Effect of biofeedback electrical stimulation on IL-10 and PGE$_2$ levels in nonbacterial prostatitis patients (category III B)

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To evaluate the role of IL-10 and PGE$_2$ in expressed prostatic secretion (EPS) in the development of chronic prostatitis category III B, and to investigate the effect of biofeedback pelvic muscles exercise in the treatment of III B chronic prostatitis. Methods: A total of 50 patients with chronic prostatitis category III B served as observation group, and 23 persons without prostatitis who had normal results in routine urine test and routine EPS test served as control group. Patients in observation group were treated by biofeedback therapy for 12 weeks, and chronic prostatitis syndrome index (CPSI), IL-10 and PGE$_2$ in EPS of observation group were observed before and after treatment, and were compared with control group. Results: Patients in observation group had significantly higher level of PGE$_2$ and higher CPSI score than control group (P<0.05-0.01), but had no significant difference in level of IL-10 compared with control group (P>0.05). CPSI score and PGE$_2$ were significantly lower 3 months after treatment and one month after treatment ends (P<0.05), but there was no significant difference in IL-10 (P>0.05). Differences in those three indexes of observation group were insignificant compared with control group. There was a strong positive correlation between CPSI and IL-10 and PGE$_2$ (r=0.563 5 and 0.432 9, P<0.05). Conclusions: Patients with III B prostatitis have elevated levels of PGE$_2$ in EPS. The degree of pain is positively related with levels of IL-10 and PGE$_2$. Biofeedback may improve symptoms via decreasing PGE$_2$ level.

[KEY WORDS] III B Prostatitis; Prostaglandins E$_2$; IL-10; Biofeedback