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MEMORIAL  
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# INNOVATIVE APPROACHES IN DIAGNOSTICS AND TREATMENT OF HUMAN AND ANIMAL DISEASES CAUSED BY INJURIES, GENETIC AND PATHOGENIC FACTORS

Peer-reviewed materials digest (collective monograph)  
published following the results of the CXXVII International  
Research and Practice Conference and II stage of the  
Championship in Medicine and Pharmaceuticals, Biology,  
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(London, July 20 - July 26, 2016)



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laser photocoagulation in one case that requires urgent laparotomy, ulcer wall perforation occurred in the intestine diverticulum by the double-lumen probe in the process of photodecomposition in the second case that also requires urgent laparotomy with removal of the tumor and damaged parts of the intestine, and in the third case there was a recurrence of bleeding requiring further argon plasma coagulation.

In 10 cases we were able to run the endoscopic stent through the site of bowel obturation by the tumor. Stenting of the bowel at the site of the tumor obstruction along with a resolution of obstruction is also provided by mechanical hemostasis.

The stenting procedure is a complex endoscopic technique possible only in cases where there is no complete tumor intestinal obstruction. In cases of complete obstruction when trying to pass a stent, there may be bleeding and perforation of the bowel wall with development of peritonitis.

In case of effective installation of the stent, it is possible to clear the bowels quickly and efficiently and eliminate acute intestinal obstruction, allowing to perform a radical traditional or laparoscopic surgery in 2-5 days after the stent installation.

Besides, installation of the stent and elimination of the threat of full germination of the colon lumen with a tumor, allows preventing intestinal obturation and refusing the surgery in case of tumor metastasis in various organs and manifestations of carcinomatosis.

We managed to pass and install the stent in 10 cases. In one case, there was bleeding in the process of the stent installation and attempts to install stent due to difficult visualization and complete obstruction of the lumen of the colon tumor had led to bowel perforation and fecal peritonitis, which required urgent laparotomy with resection of the bowel with the tumor.

Thus, endoscopic techniques require a highly skilled endoscopist and specialized skills, advanced endoscopic and laser equipment.

Based on the data given, it should be noted that the use of endoscopic techniques helps stop bleeding in 60% of cases as well as to obtain management of acute intestinal obstruction in 72% of cases with tumors of the left half of the colon, allowing to make a high-quality preoperative preparation of patients, to reduce the risk of surgery and in most cases, to perform laparoscopic surgery. Application of this method in complex techniques to stop bleeding increases the efficacy of therapeutic endoscopy and contributes to the stabilization of the patients, preoperative preparation as well as reduces the number of complications.

In our opinion this treatment strategy is promising because it allows you to perform one-stage surgery with minimal risk to the patient and to avoid in most cases 2- or 3-stage operations.

#### Conclusions.

1. Endoscopic local hemostasis is an effective method that allows stopping bleeding in the patients with colorectal cancer in 60-70% of cases.
2. The most effective method of endoscopic bleeding control is a combined method of laser photocoagulation with the injection introduction of fibrin glue as well as stenting.
3. The endoscopic hemostasis allows stabilizing the patient's condition, to conduct an effective preoperative preparation, to conduct one-step surgery, and reduce postoperative complications 2 times.

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### SECONDARY LYMPHEDEMA OF LIPS AS A SYMPTOM OF OROFACIAL LESIONS

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*The study involved 18 patients with secondary lymphedema of lips with Melkersson-Rosenthal syndrome, Granulomatous cheilitis of Miescher, Crohn's disease, chronic odontogenic periapical inflammation. Based on data from clinical and ultrasound examinations it was established the similarity of the clinical picture and course of lymphedema in these diseases. The authors suggest not to consider the secondary lymphedema of lips to be an independent nosological entity.*

**Keywords:** *lips lymphedema, macrocheilitis, Melkersson-Rosenthal syndrome, Granulomatous cheilitis of Miescher, Crohn's disease.*

Lymphedema is a congenital or acquired disease of the lymphatic system, associated with the abnormality of the outflow of lymph from the lymphatic capillaries and peripheral lymphatic vessels from organs and tissues to the main lymphatic collectors and the thoracic duct, which leads to an increase in the size of the affected organ.

Lymphedema occurs when lymphatic load exceeds the transport capacity of the lymphatic system. The imbalance between the formation of lymph and its outflow occurs in various diseases, including orofacial pathology. Primary lymphedema occurs more rarely, in idiopathic or acquired vascular malformations, especially in their hypoplasia or aplasia. Secondary Lymphedema usually develops in impairment of lymph transport due to damage or resection of lymph vessels and lymph nodes, infections and radiation [6, 8].

In dentistry clinic they adhere to the same systematics and consider lymphedema of lips as primary pathology (ICD-10: Q82.0 Hereditary lymphedema. Q18.6 Macrocheilia) and secondary pathology (ICD-10: I89.0 Lymphedema, not elsewhere classified) [14].

The literature describes secondary lymphedema of lips in a number of diseases, one of the leading clinical symptoms of which is macrochilia [4, 7, 9, 12], but there is no information about the features of the clinical picture of swelling of each of these diseases.

**The aim** of our study was the comparative evaluation of the clinical picture of secondary lymphedema of lips with orofacial lesions.

**Material and methods.** Survey was conducted in 18 patients aged 51-73 years, among them 15 women and 3 men. Patients were directed for consultation to the department with various orofacial pathologies, where the main symptom of disease was macrochilia. Patients underwent clinical, radiological, laboratory and ultrasound examination. Clinical and laboratory tests - according to generally accepted methods, orthopantomography – on apparatus PDX0771000, ultrasound - on Toshiba «Aplio» of expert class using Doppler ultrasound.

**Results and discussion.** Analysis of the results of a complete examination of patients allowed determining Melkersson-Rosenthal syndrome in 5 patients. Among these patients, 2 were directed with erysipelas face. In 3 patients the syndrome was characterized by the classic symptoms, in 2 - two symptoms. Moreover, one patient formed a triad of symptoms for 25 years. In 2 patients we, together with gastroenterologist, diagnosed «Crohn»s disease». Granulomatous cheilitis of Miescher was diagnosed in 3 patients. The reason of the remaining 8 cases of macrochilia was local stomatogenic pathology (granulating periodontitis, radicular cyst, periodontal disease with bone pockets, a chronic relapsing labial fissure).

Despite the different genesis of the disease all patients have a common symptom - an increase of lips due to their edema. They complained of discomfort in the affected lip, the feeling of heaviness and tightness in it, violation of diction. Pain was absent.

For disease history it was characteristic the same type for macrochilia. As a rule, patients noted cyclic course with sequences of relapse and remission periods. Firstly the edema of the upper or lower lip appeared, which lasted from a few weeks to several months. In remission period the edema did not disappeared completely, with each subsequent relapse it was observed its strengthening.

On examination the edema of the upper or lower lip was determined. It was generalized and even or asymmetrical, damaging more one of the halves of the lips. Edema captured topographically only one or two lips, sometimes spread beyond it. Most often, the skin of the lips has elements of pigmentation due to telangiectasia, slight cyanosis. On the vermillion zone there were signs of trophic disorders - sometimes atrophy and thinning of the skin, peeling, angiectasis (**Fig. 1, 2**).

Tissues were of tightly-elastic consistency at palpation, painless, after pressing the tracks remain. In the lips thickness the small nodules were slightly palpable, which are small salivary glands.

Ultrasonography determined in lips thickness the heterogeneity of structure without clear contours, decreased echogenicity, increased vascularization and vasodilatation.

In patients, the cause of lymphedema of which was odontogenic factors, on orthopantomography the signs of apical periodontitis, radicular cysts, deep bone periodontal pockets were determined (**Fig. 3**).

Data of laboratory examinations were within the age norm.

Thus, clinical and ultrasound picture of lymphedema of lips, its clinical course had common features, despite the different genesis of the disease.



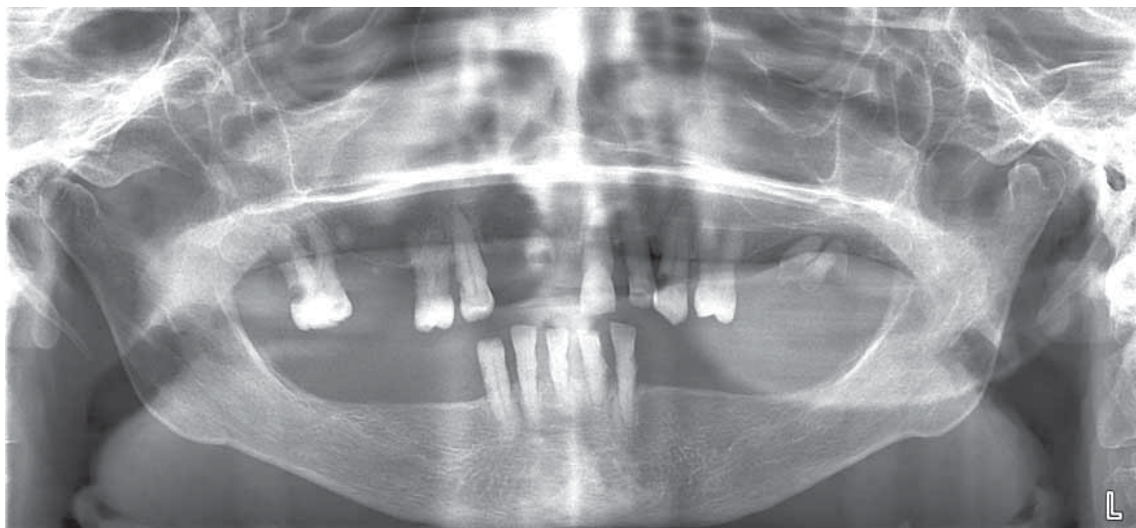
**Fig. 1. Patient T., 68 years old. Lymphedema of the upper lip.**



**Fig. 2. Patient L., 70 years old. Lymphedema of the lower lip.**

According to the literature data, only in 75.4% of patients the syndrome is accompanied by classical triad, the rest has one or two symptoms [3, 12]. This is confirmed by our study. Sometimes the syndrome is accompanied not only by the swelling of lips but also other parts of the face, particularly by isolated edema of the upper eyelid [2].

To the disease, the symptom of which is edema of lips, is also included Granulomatous cheilitis of Miescher [5, 7]. There is evidence of a combination of granulomatous cheilitis with vulvitis. Moreover, the results of histological studies indicate on their similarity [1]. A similar morphological pattern of lips edema with Granulomatous cheilitis of Miescher and Melkersson-Rosenthal syndrome is noted by other researchers [5, 7].



**Fig. 3. Patient T., 68 years old. Orthopantomogram.**

Some authors separate determine orofacial granulomatosis [10]. It is also a rare disease that is characterized by persistent or recurrent swelling of the soft tissues of the mouth, ulceration, and the presence in the tissues thickness the non-caseating granulomas. This term was introduced to integrate a range of different disorders, including the Melkersson-Rosenthal syndrome and granulomatous cheilitis (which is sometimes considered monosymptomatic form of Melkersson-Rosenthal syndrome) and is regarded as synonymous of previously considered disease [11].

**Conclusions.** The similarity of the data of anamnesis, clinical and other methods of research of the secondary lymphedema of lips allows us to consider it to be symptomatic and not to allocate this pathology as a separate nosological entity.

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