

## THROAT MICROBIAL FLORA IN CHILDREN DIAGNOSED WITH COMPENSATED CHRONIC TONSILITIS

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**Introduction:** Chronic tonsillitis in children is one of the most common pathologies in pediatric otolaryngology practice. The main factors in development of chronic tonsillitis are: microbial factor, decreased immunity, predisposing factors.

**Purpose:** To determine the etiopathogenic role of microbial factor in the development of chronic tonsillitis in children.

**Materials and methods:** Microbial flora was examined at 34 patients diagnosed with compensated chronic tonsillitis at different parts of the pharynx: the surface of the tonsils, the tonsil gaps and nasopharynx. 19 patients were examined to the presence of fungi.

**Results:** The bacteriological examination of microbial flora in the pharynx at 34 children diagnosed with chronic compensated tonsillitis appreciated the following microorganisms: Staphylococcus aureus – 33%; Streptococcus pneumoniae – 28%; Enterococcus – 26%; E. coli – 5%; Streptococcus B-hemolytic – 2%; K. oxytoco – 2%; Pseudomonas – 2%; Haemoph. influenzae – 2%.

From 19 children examined at the presence of fungi in the pharynx, at 3 children was found Candida albicans (15,8%) associated with microbial flora.

Analyzing the results of bacteriological examinations from different areas of the pharynx- the surface of the tonsils, the tonsil gaps and in the nasopharynx, it was found that the microbial flora in these areas is the same in 53,3%, and it is different in 46,7%. Analyzing the results from the surface of the tonsils and from the tonsil gaps, it was found that the microbial flora in these areas is the same in 73,7%, it is combined in 20,6% and it is different in 5,9%. Analyzing the results from the tonsil gaps and the nasopharynx, it was found that the microbial flora in these areas is the same in 62,1%, it is combined in 20,7% and it is different in 17,2%. Analyzing the results from the surface of the tonsils and nasopharynx, it was found that the microbial flora in these areas is the same in 64,7%, it is combined in 20,6% and it is different in 14,7%.

Having examined the degree of microbial activity of Staph.aureus (according to scale from 1 to 4 "+") it was found the following results: "++++" 13 cases (32,5%), "+++ " 12 cases (30%), "+" 8 cases (20%), "++" 7 cases (17,5%). Having examined the degree of microbial activity of Strept.pneumoniae (according to scale from 1 to 4 "+") it was found the following results: "+++ " 18 cases (54,6%), "++" 8 cases (24,2%), "+" 7 cases (21,2%). Having examined the degree of microbial activity of (according to scale from 1 to 4 "+") it was found the following results: "+++ " 18 cases (51,4%), "++++" 16 cases (45,7%), "+" 1 case (2,9%).

Having examined the sensitivity of the agents detected to the main groups of antibiotics it was established that in most cases the microbial flora is sensitive to B lactamic antibiotics, namely amoxicillin/clavulanic acid – 97%, and amoxicillin – 82,3%. To the cephalosporin group the sensitivity was 79,4%, to the macrolide group – 55-65% cases. The highest resistance of the microbial agents was showed to be to penicillin – 70,6%, and trimethoprim/sulfametazon – 69,0%.

**Conclusions:** Analyzing the results of bacteriological examinations of microbial flora in different pharyngeal areas, was established that the microbial flora in these areas is often the same.

The bacteriological examination of microbial flora in the pharynx at the examined group appreciated that most often are found the following microorganisms: Staphylococcus aureus, Streptococcus pneu-

moniae, Enterococcus, and rarely other pathogens. From the group of children examined to the presence of fungi in pharynx, *Candida albicans* was found in 15,8% cases.

The examination of sensitivity to the main groups of antibiotics of the agents detected in the pharynx, it was established that in most cases the microbial flora is sensitive to the group of B lactamic antibiotics (Amoxicillin/clavulanic acid and amoxicillin), it is less sensitive to the cephalosporin group, and less sensitive to the macrolide group. The highest resistance of the microbial agents it was shown to be to the penicillin and trimethoprim/sulfametazon.

**Keywords:** Microbial flora, chronic compensated tonsillitis, children, antibiotics, fungi.

## THE FACTORS INCREASING RISK OF MORTALITY IN THE PELVIO-ABDOMINAL TRAUMATISM

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**Introduction:** The associated pelvio-abdominal trauma shows an unfavorable prognosis for survival. Predictors of mortality in pelvis fracture patients should be available early in the course of treatment in order to be useful.

**Aim:** The objective of this study was to establish the factors increasing risk of mortality in the pelvio-abdominal traumatism.

**Material and methods:** The study includes 195 victims with blunt trauma: 152 patients with pelvic ring fractures and 43 patients without pelvic ring fractures. Data were collected regarding: mechanism of injury, Algover's shock index (SIA), associated injuries, Injury Severity Score (ISS), Glasgow Coma Scale (GCS), Revised Trauma Score (RTS), Trauma and Injury Severity Score (TRISS) and mortality. Statistical analysis was performed with Kaplan-Meier method, log rank test and Cox regression analysis for the survival functions.

**Results:** Study group (SG)-152 patients with pelvic ring fractures. M/W- 2,16. Mean age  $38,81 \pm 16,03$  years. ISS =  $38,84 \pm 6,76$  points, RTS- 6.16 points, TRISS- 71,35%. Mortality 41,44% (63 patients). Pelvic fractures were classified according to the system proposed by Tile. Of 152 patients the number and proportion of observations with pelvic fractures: type A constituted 58 (38,15%), lethality - 27,58% (16 patients); type B- 40 (26,31%), lethality 45% (18 patients); type C- 54 (35,52%) patients, lethality 53,7% (29 patients). The mortality was significantly higher in patients with unstable fracture patterns. The control group (CG)-43 patients with associated abdominal trauma, without damage to the pelvis. M/W-5,1. Mean age  $41,37 \pm 16,74$  years. ISS =  $29,51 \pm 15,78$  points, RTS- 6.53 points, TRISS- 71,1%. Lethality- 20, 93% (9 patients). Brain trauma: SG-73,02%; CG- 51,16%. Chest trauma: SG- 76,31%; CG- 72,09%. Hemopneumothorax: SG- 40,13%; CG- 6,97%. Fracture of extremities: SG- 45,39%; CG- 16,27%. Abdominal trauma: SG- 97,36%; CG- 100%. Multiple trauma was more frequent in study group than in control group. The highest mortality rate was observed in the 60-71 age group. With Cox regression analysis, the parameters such as: pelvic ring fracture, patient age >60 years, Injury Severity Score >25, Glasgow Coma Scale score of <9, shock on admission, multiple injury of internal organs were factors increasing risk of mortality.

**Conclusion:** The factors increasing risk of mortality in the pelvio-abdominal traumatism included: pelvic ring fracture, patient age >60 years, Injury Severity Score >25, Glasgow Coma Scale score of <9, shock on admission, multiple injury of internal organs.