МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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laparoperation for its sanitation, control of a course of inflammatory process, viability of fabrics, ability of seams and anastomoses. We have developed technologies for temporary closure of a laparotomy wound for the period between remediations, the current timing of their implementation, indications for suturing the surgical wound. The number of programmed laparation operations depended on the nature of the inflammatory process and averaged 3.2 ± 1.4. According to the results of microbiological studies, the number of microorganisms before suturing the surgical wound was significantly lower than the etiologically significant concentration.

For the period between the openings of the peritoneal cavity, we used the designed method of peritoneosorption, placing in all its departments containers with sorbents, which were given antimicrobial properties. They were replaced during the next laparation. This allowed up to 80% of peritoneal exudate to be adsorbed together with microorganisms, reducing their peritoneal damage and preventing translocation.

Conclusions. Thus, the evaluation of variants of the IL1β 511 C / T genotype makes it possible to predict the nature of the inflammatory process, and the use of treatment tactics through the utilization of improved techniques of peritoneal rehabilitation can significantly increase the treatment effectiveness of the patients with acute peritonitis.

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DIAGNOSTIC APPROACH IN PEDIATRIC PATIENT WITH ORBITAL CELLULITIS

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Introduction. Pediatric preseptal or orbital cellulitis may develop from either contiguous extension from periorbital structures or from both exogenous and endogenous sources. The role of ethmoidal sinusitis in orbital cellulitis has been the cause of much speculation. Orbital cellulitis is highly associated with paranasal sinusitis. Ethmoidal sinusitis has been reported in 84–100% of cases of orbital cellulitis. The medial wall of the orbit is the thinnest and most porous of the orbit and may account for the contiguous extension. Furthermore, a shared valveless venous system has been cited as one of the possible means of spread orbital and periorbital surgery, penetrating trauma, blunt trauma, dental procedures constitute some of the exogenous causes of orbital cellulitis. Endogenous causes may include endophthalmitis and sepsis.

The aim of the study. To evaluate diagnostic procedures in management of orbital cellulitis.

Material and methods. A pediatric male patient was treated in Chernivtsi City Children's hospital during April-May 2023. Clinical, ophthalmological, MRI, laboratory and microbiological testings were conducted.

Results. Bacterial infection is the main cause of inflammation in case of orbital cellulitis. Orbital signs include exophthalmos/proptosis and diplopia. Patient complained of pain, restricted motility and decreased vision. Signs and symptoms of acute rhinitis and sinusitis were also present.

Additional diagnostic studies may benefit in child once a bacterial orbital cellulitis is diagnosed or suspected. Assessement of blood included a complete blood count (CBC) and blood cultures. Although the diagnostic yield of blood cultures is low compared to that of surgical aspirates, a positive result may help tailoring antibiotic therapy. CSF analysis is no longer routinely ordered with the exception of bilateral cases of orbital cellulitis where meningitis and/or intracranial involvement is suspected.

Visualizing methods like computerized tomography (CT) scan or magnetic resonance imaging (MRI) are most commonly recommended study for those suspected of having orbital cellulitis. It is recommended when possible the use of contrast media which increases the sensitivity and specificity of a given study. Diffuse and localized postseptal inflammation may be observed in the setting of bacterial orbital cellulitis. Localized inflammation in the form of abscess may be intra- or extraconal. Such inflammation may also develop between the bone and periorbita, resulting in a subperiosteal abscess. Radiation exposure is of concern, especially in the pediatric population and

has been the subject of research. The clinical utility of a CT imaging study often out weights the risks of limited radiation exposure.

The differential diagnosis of bacterial orbital cellulitis includes other causes of orbital inflammation. Another possible mechanism also was necessary to evaluate. Specifically, mycotic orbital celluitis, neoplasm, thyroid eye disease and idiopathic orbital inflammation as well as autoimmune, congenital, and traumatic disease should be considered in the diagnosis of bacterial orbital cellulitis. So as vision loss may result from insult to the optic nerve or retina through a variety of mechanisms including orbital compartment syndrome, vascular infiltration, mass effect, and optic neuritis several types of investigations were conducted.

Conclusions. Pediatric bacterial orbital cellulitis is an infectious inflammation within the postseptal space that has been associated with significant morbidity and occasional mortality. Distinguishing preseptal from orbital cellulitis is critical to the appropriate management as is the distinction of bacterial orbital cellulitis from other postseptal processes. *Staphylococcus aureus* and *Streptococcus* species are the most common pathogens. Diagnostic tests including imaging studies should be judiciously applied that may reveal ethmoid sinusitis. Patients should be admitted and treated with broad-spectrum antibiotics and when needed surgical intervention be carried out. Monitoring for complications may prevent significant morbidity and mortality.

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IMMUNOLOGICAL ASPECTS OF SINUSITIS IN DIABETES MELLITUS

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Introduction. Inflammatory diseases of the nose and paranasal sinuses are very relevant in otolaryngology. They occur at any age and are observed in 80% of the population. In the United States, sinusitis is the most common chronic disease, surpassing arthritis and arterial hypertension in frequency of detection. According to the US National Center for Disease Statistics, up to 12.5% of North Americans suffer from chronic sinusitis.

In Ukraine, the number of patients with diseases of the nose and paranasal sinuses has currently reached 62%. Rhinosinusitis is especially severe in the setting of diabetes mellitus. In such patients, the ability to work is significantly reduced and the quality of life deteriorates and the treatment period increases. They are characterized by involvement in the inflammatory process of the orbit and cranial cavity, damage to the vessels of the mucous membrane of the paranasal sinuses.

The aim of the study. The nature and extent of immune disorders, their place and role in the pathogenesis of the disease and approaches to their correction have not been formulated in the literature. Most studies are conducted on maxillary sinusitis in patients without endocrine disorders. Therefore, it is very important to study the features of the clinical course of chronic purulent sinusitis and the nature of immune disorders in patients with diabetes mellitus.

Material and methods. Chronic rhinosinusitis is defined as a group of diseases characterized by inflammation of the nasal mucosa and paranasal sinuses for at least 12 weeks. This is a heterogeneous multifactorial disease. Chronic rhinosinusitis is caused by many risk factors, such as age, gender, smoking status, nasal polyps, allergic rhinitis, asthma, aspirin intolerance, infections, biofilms, gastroesophageal reflux, as well as anatomical abnormalities of the upper respiratory tract and histological appearance of the sinus mucosa.

Results. It is known that the percentage of people diagnosed with diabetes has been increasing over the past decades. Elevated blood sugar levels in people with this disease suppress the immune system. Nerve damage and decreased blood flow are also important factors that also increase the body's vulnerability to infections. Research shows that patients with diabetes are at increased risk of lower respiratory tract infections, urinary tract infections, and skin and mucous membrane infections. Pseudomonas aeruginosa and Staphylococcus aureus are the two most common bacterial isolates in these patients. The authors report a significant effect of diabetes mellitus on chronic rhinosinusitis. These patients are significantly more likely to have nasal polyps,