



UDC: 616.071-08:618-177.112.2

LASER THERAPY IN PATIENTS WITH A RARE, WIDESPREAD FORM OF LICHEN PLANUS

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ABSTRACT: Lichen planus is a pressing problem in dermatology due to the presence of severe forms of lichen planus, particularly those with a chronic course. Neoplastic transformation of lesions is possible, which is difficult to diagnose in atypical clinical forms of lichen planus.

Keywords: lichen ruber planus, low-level laser therapy, immunopathogenetic parameters.

**ЛАЗЕРНАЯ ТЕРАПИЯ У ПАЦИЕНТОВ РЕДКО ВСТРЕЧАЮЩИЕСЯ
РАСПРОСТРАНЁННОЙ ФОРМЫ КРАСНОГО ПЛОСКОГО ЛИШАЯ**

Аннотация: Красный плоский лишай является в дерматологии актуальной проблемой, которая связано с наличием тяжело протекающих форм красного плоского лишая, особенно с своим хроническим течением. Возможно опухолевой трансформацией очагов поражения, которая трудно диагностируется с атипичными клиническими формами красного плоского лишая.

Ключевые слова: красный плоский лишай, низкоинтенсивная лазерная терапия, иммуногенетические показатели.

**ҚИЗИЛ ЯССИ ТЕМИРАТКИ КАМ УЧРАЙДИГАН КЕНГ ТАРҚАЛГАН ШАКЛИ
БЎЛГАН БЕМОРЛАРДА ЛАЗЕР ТЕРАПИЯСИ**

Аннотация: Қизил ясси темиратки дерматология соҳасида долзарб муаммолардан бири ҳисобланади. Бу, айниқса, касалликнинг оғир кечиши ва сурункали шаклда давом этиши билан боғлиқ. Шунингдек, қизил ясси темираткининг айрим ўчоқлари ўсмага айланиши эҳтимоли мавжуд бўлиб, бу ҳолатни клиник жиҳатдан аниқлаш қийин, чунки у атипик кўринишларда намоён бўлади.

Калит сўзлар: қизил ясси темиратки, паст интенсив лазер билан даволаш, иммуногенетик кўрсаткичлар.

INTRODUCTION

Lichen Planus (LP) represents a current challenge in dermatology due to the existence of severe forms, especially those with chronic progression [4, 5, 6, 9, 10, 12]. There is a possibility of neoplastic transformation of the affected foci, which is often difficult to diagnose alongside atypical clinical forms of LP. Furthermore, the limited effectiveness of previously used standard therapy necessitates the search for new non-drug treatment methods [1, 2, 3, 7, 8, 11]. Low-level laser therapy (LLLT), utilizing therapeutic apparatuses such as the "MILTA-F-8-01" series, is one such method.

Clinical Observation Patient A., born 1982, presented to the Department of Dermatovenereology at Andijan State Medical Institute, under the supervision of the Head of the Department,

Professor A.B. Pakirdinov. Following a departmental consultation, the patient was directed for inpatient treatment to the second dermatological ward of the Andijan Regional Dermatovenerological Dispensary.

Complaints: The patient complained of eruptions on the skin of the upper and lower limbs and periodic, intense pruritus.

Anamnesis Morbii (History of Illness): The patient considers himself ill for 1 year, starting when eruptions appeared on the anterior surface of the shins. He does not associate his disease with any specific factor. Family history is unremarkable. He initially self-treated based on the advice of friends and did not consult a dermatologist. After some time, the number of eruptions began to increase, with new elements appearing on the skin of the upper and lower limbs. He received outpatient treatment at his place of residence, which included local application of hydrocortisone ointment, oral administration of Diazolin, vitamins, intravenous 30% Sodium Thiosulfate, and antibiotics (Augmentin-1000), but improvement was insignificant. The last exacerbation was noted for 1 month, during which new eruptions appeared on the skin of the thighs and forearms. He then consulted a dermatologist at his place of residence, who referred him to the Department of Dermatovenerology at Andijan State Medical Institute for consultation.

Anamnesis Vitae (Life History): Residence: Andijan region. Education: Specialized secondary education. He denies having venereal diseases, HIV infection, oncological diseases, tuberculosis, or previously transferred infectious diseases. He reports no drug intolerance. Past Diseases: Frequent acute respiratory infections, tonsillitis (angina). Heredity: Not aggravated. Traumas/Surgeries: Appendectomy. Harmful Habits: Smokes, drinks alcohol rarely on holidays.

General Examination The patient's condition is satisfactory, and consciousness is clear. Auscultation, palpation, and percussion reveal no abnormalities in internal organs. Heart Rate is 72 beats/min. Blood Pressure is 125/75 mmHg. Stool is normal and regular.

Local Status The dermatological pathological process is widespread, symmetrically located, and follows a chronic course in the exacerbation stage. It is localized on the skin of the upper limbs (shoulders, forearms) and lower limbs (thighs, shins, ankles, dorsal surface of the feet). It is characterized by multiple papular elements, pink with a violet tint, measuring 0.3–0.6 cm in diameter, polygonal in shape, with an umbilical depression in the center. Some papules merge, forming rings with a slight central depression up to 2.0 cm in diameter (Fig. 1-2). Under lateral illumination, a waxy sheen is visible. Wickham's striae sign is positive. Peripheral lymph nodes are not enlarged upon palpation.



Fig.1



Fig. 2

Research Data:

Clinical Blood Analysis: Leukocytes $3,3 \times 10^9/l$; Erythrocytes $4,62 \times 10^{12}/l$;

Hemoglobin 140 g/l; Platelets $337 \times 10^9/l$; Erythrocyte Sedimentation Rate (ESR) 6 mm/h; Eosinophils 2%; Lymphocytes $1,0 \times 10^9/l$.

General Urine Analysis: Straw-yellow, transparent; Protein 0,017 g/l; Specific Gravity 1,025; Glucose: negative; pH 6,5; Leukocytes, erythrocytes not detected. Biochemical Blood Analysis: Cholesterol 5.03 mmol/L Total Bilirubin 10.9 mmol/L; Glucose 6.0 mmol/L. Abdominal Ultrasound (20.02.2019): Gallbladder kinking. Skin Biopsy Analysis (Andijan Regional Oncological Dispensary): Epidermis of uneven thickness, focal hyperkeratosis, focal hypergranulosis, foci of vacuolar degeneration. Dermis shows swelling of collagen fibers and collapsed vessels. A band-like lymphohistiocytic infiltrate is present in the superficial layers of the dermis.

Treatment - Patient A. (born 1982) was prescribed treatment in accordance with the standard of specialized medical care for Lichen Planus, including Low-Level Laser Therapy (LLLT) (Photo 1 - Laser apparatus "MILTA-F-8-01").

Photo - 1. Laser device "MILTA-F-8-01"



The objectives of LLLT include the elimination of the affected area at the local level and, at the general level: modulation of immune system activity, enhancement of liver detoxification activity, and elimination of the body's energy deficit. The latter objective is achieved by performing LLLT using the Intravascular Low-Level Laser Therapy (IVLLT) method.

The treatment plan involved irradiation of the affected zone, activation of segmental innervation in zones corresponding to the level of the lesion, exposure to the thymus projection zone, blood irradiation using the Intravenous Laser Blood Irradiation (VLLT) and Non-Invasive Laser Blood Irradiation (NLLBI) methods, irradiation of the liver in the projection of its lower edge, and irradiation of the spleen projection zone (Table 1).

Table 1. Irradiation regimens for treatment zones in lichen planus

Zone of Irradiation	Terminal	Frequency (Hz)	Diode Power (mW) / Laser Power (W)	Nozzle	Exposure (min)
Skin, affected zone	KT1-2	1500	50	No. 7/MN	4-10
VLLT	DT-VLLT	-	1.5 W	KIVL-01	20-30
NLLBI of elbow vessels	KT1	1500	30	No. 7	4-6



Projection of the lower edge of the liver	OT3-5	1500	40	No. 7/MN	4-6
Spleen Projection	OT2-4	600	30	No. 7/MN	4
Thymus Area	OT1	150-300	30	No. 7/MN	2-4
Spine, Segmental Innervation Area	MT	150-300	40 (30-60)	BN	2-4

The duration of inpatient treatment was 14 days. The patient was discharged with complete resolution of the elements, with residual hyperpigmentation in some areas, for clinical surveillance by a dermatovenerologist at his place of residence.

CONCLUSION

The described clinical case demonstrates a rare form of LP with a widespread localization without involvement of the genitals. This is noteworthy because the papular form is the most common presentation. Despite the diversity of clinical forms, course variants, and syndromes of LP, the diagnosis of this disease does not present major difficulties, as it is almost always possible to detect typical polygonal papular elements with a characteristic color, smooth surface, umbilical depression, and transverse striation (Wickham's striae). A frequently recurrent course can lead to a reduced quality of life and depression. However, given this clinical picture, the diagnosis can be established by correlating anamnestic, clinical, and histological research data. The adjustment of therapeutic and diagnostic measures is especially important. Attention must be paid to prior treatment and tolerance to medicinal substances. We hope that the presented clinical case will help dermatovenerologists focus attention on the clinical and pathomorphological picture of LP, thereby contributing to the establishment of a correct diagnosis and the determination of optimal treatment tactics.

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