, or anogenital region. Lesions are accompanied by intensive pruritus. We present a case of a 57 years old woman, anxious, depressive, who developed a erythematous-squamos, intensely itchy eruption, localized on legs and arms. The evolution was variable, with episods of remission and exacerbation, especially due to mental stress. We performed a skin biopsy with histopathological examination which showed hyperkeratosis, parakeratosis, acanthosis with epidermal irregular ridges; focal spongiosis; dermal fibrosis. The final diagnosis was established: lichen simplex chronicus. The treatment with antihistamines, occlusive dermatocorticoids and emollients was initiated, with favorable evolution. Management of lichen simplex chronicus is quite challenging, because the lesions are very itchy, and it this leads to „scratch itch"cycle, difficult to treat.

Keywords: lichen simplex chronicus, neurodermatitis, prurigo nodularis, treatment of neurodermatitis, DLQI, depression.

INTRODUCTION

LSC, also known as neurodermatitis, is a common skin condition, a response to repeated rubbing or scratching, without a predisposing cutaneous disease (1). It is known that mental stress has an important role in development and perpetuation of lesions. (2). According to different studies, LSC occurs in 12% of population, affecting most commonly women (3). Skin biopsy with histopathological examination may be usefull. The features observed are: hyperkeratosis, acanthosis, spongiosis and parakeratosis (sometimes); hiperplasia of all components of the epidermis (4, 5).

Clinically, the lichenified plaques accompanied by pruritus. Sometimes, itch is more severe than the aspect of lesions. By scrathing, the itch dissapers initially, for several hours, but then tends to reappear even more severe. The skin becomes injured. (6). The lesions appear as redness-edematous plaques, with squamous areas, thickened. LSC is frequent on women, 30-50 years old.The patient can have one or multiple lesions. When lesions are located on the neck, it is called lichen nuchae. It is usually covered by thick scales, like in psoriasis, and it is located around the midline of the nape or can extend on the scalp or behind the ears. Infection may also occur. (7, 8). LSC may also accompany other dermatological disorders: venous insufficiency, atopic dermatitis, asteatotic eczema. (9).

Treatment of LSC is due to the cause and severity of the disease. Psychological counseling is always helpful. The patient should be explained that the scrathing is maintaining the lesions. Antihistamines can be recommanded. On infected lesions, topical antibiotics may be applied. On severe, very itchy lesions, occlusive bandages and dermatocorticoids are requested. Some authors showed improvement after treatment with dopexin 5% cream. In severe, chronic cases dermal infiltration of triamcinolone leads to improvement of symptoms. (10, 11, 12).

METHODS

We present the case of a 57 years old woman, anxious, depressive who reffered to our Dermatology Clinic for the evaluation of a erythematous-squamous, itchy eruption, located on legs and arms, in evolution for several months. Exacerbation on lesions usually tends to occur along with mental stress. Family history was unremarkable. Medical history suggested multiple episodes of depression, but without treatment. Except the skin lesions, physical exam revealed no other abnormal findings. Local cutaneous exam showed: erythematous plaques, covered by thick, white scales, crusts, with relatively regular, well-defined edges, variable diameter, located on legs and arms (Fig. 1, Fig. 2).

We also performed a series of blood tests, abdomino-pelvine echography, and pulmonary radiography, that were all normal.

For the diagnosis of certainty, the biopsy with histopathological examination was defining: dermal fragment with hyperkeratosis, parakeratosis with sero-leukocyte crust, outbreaks, important acanthosis with epidermal irregular ridges, focal spongiosis and an inflammatory intradermal lymphohistiocitar infiltrate

that includes rare eosinophils dispersed, based on dermal fibrosis. The histopathological aspect supports the diagnosis of lichenified chronic spongiotic dermatitis / lichen simplex chronic (Fig. 3, Fig. 4).

RESULTS

We initiaed the treament, according to the severity of the lesions. These lesions were thick, with white scales and crusts, so topical antibiotic, followed by potent dermatocorticoid (betamethasonum) and emollients proved their efficiency. After two applications per day, for 5 days of hospitalisation, there were no scales, and the erythema and inflammation were significant improved. The pruritus had almost disappeared. We also opted for psychological consultation, and the the patient's mental state has improved. Our patient no longer developed panic attacks so often.

We decided to discharge the patient, with recommandation of following the same topical treatment, (but decresing the number of applications of dermatocorticoids, as the aspect of lesions improved), and of course, continuation of psychotherapy. The patient returned coform programming, to control, 4 weeks after discharge, and the evolution was great: first, the quality of life improved significantly, she was no longer depressed because she had no pruritus, and the lesions the lesions healed, only discret hyperpigmentation with discrete eythema, only on few of them existed (Fig. 5, Fig. 6).

DISCUSSIONS

Some studies suggested the association between LSC and psychosocial burden. Also, this patients often develop depression or anxiety, or both. (6). Other characteristics for patients with LSC are: lack of flexibility, poor social skills, insomnia. (12). In China, a study compared the quality of life of patients with LSC, with patients with psoriasis. DLQI score for LSC was lower than for patients with psoriasis. However, the parameters that were studied demonstrated that LSC has a moderate impact on quality of life. (13).

On the other hand, when it comes for patients with chronic diseases, comparing the quality of life for men with the one for women, it reveals that women are more often affected (14).

Because itching is the main symptom in LSC, some authors decided to compare it with the pruritus in psoriasis, known to occur in aproximately 80% of patients. Even thought it is severe in both disorders, it looks like patients with LSC are more concerned about pruritus than patients with psoriasis (15).

LSC is difficult to treat. Many therapies proved to be efficient: dermatocorticoids, topical tacrolimus, cyclosporine, phototherapy, transcutaneous electrical nerve stimulation, psychotherapy (16-18).

CONCLUSIONS

In conclusion, management of LSC can be challenging. Althought it is not a life-threatening disorder, the quality of life of this patients is often affected. There are multiple options of therapy, but, unfortunately none of them can prevent reccurence. Because of its chronic evolution, patients must be periodically reassessed.

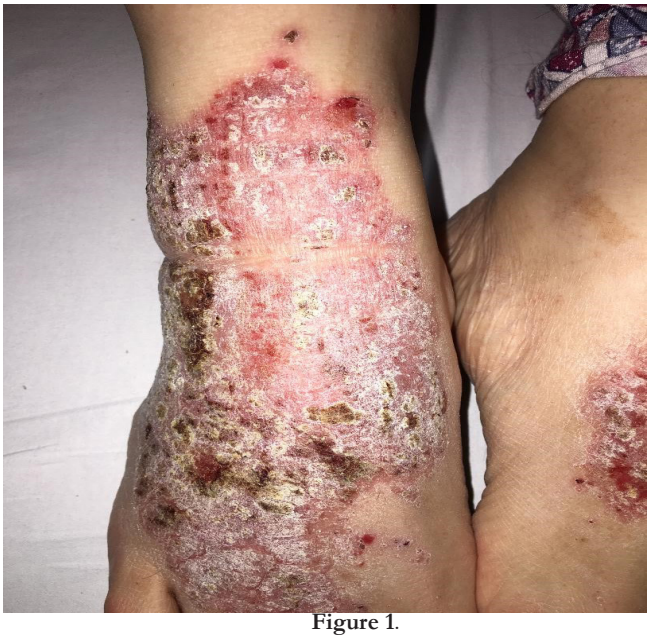

Figure 1.
Erythematous plaques, covered by thick, white scales, crusts, with relatively regular, well-defined edges, on leg

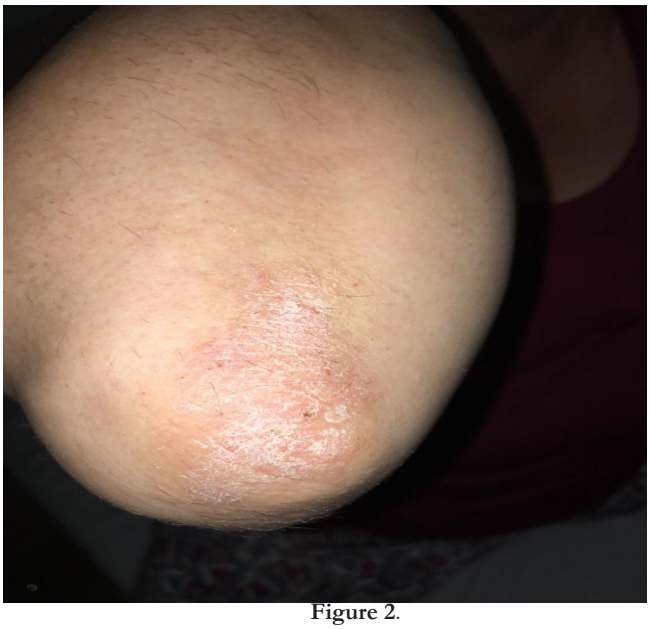

Figure 2.
Erythematous plaque, with thick white scales, on elbow

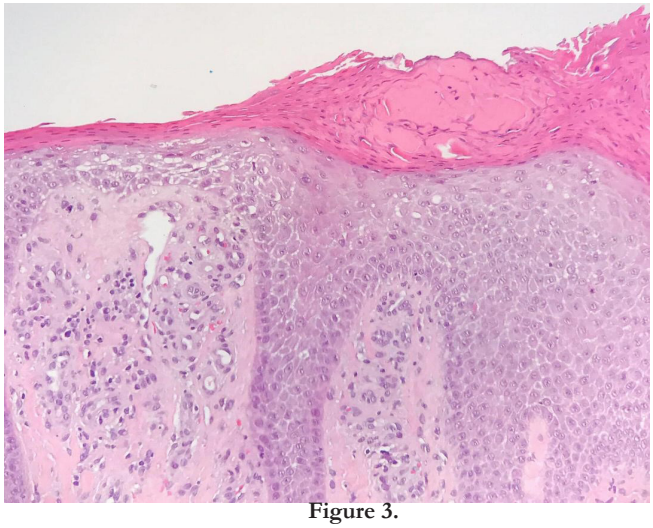

Figure 3.

Dermal fragment with hyperkeratosis, parakeratosis

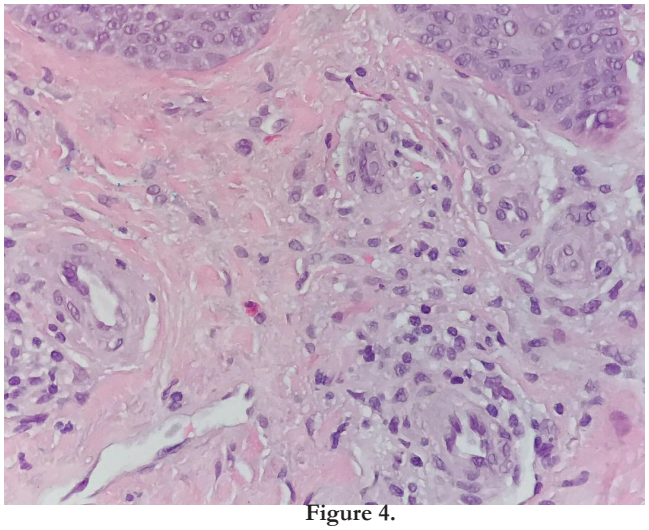

Figure 4.

Inflammatory intradermal lymphohistiocitar infiltrate

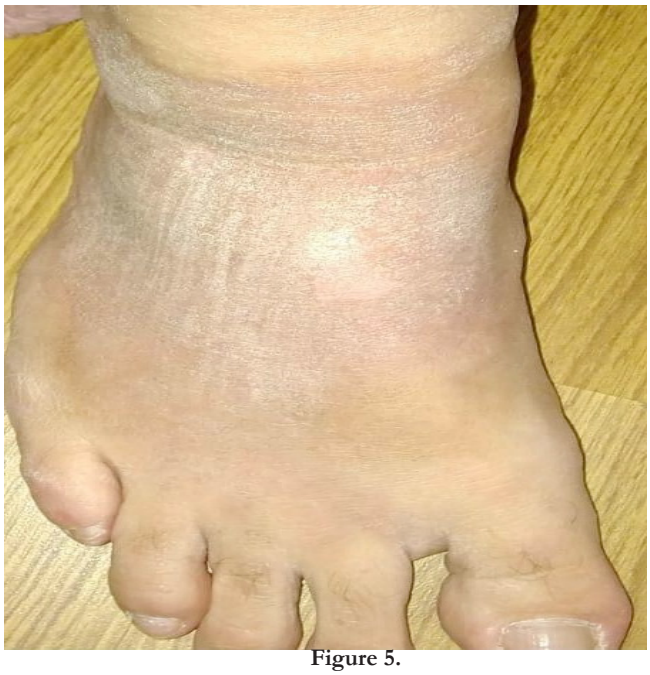

Figure 5.

Improvement of lesions on lege

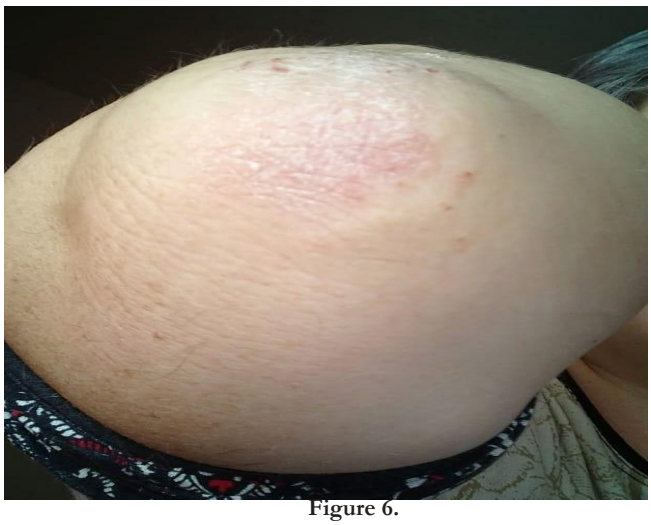

Figure 6.

Improvement of erythematous-squamous plaque on elbow

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