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## Revised Abstract

**Objectives:** The aim of this study was to determine the prevalence and etiology of chronic bacterial prostatitis among the patients with clinically proved diagnosis.

**Methods:** During one-year period (October 2002 to October 2003) 129 patients with suspected prostatitis were examined. The clinical diagnosis was confirmed in patients within > 3 months duration of the perineal discomfort, pain following ejaculation, urinary frequency, urgency, dysuria, low back pain, suprapubic pain, tender prostate palpation on physical examination. The bacteriological diagnosis was determined in patients who had not been given antibiotics in previous month by Meares and Stamey technique. Prostatitis was categorized according to NIH classification.

**Results:** Chronic bacterial prostatitis (NIH category II) was found in 9 patients (7.0%), inflammatory chronic pelvic pain syndrome (NIH category IIIa) - in 59 (45.7%), non-inflammatory chronic pelvic pain syndrome (NIH category IIIb) - in 61 patients (47.3%).

The following pathogens were isolated - in NIH Category II: *Staphylococcus* spp. - in 3 (33.3%), anaerobic bacteria (*Prevotella* spp., *Prevotella* spp. and *Peptostreptococcus* spp.) - in 3 (33.3%), *Escherichia coli* - in 2 patients (22.2%), *Acinetobacter Iwoffii* - in 1 patients (11.1%).

**Conclusions:** Chronic bacterial prostatitis is the rare clinical entity. Careful examination with quantitative segmented bacteriologic cultures leads to proper categorization into the recognized forms of the prostatic syndrome. The main pathogens causing chronic bacterial prostatitis were *Staphylococcus* spp., *Prevotella* spp., *E. coli* and *A. Iwoffii*.

## Introduction and Purpose

Chronic prostatitis is recognized to be a result of infectious and noninfectious prostate inflammation as well as noninflammatory diseases. But the separation of various prostatitis syndromes is difficult to perform. Chronic bacterial prostatitis (CBP) is a common diagnosis and a frequent indication for antimicrobial therapy that is characterized as recurrent urinary tract infections with bacterial persistence in prostatic secretion. So it's diagnosing is primarily based on bacterial culture. However,

the identification of causative agent is complicated and exceedingly uncommon. Data on prevalence of CBP and its etiology in Russia is very limited.

Thus, the aim of this study was to determine the prevalence and etiology of chronic bacterial prostatitis among the patients with clinically proved diagnosis.

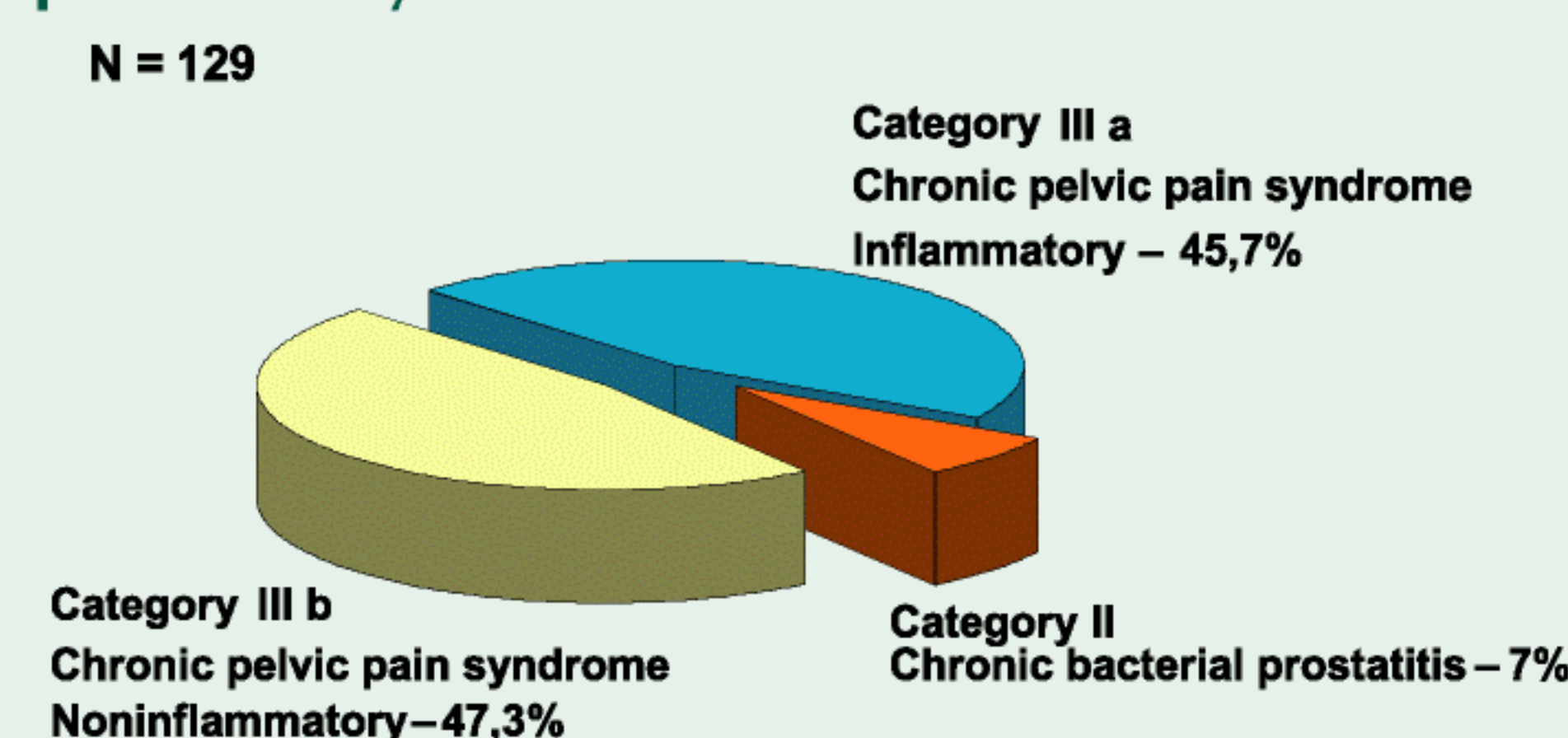
## Methods

From October 2002 to October 2003 patients with suspected chronic prostatitis were examined. The clinical diagnosis was confirmed by the presence of ≥3 months perineal discomfort, pain following ejaculation, urinary frequency, urgency, dysuria, low back pain, suprapubic pain, tender prostate palpation. The bacteriological diagnosis was performed by Meares and Stamey technique in patients who had not been given antibiotics in previous month. Prostatitis was categorized according to NIH classification. CBP (Category II) was proved if the number of bacteria isolated from expressed prostatic secretion (EPS) was >10<sup>3</sup> CFU/ml, the number of leucocytes was >10 per high power field (x 400); and if number of CFU in EPS was at least 10-fold greater than the number of CFU in midstream urine (VB2) and first voided urine (VB1) culture. Inflammatory chronic pelvic pain syndrome (Category IIIa) was confirmed for patients if the number of leucocytes in EPS was >10/high power field (x 400) with no bacteria found in EPS. Noninflammatory chronic pelvic pain syndrome (Category IIIb) was confirmed if neither bacteria nor leucocytes were found in EPS.

## Results

A total of 129 patients at the age of 18-56 were included in the study. Chronic bacterial prostatitis (NIH category II) was found in 9 patients (7.0%), inflammatory chronic pelvic pain syndrome (NIH category IIIa) - in 59 (45.7%), non-inflammatory chronic pelvic pain syndrome

Figure. Prevalence of different forms of the prostatitis syndrome.



(NIH category IIIb) - in 61 (47.3%). Mean age of the patients was 31,3 years (Table). Prevalence of

different forms of prostatitis syndrome is presented in the figure.

The following pathogens were isolated from EPS of patients with chronic bacterial prostatitis: *Staphylococcus* spp. - in 3 patents (33.3%), anaerobic bacteria (*Prevotella* spp., *Prevotella* spp. and *Peptostreptococcus* spp.) - in 3 patients (33.3%), *Escherichia coli* - in 2 patients (22.2%), *Acinetobacter Iwoffii* - in 1 patient (11.1%).

Table. Mean age of patients with chronic prostatitis syndrome.

Forms of the prostatitis syndrome (NIH)	Number of patients	Mean age, years	Range
Chronic bacterial prostatitis	9	30	25-38
Inflammatory chronic pelvic pain syndrome	59	32	21-56
Non-inflammatory chronic pelvic pain syndrome	61	32	18-51
Total	129	31.3	18-56



## Conclusions

- Chronic bacterial prostatitis is the rare clinical entity.
- Careful examination with quantitative segmented bacteriologic cultures leads to proper categorization into the recognized forms of the prostatic syndrome.
- The main pathogens causing chronic bacterial prostatitis were *Staphylococcus* spp., *Prevotella* spp., *E. coli* and *A. Iwoffii*.

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