#819 Experience in the use of extracorporeal shock wave therapy in combination with the drug Bovhyaluronidase Azoximerum in the treatment of chronic prostatitis

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Hypothesis / aims of study

AIM

The aim of the study was to evaluate the safety and effectiveness of extracorporeal shock wave therapy (ESWT) in combination with therapy using the drug Bovhyaluronidase Azoximerum for the treatment of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS).

METHOD

The study included 100 men (mean age 45.5±9.1 years) with CP/CPPS and evidence of fibrotic changes and/or calcifications in the prostate, as determined by transrectal ultrasound (TRUS). According to the NIDDK/NIH classification, 32% (n=32) were identified as having CP type II, 33% (n=33) had CP/CPPS type IIIA, and 35% (n=35) had CP/CPPS type IIIB. Men in type II were included in Group 1 (n=32) - receiving ESWT and "3-As" therapy. The remaining patients were randomly assigned to Group 2 (n=32) with ESWT and Group 3 (n=36) with a combination of ESWT and the drug Bovhyaluronidase Azoximerum. ESWT sessions (Dornier Aries) were performed on the perineum twice a week for 6 weeks. Patient examinations were conducted at 0 and 30 weeks, assessing NIH-CPSI, IPSS, VAS, uroflowmetry, TRUS of the prostate with compression elastography, culture of seminal/prostatic fluid, spermogram/prostate fluid analysis, serum PSA for men over 50 years of age. The study was approved by the Ethics Committee of the RUDN Medical Institute.

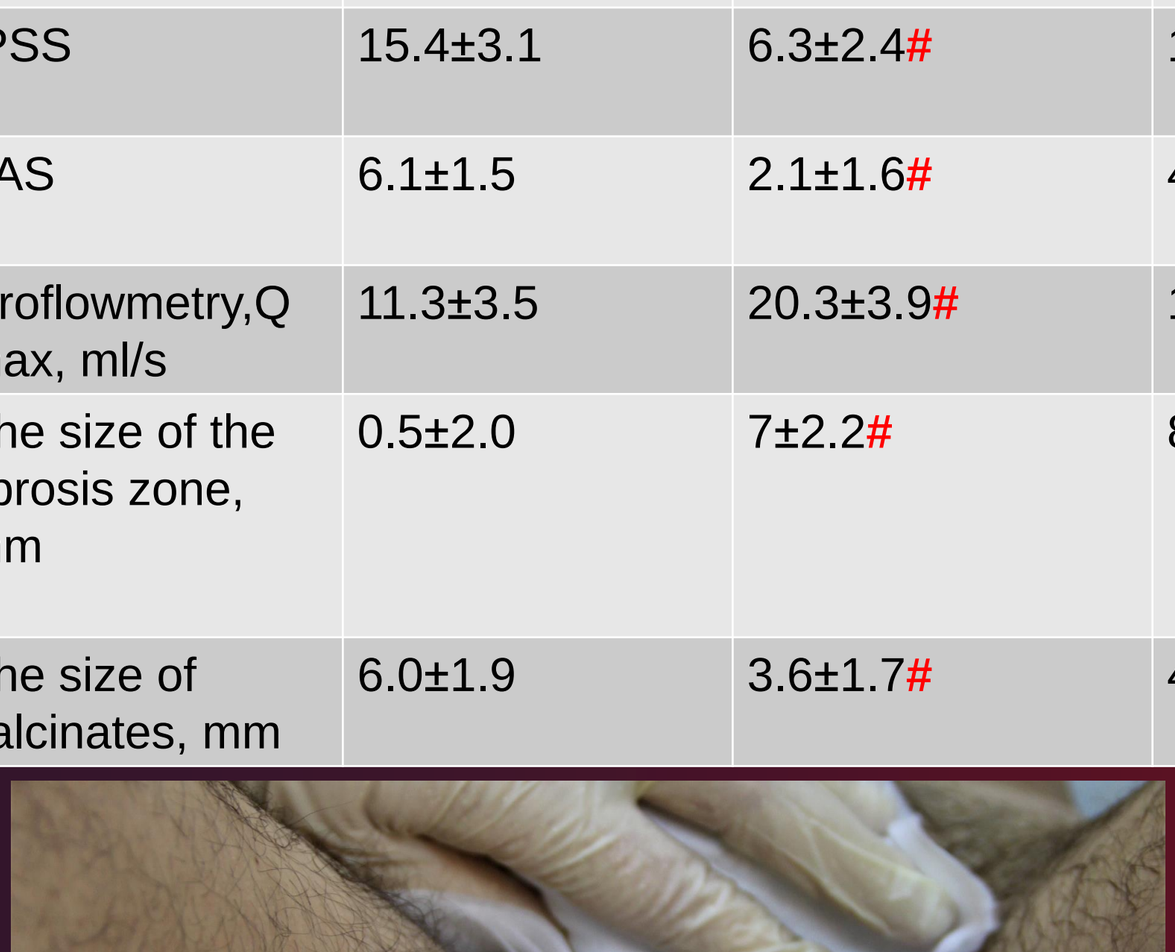
Results and interpretation

RESULTS

No side effects from the treatment were registered in patients. After treatment, the level of WBC in the seminal/prostatic fluid decreased in Groups 1 and 2, and bacterial growth in seminal/prostatic fluid decreased in 15 cases in Group 1. The serum PSA level was <4 ng/ml in all men. The mean NIH-CPSI, IPSS, and VAS decreased in all groups ($p<0.05$). Qmax according to uroflowmetry improved in all groups ($p<0.05$). In Group 1, the fibrosis decreased from 10.5±2.0 mm to 7±2.2 mm ($p<0.05$), and the calcinate size decreased from 6.0±1.9 mm to 3.6±1.7 mm ($p<0.05$). In Group 2, the fibrosis decreased from 8.8±2.0 mm to 6.5±2.1 mm ($p<0.05$), and the calcinate size was reduced from 4.8±1.9 mm to 3.5±1.7 mm ($p<0.05$). In Group 3, fibrosis disappeared completely in 24 patients (66.7%), and in 12 patients (33.3%), the fibrosis zone decreased from 9.5±2.0 mm to 2.5±1.8 mm ($p<0.05$), while the size of calcinates decreased from 6.2±2.0 mm to 2.2±1.8 mm ($p<0.05$).

	Group 1, ESWT + "3-As" therapy (n=32)		Group 2 , ESWT (n=32)		Group 3, ESWT+ Bovhyaluronidase Azoximerum (n=36)	
	0 day	60 day	0 day	60 day	0 day	60 day
NIH-CPSI	15.9±3.0	6.8±2.5#	16.8±2.9	7.8±3.2 #	18.6±2.7	2.5±2.2#
IPSS	15.4±3.1	6.3±2.4#	12.9±2.5	6.5±3.3 #	18.9±2.5	3.3±2.5#
VAS	6.1±1.5	2.1±1.6#	4.6±1.8	2.3±1.5 #	6.9±2.2	1.1±1.2#
Uroflowmetry,Q max, ml/s	11.3±3.5	20.3±3.9#	12.3±2.7	20.1±4. 3#	11.4±2.8	21±4.5#
The size of the fibrosis zone, mm	0.5±2.0	7±2.2#	8.8±2.0	6.5±2.1 #	9.5±2.0 (n=12)	Disappeared completely in 24 patients (66.7%)# 2.5±1.8 (n=12)#
The size of calcinates, mm	6.0±1.9	3.6±1.7#	4.8±1.9	3.5±1.7 #	6.2±2.0	2.2±1.8#

NIH-CPSI - National Institutes of Health Chronic Prostatitis Symptom Index (M±m),
IPSS – International Prostate Symptom Score (M±m),
VAS – The visual analog scale (M±m),
P value, versus baseline ($p<0.05$)



The technique of performing ESWT

CONCLUSIONS

The presented methods of therapy effectively and positively correct prostate inflammation, pelvic pain, and dysuria; they also stimulate the lysis of fibrosis zones and calcinates. Extracorporeal shock wave therapy and the drug Bovhyaluronidase Azoximerumare effective in the treatment of chronic prostatitis/chronic pelvic pain syndrome types II and III.

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