

Conclusion. The findings confirm the effectiveness of regenerative therapy and bioactive implants in treating jawbone defects caused by COVID-19. These methods are recommended for widespread clinical application.

REFERENCES

1. Outstretching challenges for rehabilitation of a mucormycotic case—a digitally designed patient-specific implant approach in the recent era. / A. Pathak, M. Dhamande, B. Mundada, A. Bhoyar [et al] // BMC Oral Health. – 2024. – Vol.24(1). – P.13-83. doi: 10.1186/s12903-024-05099-4.
2. Alasser, N. Patient-specific implants for maxillofacial defects: challenges and solutions. / N. Alasser, A. Alasraj // Maxillofac Plast Reconstr Surg. – 2020. – Vol. 42(1). – P.15. doi: 10.1186/s40902-020-00262-7.
3. The role of patient specific implants in the oral and maxillofacial region. / I.D. Roy, A.P. Desai, M. Ramyasri, K. Mukesh // Med J Armed Forces India. – 2024 – Vol. 80(4). – P.387–391. doi: 10.1016/j.mjafi.2024.04.022.

LEUKOCYTE INTOXICATION INDICES IN CHILDREN WITH PNEUMONIA

*Russu M.V., A.L. Shiraza, Hashini P. Thenabadu,
S.G. Ranudi Pehara Subaweera
Grodno State Medical University*

Relevance. Pneumonia is a significant cause of morbidity and mortality among children under five years of age. The complexity of pneumonia is often compounded by various associated conditions. Leukocyte intoxication indices (LII) serve as valuable biomarker for assessing the severity of pneumonia and the effectiveness of the immune response in pediatric patients [1].

Research objectives. To assess the LII in children under 5 years of age, with different associated conditions of pneumonia before and after treatment.

Research objectives. A quantitative descriptive study was conducted at Grodno Regional Children's Clinical Hospital in Belarus. Children diagnosed with 3 different associated conditions of pneumonia were included in the study group. The results were obtained from 69 patients under 5 years of age. The 1st group included 16 children with pneumonia associated with pleurisy. The 2nd group included 33 children with pneumonia associated with otitis media. The 3rd group included 20 children with pneumonia associated with adenoiditis. Case reports of patients were used as the data collection tool. The calculation of Leukocyte Intoxication Index (LII) was carried out using the formula:

$$LII = \frac{(4 * \text{Myelocytes} + 2 * \text{Band forms} + 1 * \text{Segmented Neutrophils})}{(\text{Monocytes} + \text{Lymphocytes}) * (\text{Eosinophils} + 1)}$$

Data was analyzed using “Excel” (Microsoft Corp., 2007).

The level of statistically significant value was taken as $p < 0.05$.

In children under 5 years of age, the LII norm was taken to be values from 0.03 to 0.34.

Results and its discussion. During the analysis of the 3 groups of children with different associated conditions of pneumonia, varying LII values were found before and after the treatment.

In patients with pneumonia associated with pleuritis, the average LII before was 3.099 ± 0.683 and after treatment it was 0.226 ± 0.049 . In patients with pneumonia associated with otitis media, the average LII before treatment was 1.742 ± 0.300 and after treatment it was 0.384 ± 0.097 . In patients with pneumonia associated with adenoiditis, the average LII before treatment was 1.196 ± 0.312 and after treatment was 0.396 ± 0.168 .

The LII value of all 3 groups showed a remarkable change in LII after the treatment. LII of group 1 was reduced back to normal (0.03–0.34) after treatment. In groups 2 and 3, LII were significantly reduced, but still remained slightly above normal (0.03–0.34).

Conclusion. 1. The findings of this study show the significant improvement in leukocyte intoxication indices (LII) under five years of age with pneumonia following treatment. 2. Group 1 (pneumonia associated with pleurisy) showed the highest change in LII from 3.099 ± 0.683 to 0.226 ± 0.049 , before and after the treatment respectively. 3. The observed improvements reinforce the potential of LII as a valuable biomarker for assessing treatment efficacy and guiding clinical decisions.

REFERENCES

1. A Leukocyte Score to Improve Clinical Outcome Predictions in Bacteremic Pneumococcal Pneumonia in Adults / M. Blot [et al.] // Open Forum Infectious Diseases. – 2014. – Vol. 1 (2). – P. 5-7. doi: 10.1093/ofid/ofu075.

IMPROVEMENT OF METHODS FOR TREATING PERIODONTAL DISEASES IN THE CONTEXT OF PREECLAMPSIA IN PREGNANT WOMEN

Shukrullaeva G.J., Akhmedov A.B.

Bukhara State Medical Institute

Relevance. Studies show that 20% to 50% of pregnant women, especially those from lower socioeconomic backgrounds, have periodontal diseases. Chronic inflammation in periodontal tissues accelerates preeclampsia development [1]. In preeclampsia, periodontal diseases worsen, with inflammation and plaque biofilm dominated by Gram-negative anaerobes disrupting gum tissue integrity [3]. Therefore, treating and preventing periodontal diseases during pregnancy is a key issue in dentistry [2].

Research objectives. To develop methods for the treatment and prevention of periodontal diseases in pregnant women with preeclampsia.