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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ
ТБИЛИСИ - НЬЮ-ЙОРК

GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board and The International Academy of Sciences, Education, Industry and Arts (U.S.A.) since 1994. **GMN** carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

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2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

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3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგების ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

Содержание:

Kosenkov A., Stoliarchuk E., Belykh E., Sokolov R., Mayorova E., Vinokurov I. RESULTS OF RESECTION METHODS OF TREATMENT IN PATIENTS WITH GIANT PYLORODUODENAL ULCERS COMPLICATED BY PERFORATION AND BLEEDING	7
Клименко М.В. ДИАГНОСТИЧЕСКОЕ И ПРОГНОСТИЧЕСКОЕ ЗНАЧЕНИЕ ПРОТИВОВОСПАЛИТЕЛЬНОГО ЦИТОКИНА TGF- β 1 В ВЫБОРЕ ХИРУРГИЧЕСКОЙ ТАКТИКИ ПРИ ОСТРОМ ПАНКРЕАТИТЕ	13
Грабский А.М. РЕТРОСПЕКТИВНЫЙ КЛИНИКО-ЭПИДЕМИОЛОГИЧЕСКИЙ АНАЛИЗ РАСПРОСТРАНЕННОСТИ МОЧЕКАМЕННОЙ БОЛЕЗНИ В РАЗЛИЧНЫХ РЕГИОНАХ АРМЕНИИ	19
Sklyarova V., Kyshakevych I., Volosovsky P., Sklyarov P., Kupchak I.M. EPIDEMIOLOGICAL FEATURES OF CHRONIC ENDOMETRITIS IN REPRODUCTIVE AGE WOMEN WITH DISORDERS OF REPRODUCTIVE HEALTH.....	27
Центило В.Г., Удод А.А. ЭФФЕКТИВНОСТЬ УСОВЕРШЕНСТВОВАННОЙ СУПРАГИОИДНОЙ И СУПРАОМОГИОИДНОЙ ШЕЙНОЙ ДИССЕКЦИИ В ЛЕЧЕНИИ РЕГИОНАРНЫХ МЕТАСТАЗОВ РАКА ЧЕЛЮСТНО-ЛИЦЕВОЙ ОБЛАСТИ.....	32
Virstiuk N., Matkovska N. PARAMETERS OF FIBRINOLYTIC AND ANTIFIBRINOLYTIC ACTIVITY IN PATIENTS WITH ALCOHOLIC LIVER CIRRHOSIS ASSOCIATED WITH ADIPOSITY	37
Kravchun P., Kadykova O., Narizhnaya A., Tabachenko O., Shaparenko O. ASSOCIATION OF CIRCULATING ADIPONECTIN, RESISTIN, IRISIN, NESFATIN-1, APELIN-12 AND OBESTATIN LEVELS WITH HYPERTENSION AND OBESITY	43
Тарасенко О.М., Кондратюк В.Е., Таранчук В.В., Кармазина Е.М., Кармазин Я.М. ВЛИЯНИЕ КОМПЛЕКСНОЙ УРАТСНИЖАЮЩЕЙ ТЕРАПИИ С ДОБАВЛЕНИЕМ СИНБИОТИКА НА ДИНАМИКУ КЛИНИКО-ЛАБОРАТОРНЫХ ПОКАЗАТЕЛЕЙ У БОЛЬНЫХ ХРОНИЧЕСКИМ ПОДАГРИЧЕСКИМ ПОЛИАРТРИТОМ.....	48
Sokolenko M., Sokolenko L., Honchar H., Sokolenko A., Andrushchak M. THE ADVANCEMENTS IN TREATMENT OF HIV-INFECTED PATIENTS WITH HERPETIC INFECTION	56
Gulatava N., Tabagari S., Tabagari N. ASPECTS OF NUTRITION IN PATIENTS WITH CONGESTIVE HEART FAILURE	62
Авагимян А.А., Манукян И.А., Навасардян Г.А., Челидзе К.Л., Рисованный С.И. АТЕРОГЕННОЕ ВОЗДЕЙСТВИЕ ДИСБИОЗА РОТОВОЙ ПОЛОСТИ (ОБЗОР)	69
Абрамов С.В., Кириченко А.Г., Корнацкий В.М., Огоренко В.В., Томах Н.В. ПСИХОЛОГИЧЕСКИЙ ПОРТРЕТ УЧАСТНИКА БОЕВЫХ ДЕЙСТВИЙ И СТРЕСС-АССОЦИИРОВАННЫЕ НАРУШЕНИЯ.....	74
Курмышев М.В., Стасевич Н.Ю., Златкина Н.Е., Романов А.С., Каргон Е.А., Зарецкая Э.Г. ИСТОРИЧЕСКИЙ АНАЛИЗ И АНАЛИТИЧЕСКИЙ ОБЗОР СОЗДАНИЯ «КЛИНИК ПАМЯТИ» В МИРОВОЙ ПРАКТИКЕ.....	80
Труба Я.П., Радченко М.П., Головенко А.С., Беридзе М.М., Лазоришинец В.В. РЕЗУЛЬТАТЫ ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ ТРАНСПОЗИЦИИ МАГИСТРАЛЬНЫХ АРТЕРИЙ С ГИПОПЛАЗИЕЙ ДУГИ АОРТЫ.....	85
Herasymenko O., Klimanskyi R., Zharikov S., Herasymenko V. CLINICAL AND LABORATORY CHARACTERISTICS OF ACUTE LYMPHADENITIS IN CHILDREN	91
Panko N., Tsiura O., Shevchenko N., Zimnytska T. LIVER LESION IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS WITH DIFFERENT DURATION OF METHOTREXATE TREATMENT	95

Усенова О.П., Моренко М.А., Ковзель Е.Ф., Шнайдер К.В., Влащенко К.Г. КЛИНИЧЕСКИЙ СЛУЧАЙ БОЛЕЗНИ ИММУННОЙ ДИСРЕГУЛЯЦИИ STAT3 GOF, АУТОИММУННОГО ЛИМФОПРОЛИФЕРАТИВНОГО СИНДРОМА	100
Khoroshukha M., Ivashchenko S., Bosenko A., Biletska V., Kovalenchenko V. GENDER-ASSOCIATED EFFECTS OF SEROLOGICAL MARKERS OF BLOOD GROUPS ON THE DEVELOPMENT OF ATTENTION FUNCTION OF YOUNG ADOLESCENT ATHLETES	103
Макалкина Л.Г., Ихамбаева А.Н., Ахмадьяр Н.С., Калиева Ш.С., Кузиков А.М. АНАЛИЗ ПОТРЕБЛЕНИЯ СИСТЕМНЫХ АНТИМИКРОБНЫХ ПРЕПАРАТОВ В ДЕТСКИХ СТАЦИОНАРАХ ЗА 2015-2017 ГГ. В РЕСПУБЛИКЕ КАЗАХСТАН.....	111
Безарашвили С.И. ИЗУЧЕНИЕ СОДЕРЖАНИЯ СВИНЦА В ОРГАНИЗМЕ ДЕТЕЙ, ПРОЖИВАЮЩИХ В Г. ТБИЛИСИ.....	117
Yaremenko L., Grabovoi A., Cherkasov V., Lakhtadyr T., Shepelev E. REACTIONS OF ASTROCYTES AND MICROGLIA OF THE SENSORIMOTOR CORTEX AT LIGATION OF THE CAROTID ARTERY, SENSITIZATION OF THE BRAIN ANTIGEN AND THEIR COMBINATION.....	122
Pugovkin A., Erkudov V., Sergeev I., Khananashvili Y. THE PHYSIOLOGICAL BASIS FOR ASSESSMENT OF HAEMODYNAMIC PARAMETERS BY MEANS OF ARTERIAL PRESSURE PULSE WAVEFORM ANALYSIS IN PERIPHERAL ARTERIES	127
Seliukova N., Boyko M., Kustova S., Misiura K., Kamyshan A. PUBERTY GENESIS OF FEMALES-OFFSPRING RATS BORN TO MOTHERS WITH FETOPLENTAL INSUFFICIENCY	135
Васецкая О.П., Зубко Е.С., Проданчук Н.Г., Кравчук А.П., Жминько П.Г. ВЛИЯНИЕ N-ОКСИД-2,6-ДИМЕТИЛПИРИДИНА НА ВЫРАЖЕННОСТЬ ЦИТОГЕНЕТИЧЕСКИХ ЭФФЕКТОВ, ИНДУЦИРОВАННЫХ ЦИКЛОФОСФАМИДОМ В КЛЕТКАХ КОСТНОГО МОЗГА МЫШЕЙ.....	141
Чануквадзе И.М., Кикалишвили Л.А., Джандиери К.Д., Отарашвили Р.Т., Джандиери Л.А. АДАПТАЦИЯ ЖЕЛЧНЫХ ПРОТОКОВ ПОРТАЛЬНОГО КОМПЛЕКСА ПРИ МЕХАНИЧЕСКОМ ХОЛЕСТАЗЕ (ОБЗОР).....	148
Kodanovi L., Jokhadze M., Metreveli M., Berashvili D., Bakuridze A. INTRODUCTION OF AROMATIC PLANTS IN THE BATUMI BOTANICAL GARDEN AND THEIR RESEARCH FOR THE CONTENT OF BIOLOGICALLY ACTIVE COMPOUNDS	153
Chomakhashvili N., Chomakhashvili Z., Zosidze N., Franchuki K. ERGONOMIC PRINCIPLES IN MEDICINE AND DENTISTRY (REVIEW).....	158
Бараташвили З.З., Казахашвили Н.А., Герзмава О.Х. ПРОБЛЕМЫ МОНИТОРИНГА КАЧЕСТВА РАБОТЫ СТАЦИОНАРОВ ГРУЗИИ В УСЛОВИЯХ ПАНДЕМИИ COVID 19 (ОБЗОР).....	163
Слипченко С.А., Шишка А.Р., Булеца С.Б., Шишка Н.В., Слипченко А. С. ПРАВОВОЙ РЕЖИМ ДОНОРСКИХ ОРГАНОВ В МЕЖДУНАРОДНОМ ЧАСТНОМ ПРАВЕ	169
Deshko L., Kostenko Y., Koval I., Mikhailina T., Oliinyk O. THE RIGHT TO HEALTH: UKRAINE'S INTERNATIONAL OBLIGATIONS AND FINANCIAL ACTIVITY OF PUBLIC AUTHORITIES IN THE CONTEXT OF REFORMING THE NATIONAL HEALTHCARE SYSTEM.....	177
Kuntii A., Blahuta R., Stetsyk B., Sichkovska I., Harasym P. USE OF SPECIAL MEDICAL KNOWLEDGE BY A PRACTITIONER DURING INTERACTION WITH INVESTIGATOR IN THE INVESTIGATION OF ILLEGAL MEDICAL ACTIVITY	182
Южно А.А., Емельянов В.П., Павликовский В.И., Калашник Е.Н., Сиваш Е.М. РЕАЛИЗАЦИЯ ПРАВА НА ОХРАНУ ЗДОРОВЬЯ ПО МАТЕРИАЛАМ ПРАКТИКИ ЕВРОПЕЙСКОГО СУДА ПО ПРАВАМ ЧЕЛОВЕКА.....	189
Муляр Г.В., Солоненко О.Н., Покальчук М.Ю., Плетнёва А.Е., Домброван Н.В. ПРАВОВОЕ ОБОСНОВАНИЕ И ПЕРСПЕКТИВЫ РЕАЛИЗАЦИИ ПРОГРАММЫ ГОСУДАРСТВЕННЫХ ГАРАНТИЙ МЕДИЦИНСКОГО ОБСЛУЖИВАНИЯ НАСЕЛЕНИЯ В УКРАИНЕ	195

CLINICAL AND LABORATORY CHARACTERISTICS OF ACUTE LYMPHADENITIS IN CHILDREN

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In childhood acute lymphadenitis (AL) account for 20 to 51% of purulent-inflammatory diseases in pediatric surgical hospitals. Lymphadenitis (LA) is a disease that is manifested as any enlargement of the lymph nodes (LN) of the inflammatory nature according to the classification of ICD where D is coded as L 04 (acute LA) and I 88 (non-specific LA). In the case of unknown etiology the term lymphadenopathy (LAP) is used at the stage of preliminary diagnosis or other cause of the enlargement of LN and it is coded as R 59 – the enlargement of the lymph nodes. At present there is no clear classification of LN lesions both in children and adults. The most common one is the distribution according to the etiological factor and the course of the inflammatory process but this classification does not fully meet all clinical requirements [1-3].

In Ukraine, however, a high percentage of BCGs has been recorded during recent years. The subclinical course, lack of expressiveness of the symptoms and specific ultrasound manifestations when compared with other lymphadenopathies which are up to 66% of the cases among children determine the difficulties in their differential diagnosis that often requires additional thin-needle aspiration biopsy [4,5].

The problem of differential diagnosis of LA and LAP is of great importance for doctors of many specialties including hematologists, oncologists, therapists, pediatricians, surgeons, infectiologists. The main problem in the diagnosis of this pathology is that the clinical picture of tumor and inflammatory lesions of LN is often very similar [6]. First of all it concerns inflammatory diseases of the tissues of the facial and submandibular area and the neck that constantly requires increased attention of surgeons and otolaryngologists because of stable frequency of the pathology, the increase in the number of the cases of severe infection, sometimes with atypical clinical manifestation, and also predisposition to long-term disease course. The children with purulent-inflammatory ailments of the facial and submandibular area account for 40 to 60% of the patients seeking help from a surgeon. The most severe cases among them are adenophlegmones of the face and the neck [7,8].

Despite significant advances in diagnostics up to 40% of the children have diagnostic errors at the stages of their examination and treatment due to the absence of a classic clinical picture, especially in young children. Immaturity of the immune system and aggressiveness of pathogens cause a rapid course of LA with frequent development of purulent complications requiring surgical intervention [9,10].

The aim of the study is to determine the clinical and laboratory characteristics of acute lymphadenitis in children.

Material and methods. The study was performed using retrograde analysis of diagnosis and treatment of 158 children with acute lymphadenitis of non-specific and specific etiology, different localization (submandibular, cervical, axillary, inguinal and other peripheral localization) who were treated at the inpatient department in the pediatric surgery of MHCF “Local oncologic dispensary of Kramatorsk” from 2015 to 2019. Among the inpatient children there were 86 (54.4%) boys and 72 (45.6%) girls. The age of the patients ranged from 2 months to 18 years. The average age of the patients was 5 ± 0.61 years.

The surgical procedures were performed in 131 (82.9%) pa-

tients while the non-specific nature of the inflammatory process was confirmed in 102 (77.9%) patients taking into account the clinical course of the disease and the results of microbiological analysis. A specific inflammatory process was revealed in 29 (22.1%) patients. It was clinically found out that 18 (13.7%) children had BCG-lymphadenitis (confirmed by histological examination) and 11 (8.4%) patients had benign lymphoreticulosis (felinosi) among them. Felinosi was diagnosed on the basis of the clinical data: primary affect (regional LA), the results of the surgery and histological examination. Lymph node biopsy was performed only in case of the absence of positive dynamics during conservative treatment and during the subacute period.

Of course, the leading criterion for microscopic examination is the architectonics of the lymph node and the cellular composition of the primary and secondary lymphoid follicles, germinal centers, paracortical area and medullary cords.

Owing to the fact that the enlargement of the lymph node (hyperplasia) in children can be caused not only by the inflammatory process in it, therefore during histological examination differential diagnosis was performed in particular with the following pathological processes (taking into account clinical course data):

- infectious (viral, bacterial, fungal, parasitic);
- malignant diseases (leukemia, lymphoma, solid tumor metastases);
- immunological disorders (histiocytosis from Langerhans cells, hemophagocytic lymphogistiocytosis, Kawasaki syndrome);
- autoimmune diseases: autoimmune lymphoproliferative syndrome, systemic lupus erythematosus, juvenile idiopathic arthritis, sarcoidosis, congenital immunological defects;
- congenital metabolic diseases that are diseases of accumulation (e.g., Niemann-Pick disease, Gaucher disease);
- associated with the use of certain medicines (phenytoin, hydralazine, procainamide, isoniazid, allopurinol, dapsone).

Thus, macroscopic changes of the lymph node or a group of the lymph nodes (the enlargement in size, pain, redness, pinching or softening, etc.) are not pathognomonic in many cases unlike histological, histochemical and immunohistochemical methods.

Histological examination was performed on the preparations made after the embedding of the tissue by the traditional method pouring into paraffin wax, preparing sections on a rotary microtome and staining with hematoxylin and eosin.

Clinical data, laboratory and instrumental methods were considered when analyzing the data from the inpatients' medical records. Based on the retrospective analysis of the findings of ultrasound diagnostics (ultrasound) the following stages of the inflammatory process were determined: initial destructive changes (the stage of serous inflammation), abscessing (the stage of purulent melting of the tissues of LN) and presence of complications in the form of soft tissue phlegmon.

Results and discussion. To make the diagnosis and to assess the clinical course of the inflammatory process in all the children there were taken into account the general clinical manifestations which were described in the section “locus morbi” (general condition, temperature response and its dynamics, the duration of the disease), the laboratory methods of the examination (general blood test, and namely: total leukocyte count, leukocyte formula, ESR; immunologic: determination of Ig M to *Bartonella henselae* (qualitative method). The disorder of the general

condition was observed in 92 (58.2%) children at the time of hospitalization, they were mainly children of young age having LA of the cervical and submandibular area. Local manifestations specified primarily by soreness and swelling in the area of LN were detected in 100% of the cases. High body temperature was observed in 111 (70.3%) children but only 13 (8.2%) children had its hectic level. Normothermia occurred in four cases (2.5%) of immunologically confirmed felonosis at the time of hospitalization and during treatment, and there was subfebrile condition in one case (0.6%). In the cases of purulent LA the normalization of the body temperature was observed after the surgery during the first 24-48 hours.

The laboratory results indicated the presence of the inflammatory process of infectious genesis at the time of hospitalization: leukocytosis with a shift of the leukocyte formula to the left in 87.3% (138 children), an increase in ESR in 70.9% (112 children). The analysis of the given data shows that the total content of leukocytes and ESR in the blood normalized in both groups of the children up to 7-8 days. In the case of using antimicrobial therapy accelerated normalization of the laboratory indicators was observed in the group of operated patients. On the third day leukocyte content, leukocyte formula and ESR indicators were within the age norm in 97.3% of the patients as opposed to the group of non-operated children where the normalization of these results was observed only on the fifth day.

According to the study performed by Tereshchenko S.Yu. the etiological spectrum of acute nonspecific lymphadenitis of 128 examined children was represented by Gr “+” – flora in 73% with the dominance of *S. aureus* (59.5%), less frequently – Gr “-” flora (27%). Among other gram-positive pathogens *Streptococcus pyogenes* were detected in 5.4% and *S. epidermidis* in 8.1%. The entrance gates of infection were the mucous membranes of the nose, oropharynx and carious teeth in 78.1% [2]. According to the studies performed by Talko M.O., Filonenko G.V. it was found out that LA in children was a consequence of bacterial etiology in 30% of the cases and it was of viral etiology in 22% of the cases. In other cases it was the result of toxoplasmosis or 36% mycobacterial infection, and it was failed to establish the cause of their increase in 12% of the cases [3]. According to the results of our research, while studying the species composition of the pathogens in children with AL and, accordingly, the choice of antibacterial therapy, it was determined that the etiological structure is represented mainly by gram-positive bacteria (67.6% *S.aureus*) in children of all ages (up to one year; from 1 to 16 years) but with age the range of infectious agents increases and microbial associations appear. Penicillins had the lowest antimicrobial activity against clinical strains of *S. aureus*, aminoglycosides, fluoroquinolones, oxazolidinones and glycopeptides had the highest one.

The laboratory parameters were determined during hospitalization in the surgical ward and on the third and on the fifth days; ultrasound of LN within the first 24 hours from the moment of hospitalization with performing a check-up examination after 48 hours, and the next time according to the parameters. Local changes and the body temperature were monitored daily. Based on the data from the case history special attention was paid to the past disease when LA occurred. The attention was also paid to determine a possible entrance gate for the infection, the duration of the disease and antibacterial therapy at the pre-hospital stage. Among the local manifestations the presence of enlarged LN, their size, tenderness, mobility, the relationship with the surrounding tissues, the condition of the skin over them, the presence of “fluctuation” symptom were noted. Cytograms of

post-operative wound smears were assessed additionally according to M.P. Pokrovskaya’s method in D.M. Steinberg’s modification by means of staining the smears with hematoxylin and eosin and calculating cellular elements (neutrophils, lymphocytes, macrophages, fibroblasts), bacteriological examination of wound secretions, the dynamics of the wound process (the terms of purification of the wound from purulent secretions and necrotic mass, disappearance of local hyperemia and swelling, appearance of granulation and the beginning of retraction at the edges of the wound).

During the first day of hospitalization all the patients having no clear clinical and laboratory picture of AL that required urgent surgery was performed ultrasound to determine the stage of the process and the differentiation with other pathology, monitoring at the stages of treatment. LN was studied in the position of the child lying on his back with the maximum identification of the lesion area. The assessment of the latter was performed both on the side of the lesion and contralateral. Special preparation for the examination wasn’t conducted. If necessary, ultrasound-guided diagnostic puncture was performed under general anesthesia. Each time ultrasound was used to determine several parameters, namely: the shape (rounded/oval), the contours (clear/unclear; even/uneven), the differentiation of the cortical layer, the presence or the absence of the part of LN hilum, maximum (longitudinal L (long)) and minimum (transverse or anterior-posterior size S (short)) sizes, thickness of the cortex and hilum, echogenicity and echostructure, the nature of vascularization by means of color Doppler mapping (CDM), as well as the state of the parathyroid tissues and surrounding structures (adjacent vessels, muscles). It should be noted that to determine the nature of the lesion, primarily benign or malignant, an important role is played by Solbiati index the ratio of long to short axes (L/S). According to the sources of the literature if it is more than 2 then this type of LN is characterized by benign lesions and if it is less than 2 it is characterized by malignant [4].

Using Dopplerography study such qualitative characteristics of vascularization as the presence or absence of intranodal blood flow and the type of blood flow were assessed. At the same time it was impossible to find the optimal conditions for the assessment of quantitative characteristics of blood flow in the case of small sizes of intranodal vessels as well as in children of young age. The main survey was conducted in B- and CDM modes.

Repeated ultrasound was performed at all the stages of the treatment to assess its effectiveness. This method was also used to assess the course of the postoperative wound process, first of all, to determine the dynamics of reduction of purulent cavity, to identify possible purulent leaks and to determine the time of drainage removal from the wound. Using shear wave elastography (SWE) at different stages of the inflammatory process the study of LN stiffness was performed in 32 patients (20.3%) on an ultrasound apparatus equipped with the function of a 7.5-11.5 MHz linear sensor. This type of diagnosis is a type of ultrasound study which performs color elastic mapping in the study area. The control volume determines the quantitative characteristic of the stiffness of LN tissue in kPa. In this mode the mapping value is the error δ which is a part of the noise component in the signal of tissue movement in determining its rigidity (Young’s modulus). All studies used a standard range of color scale from dark blue (0 kPa) to bright red (60 kPa). In cases of heterogeneous LN structure its stiffness was determined in several areas. This study was also carried out on the contralateral side. We additionally assessed its structure, determined the total area of altered areas and its ratio to the total area of the lymph node (in %) at different stages of inflammation based on the analysis of color mapping.

Bhagat V. et al. discovered that 70% of pediatric patients had unilateral reactive lymphadenopathy while 30% of them had bilateral lesions. However, Engelis A. et al. reported that a bilateral process was revealed in 91% of the children with reactive LN. Bacterial and tuberculous LA tend to be unilateral (100%) in contrast to reactive hyperplasia. It was reported that the latter was common in the area of submandibular (87%), preauricular or parotid (9%) and submental (3%) lymph nodes, at the same time 98.6% of patients had unilateral enlargement of the nodes [11,12]. Unilateral lesions are also more common than bilateral lesions in Kawasaki disease. Reactive hyperplasia is the main cause of the enlargement of the cervical lymph nodes in children and it accounts up to 98% of the cases, primarily submandibular and cervical regions [13]. Although reactive nodes tend to be smaller than in infectious or bacterial LA and lymphoma. However, the size of LN cannot be used as the only criterion for differential diagnosis of LAP in children. It was reported that cervical LN in Kawasaki disease, bacterial LA and Epstein-Barr infection had similar sizes.

Thus, the main diagnostic methods of the stage of the inflammatory process in affected LN were ultrasound which was applied to all the patients of the experimental group (158 children) and SWE that was performed in 32 (20.3%) patients, if necessary, diagnostic puncture 68 (43.04%) children. This manipulation was performed by puncturing the area of maximum infiltration to an average depth of 2 cm with a special thick needle where the purulent area was most likely located and its search by aspiration from several point or under ultrasound control. This manipulation was performed in all 27 (17.1%) patients from non-operated patient group where only 7 (25.9%) children had hemorrhagic content and there was no content in the other 74.1% of the cases at all. 41 (25.9%) patients had purulent content after that the surgery was performed opening and drainage of AL. 17 (62.9%) children who didn't have any surgery managed to avoid extra puncture surgical procedure and the disease was treated conservatively due to the use of SWE.

The results of ultrasound examination are confirmed in 100% of the cases during a surgical procedure in case of abscessing and suspicion of its beginning and the pus was obtained only in 1 case when revealing infiltration.

The use of antibacterial therapy in children's AL is pathogenetically justified. Using this type of therapy in the treatment of bacterial LA accelerated rates of normalization of the body temperature response, the laboratory parameters and local manifestations during intravenous administration of the drug were noted both during the stage of serous inflammation and abscessing. The use of antibacterial therapy by the children at the initial stage of destruction of LN (according to the data of ultrasound) made it possible to avoid further abscessing and achieve recovery in a conservative way.

Surgical treatment which was performed in 82.9% of the cases (131 children) was administered on the background of antibacterial therapy (cephalosporins of II-III generations). As for 11 patients (8.4%) who were diagnosed with felinosis a differential approach was used depending on the course, local manifestations and dynamic ultrasound data. According to the treatment protocols desensitizing and analgesic drugs were also used in the postoperative period.

According to the clinico-laboratorial picture, local manifestations, dynamic ultrasound control and diagnostic puncture AL was detected at the abscessing stage and surgical treatment of 131 children was performed. Cervical and submandibular localization of AL was diagnosed in 52 (39.7%) patients, in the

inguinal area 48 (36.6%), axillary 31 (23.7%). The localization of LA was one-sided in 127 children (96.9%). The causal factors for the occurrence of AL were found in 98 (74.8%) children, ARVI was complicated by bacterial infection 31 (31.6%), tonsillitis, pharyngitis 22 (22.4%), suppurative skin diseases 16 (16.3%), cat scratches 11 (11.2%), vaccination 18 (18.5%).

According to the clinical data in some cases the uncertainty of the nature of the pathological process led to the performance of open biopsy of the lymph node in 131 (82.9%) patients with a diagnostic aim. The nonspecific nature of the inflammatory process was confirmed in 102 (77.9%) patients. In fact, it is reactive lymph node hyperplasia – the enlargement of the lymph node (limadenitis) caused by the immune response to the remote zone of infection, generalized infection, autoimmune processes. It is impossible clinically to differentiate reactive lymph node hyperplasia and other pathological processes in it in most patients before performing a biopsy. The enlargement of the lymph nodes can be interpreted as lymphadenitis in the following cases:

clear association of enlarged lymph nodes with primary area of inflammation, with the location in one or adjacent anatomic areas;

the presence of clear signs of local inflammation: redness of the skin over the lymph node, the glomeration of the lymph node with the skin or subcutaneous tissue, fluctuation, fistula formation;

the lymph node enlargement because of infectious disease where the diagnosis is determined by other dominant signs.

In most studied cases there was acute purulent lymphadenitis caused by purulent bacteria: histological structure of the node was effaced, there were marked abscesses with pus of different sizes (purulent detritus and neutrophilic leukocytes) which are surrounded by a red border (full-blood vessels).

In other cases, it is logical to use the term “enlargement of the lymph nodes” or “lymphadenopathy” that emphasizes the ambiguity of the pathological process in the lymph node itself.

Specific inflammatory process was detected in 29 (22.1%) patients, among them BCG-lymphadenitis was clinically revealed in 18 (13.7%) children that was confirmed by the results of histological examination where the changes resembled the histomorphological picture of acute productive-cellular (specific) inflammation with the accumulation of monocytes and macrophages around damaged areas with serous-fibrinous or leukocyte infiltration. Sometimes there were mature macrophages or epithelioid cells and giant cells with many nuclei (with a horseshoe-shaped or annular nucleus position) as a sign of a longer process.

11 (8.4%) patients had benign lymphoreticulosis (felinosis, Mollera granuloma) a cat scratch disease caused by Bartonella henselae. Histological examination of lymph nodes revealed inflammatory infiltrates with hyperplasia of the reticular cell, sometimes there was the presence of brucellous granules (area exudative inflammatory changes of serous nature).

All the operated patients underwent AL opening and drainage of the abscess cavity. The location of the incision was determined by palpation in the area of the greatest “softening”. According to standard techniques the surgery was performed draining a purulent cavity with the help of a rubber drainage and the following carrying out under the gauze bandages soaked with hypertonic solution at the stage of exudation and soaked with hyperosmolar ointments at the stage of granulation and epithelialization.

Dynamic ultrasound monitoring of the condition of the postoperative wound was performed during the postoperative treatment. It ensured effective control over the course of the exudative-reparative process, helped to determine the efficacy of drainage of the purulent zone taking into account the depth of the abscess cavity and the lack of the possibility of visual con-

trol. This method also made it possible to assess the adequacy of the surgical procedure with its possible correction of the treatment and determination of the time of drainage removal. The absence of anechoic areas on the echograms, the preservation of the structure of the lymph node and the absence of periadenitis phenomena confirmed the absence of pus in the depth of the wound that in turn allowed the drainage to be removed.

Due to US in the dynamics the accumulation of purulent content in the depth of the wound was revealed in 29 children of young age (22.1%) during the first days of the postoperative period (1-2 days) despite its draining owing to clear soft tissue swelling which created a “lock” effect that required re-draining of the wound and that was not noted in older children.

Thus, sonography allowed to identify the stage of purulent melting, localize the process in details, follow the dynamics and to prevent possible complications. The method also allowed tracing the result of treatment after the surgery.

Conclusions. 1. Using retrospective analysis it has been found out that clinical course of AL in children differs depending on their age and the etiological factor with LA prevalence of the cervical and submandibular area (73%) in children under 3 that occurs because of bacterial complications in cases of ARVI (31.6%) while the lesions of the axillary and inguinofemoral areas (60.3%) were predominant in children over 3; specific LAs in children under 3 were represented by BCGs (8.4%) and felinosis (13.4%) with subclinical course and dominance of only local manifestations after being 3 years old.

2. 62.9% of the children who did not undergo any surgery were able to avoid being performed extra puncture and the disease was treated conservatively due to shear wave elastography.

REFERENCES

1. Talko M.O., Filonenko G.V. The characteristics of the species composition of the pathogens in purulent lymphadenitis in children and the choice of antibacterial therapy // *Clinical surgery*. 2018; 85 (2): 42-44.
2. Tereshchenko S.Yu. Cervical lymphadenopathy of infectious etiology in children: the questions of differential diagnosis // *Children's infections*. 2013; 12 (1): 36-42.
3. Vojtshovskiy V.V., Landyshev Y.S., Grigorenko A.A., Govorov N.D. Differential diagnosis in lymphadenopathy syndrome. *New St. Petersburg medical records*. 2014; 1: 32-43.
4. Nagornaya N.V., Bordyugova E.V., Vilchevskaya E.V. etc. Lymphadenopathy in children // *Child's health*. 2013; 6: 166-176.
5. Pavlenko O.V., Bida R.Yu. Clinico-microbiological aspects of the state of facial and neck phlegmon // *Archives of Clinical Medicine*. 2015; 21 (2): 46-49.
6. Georget E., Gauthier A., Brugel L., Verlhac S., Remus N., Epaud R., Madhi F. Acute cervical lymphadenitis and infections of the retropharyngeal and parapharyngeal spaces in children. *BMC Ear Nose Throat Disord*. 2014; 14:8.
7. Tsvetanov T. Acute lymphadenitis and affected spaces: A systematic Review. *Intern J of Applied Dental Sciences*. 2017; 3 (1): 32-34.
8. Mohamed A.M., Mohamed A.E., Heba A., Elaziz A. Evaluation of the role of sonoelastography in diagnosis of enlarged cervical lymph nodes. *The Egypt J of Radiology and Nucl. Med*. 2017; 48: 381-391.
9. Suhasini B. Role of High Resolution Ultrasonogram and Elastography In Cervical Lymphadenopathy. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*. 2018; 17 (3): 5-10.
10. Safont M., Angelakis E., Richet H., Lepidi H., Fournier P.,

Drancourt M., Raoult D. Bacterial Lymphadenitis at a Major Referral Hospital in France from 2008 to 2012. *J Clin. Microbiol*. 2014; 52 (4): 1161-1167.

11. Bhagat V, Shah P, Patel C. Frequency of tuberculosis in cervical lymphadenopathy. *Int J Med Sci Public Health*. 2016; 5: 666-670.

12. Engelis A, Kakar M, Meikšāns R, Petersons A. BCG-SSI® vaccine-associated lymphadenitis: Incidence and management. *Medicina*. 2016; 52: 187-191.

13. Masih A, Ellison S, Moffett KS. Incomplete Kawasaki Disease Presenting with Fever and Cervical Lymphadenitis in a 10-Year-Old Child. *J Otolaryng and Rhinol*. 2019; 5(1): 1-3.

SUMMARY

CLINICAL AND LABORATORY CHARACTERISTICS OF ACUTE LYMPHADENITIS IN CHILDREN

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The aim of the study is to determine the clinical and laboratory characteristics of acute lymphadenitis in children.

The study was performed using retrograde analysis of diagnosis and treatment of 158 children with acute lymphadenitis of nonspecific and specific etiology, different localization (submandibular, cervical, axillary, inguinal and other peripheral localization) who were treated at the inpatient department in the pediatric surgery of MHCF “Local oncologic dispensary of Kramatorsk” from 2015 to 2019. Among the inpatient children there were 86 (54.4%) boys and 72 (45.6%) girls. The age of the patients ranged from 2 months to 18 years. The average age of the patients was 5.8 ± 0.61 years. The surgical procedures were performed in 131 patients (82.9%) while the non-specific nature of the inflammatory process was confirmed in 102 patients (77.9%) taking into account the clinical course of the disease and the results of microbiological analysis. A specific inflammatory process was found out in 29 patients (22.1%). It was clinically detected that 18 children (13.7%) had BCG-lymphadenitis (confirmed by histological examination) and 11 patients (8.4%) had benign lymphoreticulosis (felinosis) among them.

Due to the use of shear wave elastography 62.9% of the children were able to avoid any surgery, extra puncture and they were treated conservatively.

Keywords: lymphadenitis, ultrasound, puncture, surgical treatment.

РЕЗЮМЕ

КЛИНИКО-ЛАБОРАТОРНАЯ ХАРАКТЕРИСТИКА ОСТРЫХ ЛИМФАДЕНИТОВ У ДЕТЕЙ

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Цель исследования – определение клинико-лабораторных характеристик острых лимфаденитов у детей.

Исследование выполнено на основе ретроградного ана-

