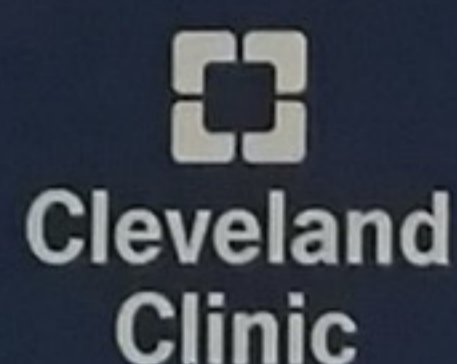


Case Series of Low Intensity Shock Wave Therapy for Men with Chronic Prostatitis/Chronic Pelvic Pain Syndrome

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Introduction

- Chronic Prostatitis/Chronic Pelvic Pain Syndrome (CPPS) is a heterogeneous syndrome that is often challenging to treat.
- Low Intensity Shock Wave (LiSW) has emerged as a potential therapy and several sham controlled studies have shown efficacy.
- We wished to study the efficacy and safety of LiSW in CPPS patients with clinical phenotyping to better understand who may best respond.

Methods

- Men were enrolled in this IRB approved study provided they had a diagnosis of CPPS for at least 6 months and were able to return for weekly treatments. Those on multi-modal therapy continued other therapies as long as the dose was stable.
- LiSW was delivered with the Urogold 100 machine (Tissue Regeneration Technologies, Woodstock, GA) using the standard probe. **Figure 1**
- There were 4 treatment sites, 2 on each side of the perineum at 500 shocks each for a total of 2000 shocks.
- Symptom severity was measured with the National Institute of Health Chronic Prostatitis Symptom Index (CPSI) at baseline and 1 month following the last treatment. Patients also self reported a General Response Assessment (GRA) ranging from 1 (significantly improved) to 5 (significantly worse).
- Patients were clinically phenotyped by the UPOINT system (www.upointmd.com).
- Pre and post values were compared with the paired t test with significance set at $p < 0.05$.

Results

- 14 men enrolled with a mean age of 45.1 years (range 22-67) and median duration of 36 months (range 9-240).
- Men had a mean of 2.6 positive UPOINT domains (range 1-5) and all but 2 had pelvic floor tenderness (domain "T").
- Total CPSI improved from 27.7 ± 5.4 to 19.4 ± 7.5 ($p=0.003$).
- While the pain and quality of life scores improved significantly, there was no change in the urinary subscore. **Figure 2**
- 9 patients (64.3%) had a >6 point drop in CPSI. **Figure 3**
- By GRA, 7 patients said they were significantly improved, 2 was somewhat improved and 5 were unchanged. There were no significant differences in responders to non-responders for phenotype or symptom duration although responders had a higher starting pain score (14.0 vs 9.4 , $p=0.005$) and both patients without pelvic floor spasm failed to improve.

Figures



Figure 1: Device used in this study

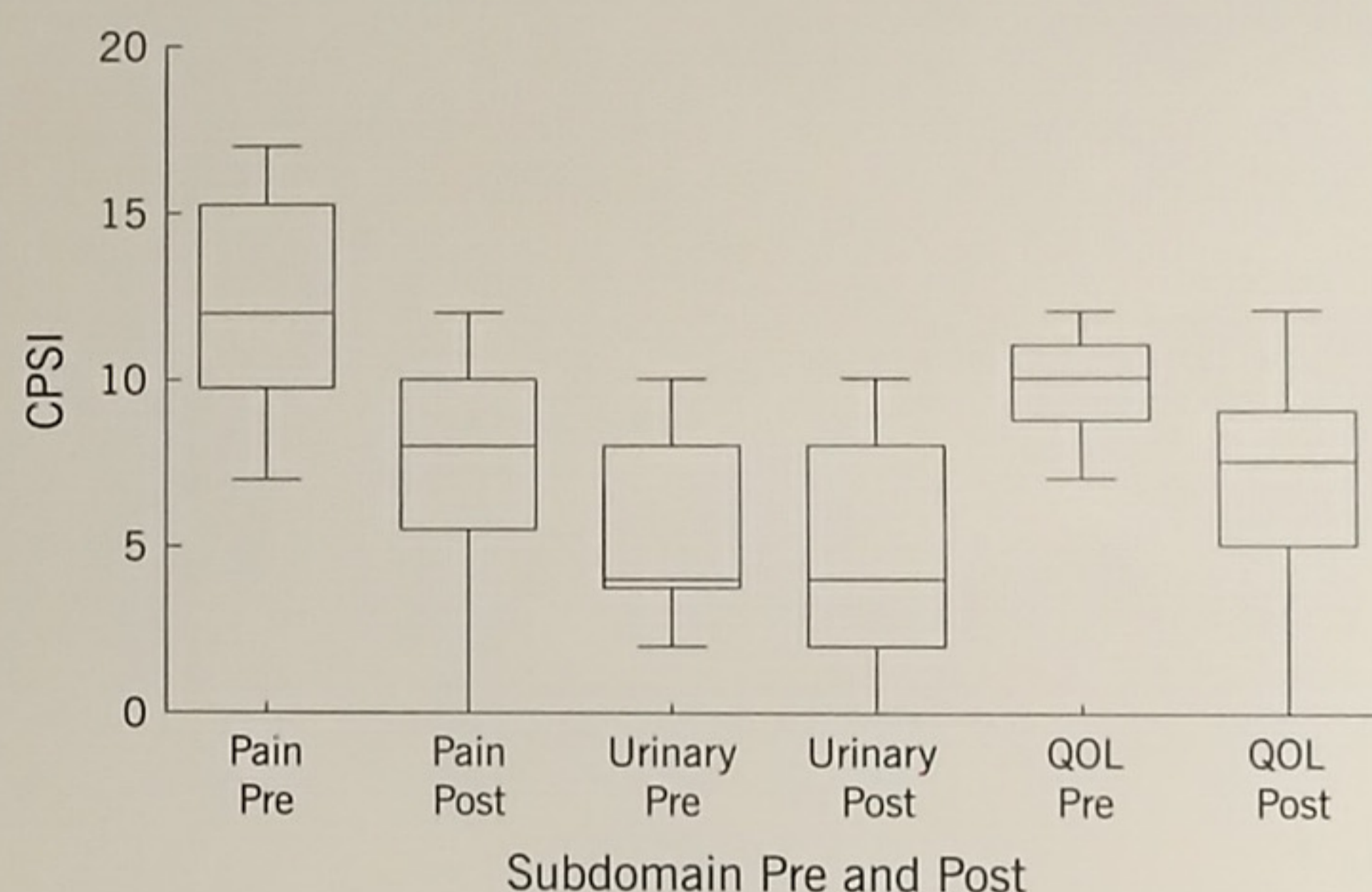


Figure 2: Box plot of mean CPSI (total and subscores) before and after therapy

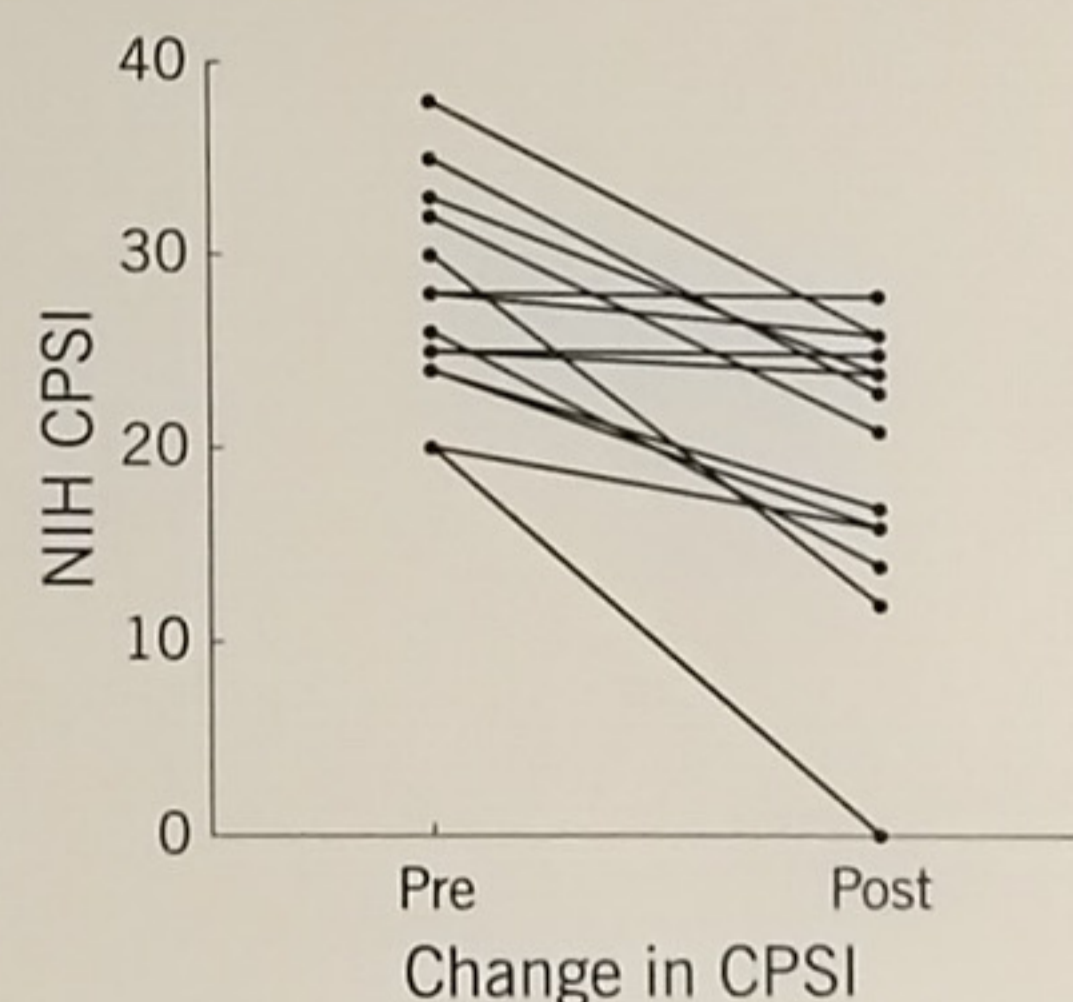


Figure 3: Change in total CPSI after therapy by individual patient

Conclusion

Once weekly low intensity shock wave lithotripsy improved the symptoms of CP/CPPS in the majority of patients without side effects. This treatment may be most effective in those with pelvic floor spasm and less effective for men with mostly urinary symptoms.