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## Possible differential diagnosis of various chronic nonbacterial prostatites

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### Abstract

**Background:** The purpose of the study was to diagnose possible chronic nonbacterial prostatitis (CNP) and chronic pelvic pain syndrome (CPPS) among patients, as well as differentiate between the inflammatory (category IIIA) or non-inflammatory (category IIIB) types in selecting and optimizing differential drug treatment of this category of patients.

**Material and methods:** The study was conducted on 43 patients diagnosed with CNP/CPPS. The control group included 10 healthy men. Both the production of nitric oxides (NO) by phagocytes, as well as prostate secretion and ejaculate were determined according to the procedure described by Metelyskaya B.A., which was modified by Gudumac V, et al.

**Results:** There was a 39.0% ( $p < 0.05$ ) decrease in NO production by induced NO-synthase (iNOS), determined in the blood of 11 patients (from the main group – 2) with CNP/CPPS and a 115% ( $p < 0.05$ ) increase was determined in 32 patients (from the main group 1) if compared to the same indices in the control group. The prostatic secretion and ejaculate showed a higher macrophage iNOS activity by 80% ( $p < 0.05$ ) and 75% ( $p < 0.05$ ) if compared to the same parameters from the control group. The iNOS activity in prostatic fluid and split-ejaculate fractions from the main group – 2 did not differ from that of the control group.

**Conclusions:** The assessment of NO production, prostate secretion and ejaculate allows to somewhat establish the main diagnosis of CNP and category III types (A – inflammatory and B – non-inflammatory prostatitis), which will significantly contribute to the optimization and selection of an appropriate differential treatment based on the drug action mechanisms.

**Key words:** chronic nonbacterial prostatitis, nitric oxide, chronic painful pelvic syndrome, drugs.

### Cite this article

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