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## CLINICAL FEATURES OF VARIOUS FORMS OF RED FLAT TINEA ON THE MUCOSA OF THE MOUTH

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**Abstract:** Study of the clinical condition of the mucous membrane of the oral cavity in hyperkeratotic (typical), erosive, ulcerated, pemphigoid and scaly forms of red flat iron.

**Keywords:** Oral lichen planus, hyperkeratotic (typical), erosive, ulcerative, pemphigoid, verrucous, oral hygiene index, PMA index, stomatoscopy.

**Introduction.** One of the common diseases of the oral mucosa (OM) with unclear etiopathogenesis is considered lichen planus (LP). The incidence of this disease among other diseases of the oral mucosa (OMD) is 30-35%; among skin manifestations of OLP it is only 1.5% - 2.4% [2,5,12,14].

In women, the incidence of LP lesions is observed more often than in men. Interestingly, men suffer more often at a young age, and women - after 50-60 years, which is associated with hormonal imbalance. The age of patients with LP is more often observed in people 30-60 years old, and the majority, i.e. 62-67% account for women over 40 years of age due to the onset of menopause and the postmenopausal period. The incidence of malignant degeneration of LP ranges from 0.4% to 3.3% with a duration of observation from 0.5 to 20 years; according to various authors, among other dermatoses it is about 5% [1,3,4,7, 8.11].

According to the Mashkilleysson classification, 1964, today there are six clinical forms of lichen planus of the oral mucosa (LP) and the red border of the lips: typical, hyperkeratotic, exudative-hyperemic, erosive-ulcerative, bullous, atypical. In practical dentistry, five forms are often found on the red border of the lips (RBL) and oral mucosa: typical, erosive, ulcerative, pemphigoid and warty. To date, the etiopathogenesis of LP has not been

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sufficiently studied [6,9,10,13,15]. Classification of LP according to ICD-10: Other lichen planus (L43.8).

The purpose of the study is to study the clinical condition of the oral mucosa in hyperkeratotic (typical), erosive, ulcerative, pemphigoid and warty forms of LLP.

Materials and methods: Sixty-two patients with OLP were examined at the Department of Therapeutic Dentistry, Clinic of the Tashkent State Dental Institute. Among them, 21 (33.8%) were male and 41 (66.1%) were female, aged between 20 and 69 years, forming the main group. Eighteen healthy individuals comprised the control group. The oral hygiene status was evaluated using the Oral Hygiene Index Simplified (OHI-S) (J.G.Green, J.R.Vermillion, 1964); the level of inflammation in the gums was assessed using the Papillary-Marginal-Alveolar index (PMA) (C.Parma, 1960), and the intensity of caries was determined by the DMF index. All patients underwent clinical examination under natural light using a dental mirror and a stomatoscope. Patients' life histories and current disease histories were recorded, and photographic documentation was conducted.



Fig.1 Examination of the oral mucosa using stomatoscopy

During stomatoscopy (Fig. 1), the entire mucous membrane of the oral cavity is examined, in an enlarged image displayed on the monitor, while the morphological elements of the lesion are diagnosed, especially in hard-to-reach areas, the integrity of the epithelium, color, moisture, elements of the lesion of the LP are determined, the ability to save and compare all obtained images with each other to identify the dynamics of the process.

### Results obtained and discussion.

Clinical examination of patients with SPL OMPR was carried out under natural light with a stomatoscopic apparatus and a dental mirror. When examining patients, all forms of oral LP were identified: hyperkeratotic (typical), erosive, ulcerative, pemphigoid and verrucous. During the examination, attention was paid to the presence of hyperemia and edema, the presence of morphological elements - pearl-white papules and Wickham mesh. Collection of the patient's medical history consisted of the presence of the named factors preceding the development of LP, such as stressful situations, toxic-allergic and other influences.

The main complaints presented by patients were pain when eating spicy and salty foods, itching and burning, bleeding gums, and an unpleasant odor - halitosis. Angular cheilitis

developed in patients with hyposalivation and dry mouth. However, more patients experience hypersalivation and loss of saliva from the mouth at night. It should be noted that when the lesions are located on the tongue and floor of the mouth, not only food intake is disrupted, but also speech. Naturally, with pain and burning, maintaining oral hygiene can be difficult; as a result, deposition of soft plaque and hard dental plaque may occur, and halitosis is noted.

Hyperkeratotic (typical) form of LP is the most common form of LP, accounting for 63.2% of all forms of this disease. Clinically, this form is manifested by the appearance of small polygonal white-gray papules, reminiscent of a pearlescent sheen, slightly protruding above the epithelium; sometimes a change in the color of the mucous membrane was noted. Patients complained of a feeling of tightness, burning and roughness in the mouth. Upon objective examination, papules are observed, usually surrounded by a lace pattern, the socalled "Wickham mesh" (Fig. 2). On the tongue, papules are in the form of circles or rings. (Fig.3). Dentistry produces a luminescent picture of the mucous membrane with a bluishviolet glow.

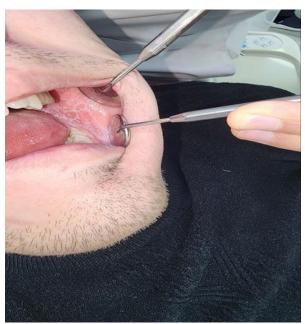




Fig.2. Hyperkeratotic form of LP.

Fig.3. Hyperkeratotic form of LP.

Papules on the cheeks, openwork.

White circles and rings on the tongue

The erosive form, with a frequency of occurrence of 14.4%, is in second place in terms of occurrence after the typical form. Patients' complaints often boil down to a burning sensation and pain, especially pronounced when eating, during chewing due to contact of the affected area of the mucous membrane with food. Some patients experience bleeding, and only minor bleeding. The erosive form of LLP is most often found on the lateral surfaces of the tongue, the back part of the buccal mucosa, the so-called retromolar region. This form is rarely observed on the red border of the lips. Upon objective examination, one can observe

bright-colored erythema around the papular area of the mucous membrane, on which eroded areas of various shapes and sizes are noted. (Fig.4). During stomatoscopy, various areas of alternating papules with a keratinized tip and an epithelial defect are noted, a luminescent pattern of a brown glow is revealed at the site of erosion, and keratinized papules also give a blue

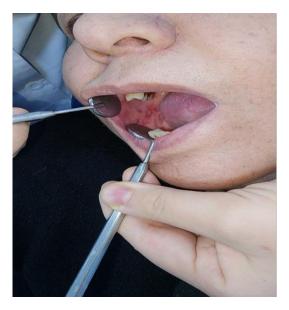




Fig.4 Erosive form of LP

Fig.5. KPL. Ulcerative form

Irregular form of erosions.

The ulcer is covered with necrotic plaque.

It should be noted that the ulcerative form of LP is observed in 4.5% of cases of the disease. Typically, patients complain of pain when eating and from the action of various irritants, both mechanical and chemical irritants. Sometimes there may be difficulty opening the mouth, salivation increases, and halitosis is noted. An objective examination reveals an irregularly shaped ulcer, surrounded by white-gray papules of a polygonal shape, with white threads resembling a lace pattern around it. Usually the ulcer is shallow and is located within the connective tissue plate of the epithelium; the bottom is filled with necrotic mass and remnants of keratinized epithelium. The ulcer has uneven edges, very painful on palpation, and there is a moderate inflammatory infiltrate around it (Fig. 5). For doctors, the state of such ulcers, which remain unhealed for a long time, should cause oncological alertness. During stomatoscopy, areas with deep defects in the oral epithelium of the mucous membrane and groups of keratinized papules are identified; the luminescent picture reveals a brown-black glow. Lymph nodes may be painful and enlarged.

The occurrence of the pemphigoid form of LP was noted in 8.3% of cases. Typically, this form was observed in patients from 35 to 60 years old; in most patients, the pemphigoid form was observed only isolated on the mucous membrane or on the skin. The pemphigoid form was often localized on the back of the cheek, namely the retromolar area of the cheek, on the tongue - it was more observed on the lateral surface, rarely on the mucous membrane of the red border of the lips and gums. The pemphigoid form is often found in patients with LP with a complicated medical history, and can occur in people with allergic manifestations

of the body. Patients often feel unwell, have disturbed sleep and appetite, sweating, and pain due to eating irritating foods. On the mucous membrane of the mouth, white papules are observed, connected to each other by a "Wickham network", with a "frosty" pattern and "fern leaves". On stomatoscopy, blisters are identified on the oral mucosa among the papules, which open, resulting in erosions with fragments of tires, surrounded by bright inflammatory hyperemia (Fig. 6). The size of the bubbles usually ranges from 2-3 to 10-15 mm in diameter. The contents of the blisters are often transparent, rarely hemorrhagic. Sometimes, in patients with hypertension combined with diabetes mellitus and erosiveulcerative course of LP, oral mucosa is observed Grynshpan-Potekaev syndrome.



Fig. 6. Pemphigoid form of LP.

Scraps of tires of blisters on the tongue.

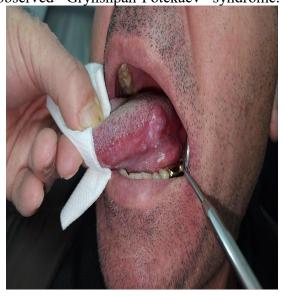


Fig. 7. Warty form of LP

Wart on the side of the tongue

The warty form of LP is rare, but can occur in 9.4% of cases. On separately keratinized papules, formations of significantly keratinized individual papules are observed, forming warty growths on the oral mucosa. Typically, patients feel a dense, painless area in the mouth in one place of the oral mucosa, rising above the epithelium; in addition, they noted dry mouth. The lesion does not respond to thermal and chemical stimuli. Typically, the warty form of LP develops over a long period of time from chronic mechanical injuries. Upon objective examination, the affected area consists of keratinized papules and rises above the mucous membrane; the "Wickham mesh" is preserved around the wart (Fig. 7). During stomatoscopy, an alternation of keratinized papules is noted, rising above the mucous membrane in the form of papillae at their tops; the affected area gives a violet glow. There are hyperkeratotic bridges between papules, where hyperkeratotic bridges are located, uniting into various shapes in the form of lines, circles, and a grid.

Thus, the clinical methods of studying dental indices showed that all patients with CP of oral mucosa have a significantly low level of oral hygiene and a high degree of gum inflammation (PMA = 60.3%, p < 0.001; OHI-s = 2.44  $\pm$  0 .25, p<0.005) compared to the control group (PMA = 30.3%, p<0.001; OHI-s = 0.42 $\pm$ 0.12, p<0.005). The caries intensity indicator according to the KPU index in patients with CP of the main group was 18.21 ± 0.68; versus  $8.18 \pm 0.25$  (P < 0.05) in the control group.

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Thus, the clinical features of the course of various forms of OLP of the oral mucosa differ from each other in clinical and diagnostic signs revealed during examination and stomatoscopic examination; "unsatisfactory" level of hygiene and the development of inflammatory processes in the oral cavity; high rates of caries intensity, which leads to a decrease in local defense mechanisms, changes in the act of chewing and speech, duration and severity of the clinical course of LLP, in some cases leading to malignancy.

Conclusion: Clinical examination of OLP patients was conducted under natural light using a stomatoscope and dental mirror. All forms of oral OLP were identified: hyperkeratotic (typical), erosive, ulcerative, pemphigoid, and verrucous. During examination, attention was paid to the presence of hyperemia and edema, as well as morphological elements such as white-to-pearly papules and Wickham's striae. Gathering the disease history of patients included identifying factors preceding the development of OLP, such as stress, toxic-allergic reactions, and other influences.

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