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SENSITIVITY TO CEPHALOSPORINS OF OPPORTUNISTIC BACTERIA, EXCRETED IN PATIENTS WITH INFECTIOUS DISEASES OF UPPER AND LOWER RESPIRATORY TRACT

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Antimicrobial resistance (AMR) is a growing problem in the 21st century and one of the most serious jeopardies to global public health. The number of resistant microbial strains, geographic areas affected by drug resistance, and the extent of resistance in each organism are escalating. Moreover, the

percentages of organisms exhibiting AMR, especially resistance to multiple antibiotics, are continuingly increased. Thus, disease agents that were once thought to be susceptible to antibiotics are returning in new leagues resistant to these therapies [1, 2].

The cephalosporins are a large group of related beta-lactam antimicrobial agents. Favorable attributes of the cephalosporins include low rates of toxicity, relatively broad spectrum of activity, and ease of administration. Various cephalosporins are effective for treatment of many conditions, including pneumonia, skin and soft tissue infections, bacteremia, and meningitis. Differences among the numerous cephalosporin antimicrobial agents are sometimes subtle; however, an understanding of these differences is essential for optimal use of these agents. As a result of widespread use of cephalosporins, bacterial resistance to these drugs is increasingly common. New, fourth-generation agents (such as cefepime) offer an alternative for the treatment of infections caused by some drug-resistant microorganisms [3].

Periodic revisions on guidelines and recommendations for treatment of the main acute infections are necessary to orient rationale and appropriate use of antibiotics. Continuous medical education and changes in physicians' and patients' behavior are required to modify the paradigm that all upper respiratory infection needs antibiotic therapy, minimizing the consequences of its inadequate and inappropriate use [4].

The aim of the research: to study the sensitivity to antibiotics of opportunistic bacteria excreted in patients with infectious diseases of upper and lower respiratory tract.

Determination of microflora sensitivity of antibiotics was carried out by agar diffusion (standard disk method) in accordance with the order of the Ministry of Health of Ukraine № 167 from 05.04.2007 [5]. 180 strains of microorganisms were analyzed in general from the patients with pharyngitis, 202 strains – from the patients with bronchitis and 211 strains – from the patients with pneumonia.

It was found in previous studies that a prominent place among causative agents of infectious diseases of upper and lower respiratory tract belongs to gram-positive coccas. Thus, the leading role in the etiology of pharynxgitis belonged to streptococci of *viridans*, *S. aureus*, *S. epidermidis*, *S. anhemolyticus* group [6]. With bronchitis, the part of coco flora was 59.2 % [7], with pneumonia – 38.3 % [8], among which the most widely spread were streptococci of *viridans* and *S. aureus* group.

In the study of the sensitivity of bacteria excreted in patients with upper respiratory diseases to antibiotics of the cephalosporin group it was found that the greatest activity was manifested by ceftriaxone and cefepime towards all strains. However, only *S.epidermidis* manifested absolute sensitivity to them. Ceftriaxone suppressed the growth of 95.7 % of *S. aureus* and 91-95.9 % of

streptococci. The activity of cefepime was within 90-100 %. Cefoperazon demonstrated activity towards 97.6 % of *S.aureus* and 91.4 % streptococci of *viridans* group, as for other types – within 84.2-87.7 %. Cefixime suppressed the growth of 86.9% of *S. aureus* and 94.7 % of *S.epidermidis*. The activity of cefuroxime was 93 % for *S. epidermidis* and *S. pyogenes*, as for other types – the results fluctuated from 73.7 % for *S. pneumoniae* to 80.3-88.6 % for *S. aureus* and streptococci of *viridans* group. The lowest activity was recorded for ceftazidim, namely, among staphylococci the sensitivity was within 50-62,9 %, *S. pyogenes* was sensitive in 69.9 %, streptococci of *viridans* group – in 61.2% and *S. pneumoniae* – in 52.6 %. Staphylococci appeared to be more sensitive than streptococci.

In diseases of lower respiratory tract, coca flora was characterized by higher levels of resistance to cephalosporins. *S. anhaemolyticus* demonstrated absolute sensitivity to cefoperazone, but other species of streptococci were sensitive in 37.5-50 % of cases. Cefoperasone suppressed the growth of 77.8 % of *S. aureus* and 50 % of *S. epidermidis*. Significantly lower activity indicators were marked for ceftriaxone towards staphylococci (*S. epidermidis* – 83,3 %, *S. aureus* – 65 %). Sensitivity of streptococci to ceftriaxone varied from 40 % in *S. pyogenes* to 77.5 % in streptococci of *viridans* group. The highest indices for cefepime were registered for *S. aureus* (82.4 %) and for *S. pyogenes* (86.4 %). Other types of bacteria demonstrated sensitivity to cefepime within 44,4 % for *S. anhaemolyticus* and 60 % for *S. epidermidis*.

Thus, ceftriaxone and cefepime demonstrated a high level of activity towards staphylococci and streptococci excreted from patients with pharyngitis. The growth of the resistance of bacterial flora excreted during diseases of lower respiratory tract to cephalosporins of the 3rd and 4th generations, namely, to ceferazone, ceftriaxone and cefepeme is marked.

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ANALYSIS OF QUALITY OF LIFE IN PATIENTS WITH CHRONIC PANCREATITIS

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The level of human quality of life (QOL) plays an important role in health. According to the WHO «health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.» Therefore, the study of the level of QOL and its changes in different