88 Analysis of microbiome of the prostatic secretion on depending of the levels of total testosterone in blood serum

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Introduction & Objectives: Chronic prostatitis (CP) is one of the most prevalent condition which takes the leading place in the structure of prostate diseases.
To conduct a comparative analysis of microbiome of prostate on depending of level of total testosterone (T) in blood serum.

Materials & Methods: Analysis of diagnostics and results of treatment 124 patients with chronic bacterial prostatitis (CBP) who were divided on three groups: I group-patients with level T below 8 nmol/l , II group- level T 8-12 nmol/l (grey zone) and III group with normal level T ≥ 12,1 nmol/l.

Results: In patients group I the bacteriological study of prostatic secretion in all cases identified multicomponent aerobic-anaerobic associations with prevalence in the quantitative ratio non-clostridial anaerobes. Degree of contamination of facultative anaerobic bacteria in majority cases did not exceed 10^5 CFU/ml and non-clostridial anaerobes exceeded 10^6 CFU/ml. In patients group II like in I were determined aerobic-anaerobic associations with prevalence in the quantitative ratio non-clostridial anaerobes. In patients group III in prostatic secretion predominated a facultative-anaerobic microorganisms. Quantitative indicators of facultative-anaerobic microorganisms in majority cases matched 10^6 CFU/ml and non-clostridial anaerobic bacteria did not exceed 10^4 CFU/ml. During of conducted analysis by data of culture prostatic secretion was noted that the less level T in blood serum the more degree of associative relationships in prostatic secretion in patients with CBP. In group I specific weight four-component associations was insignificant (4,35%) and most frequently determined five-component and six-component associations of microorganisms 19,5% and 26% respectively, seven-component associative relationships were identified in 17,4% cases and eight-component association bacteria in prostatic secretion in 32,6% patients. In group II more often observed three and four-component association of bacteria in 26% and 55,5% patients, respectively and rarely a five-component association of bacteria in 14,8% cases. The small specific weight constituted 6 associates which were found in prostatic secretion in patients with CBP and combined with testosterone deficiency-3.7%. In group III were mainly identified two and three component association of bacteria in 37,2% and 39,2% cases, and four and five component associative relationships of microorganisms 7,8% patients.

Conclusions: Therefore in patients with level T below 12 nmol/l the bacteriological investigation of prostatic secretion showed multicomponent associative bacterial relationships that can be exert the difficulties for administration antibacterial therapy.