Physiotherapy Interventions for the Treatment of Urologic Chronic Pelvic Pain Syndrome: A Systematic Review
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Aim of study
To evaluate the effects of the physiotherapy (PT) interventions in men and women with Urologic Chronic Pelvic Pain Syndrome (UCPPS) aiming to discuss the results in the short, medium and long-term follow-up.

Methods
- **Inclusion criteria**: full text of randomized, quasi-randomized control trials and case studies articles.
- **Database**: Cochrane Library, PUBMED/MEDLINE, LILACS, Scielo and PEDro database, based on Preferred Reporting Items for Systematic Reviews and Meta- Analyses (PRISMA).
- **Keywords**: Chronic pelvic pain syndrome, urologic chronic pelvic pain syndrome, chronic pelvic pain, physical therapy treatment, management (combined or alone)
- **Languages**: English and Portuguese
- **Period of time**: from 1996 to 2016
- **PT interventions as the main treatment for UCPPS**
- **Outcomes measure**: pain, self-reported disability or quality of life scores.

Results
- **3534 studies - 7 met the inclusion criteria (Figure 1)**
  - 3 included both genders and 4 only men.
  - **Demographic data**: 748 patients (76% male) – age range between 24 - 53 years old.
  - **Symptoms**: pelvic pain, genital pain, urinary dysfunctions (frequency, urgency, hesitancy, dysuria) and sexual disorders (pain during or after ejaculation).
  - **Physiotherapy interventions**(combined or alone): kinesiotherapy (43%), myofascial therapy (43%), electrotherapy and biofeedback (15%), trigger points (29%).
  - **Downs & Black Scale**: to analyze the methodological quality of the studies - the mean score = 17.33 ± 2.53 (range between 14 – 20) - low to moderate methodological quality (Table 1).

Interpretation of Results
Although differences regarding the applicability of the interventions, the time of treatment and the number of sessions, PT interventions showed an effective role in UCPPS treatment. The evidence in this review is limited by trials with large methodological discrepancy, low to moderate methodological quality, and no-long-term of follow up.

Concluding message
Physiotherapy Interventions are recommended for the treatment of UCPPS. However, randomized studies with stronger methodology and controlled quality in terms of number of sessions, which assesses the effects of interventions on the symptoms, with long-term follow-up are necessary.

# Table 1. Summary of Included Studies

<table>
<thead>
<tr>
<th>Authors</th>
<th>Country</th>
<th>Type of study</th>
<th>Gender/ Number of Participants</th>
<th>Physiotherapy Interventions</th>
<th>Combined Therapy</th>
<th>Outcome Measures</th>
<th>Results</th>
<th>Check list Downs &amp; Black Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson et al., 2015 (USA)</td>
<td>Retropective study</td>
<td>men and women (n=393)</td>
<td>Trigger point wand 2-4x/week for 6 months</td>
<td>Drug therapy + Paradoxal Relaxation Therapy (PRT)</td>
<td>VAS, NIH-CPSI</td>
<td>at 6 months treatment – decrease of trigger points sensitivity and pain in both genders</td>
<td>19</td>
<td></td>
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<tr>
<td>FitzGerald et al., 2013 (USA)</td>
<td>RCT</td>
<td>men and women (n=47)</td>
<td>Myofascial therapy X GTM 1x/week for 10 weeks</td>
<td>No</td>
<td>NIH-CPSI, SF-12, FSP/MSHI Pelvic floor assessment</td>
<td>57% decrease of pain in myofascial therapy group X 21% decrease of pain GTM</td>
<td>20</td>
<td></td>
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<tr>
<td>Anderson et al., 2011 (USA)</td>
<td>Prospective study</td>
<td>men and women (n=113)</td>
<td>Trigger point wand 2-4x/week for 6 months</td>
<td>Drug therapy + PRT</td>
<td>VAS, NIH-CPSI</td>
<td>At 6 months treatment – significant decrease of pain symptoms (VAS score)</td>
<td>19</td>
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<tr>
<td>Van Alstyne et al., 2010 (Netherlands)</td>
<td>Case study</td>
<td>men (n=2)</td>
<td>Paradoxal relaxation + Postural exercises + Myofascial therapy</td>
<td>No</td>
<td>VAS, NIH-CPSI</td>
<td>Decrease of pain symptoms (VAS and NIH-CPSI scores)</td>
<td>14</td>
<td></td>
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<tr>
<td>Sikiru et al., 2008 (Nigeria)</td>
<td>RCT</td>
<td>men (n=24)</td>
<td>TENS 5x/week for 4 weeks</td>
<td>Antibiotics, painkillers and placebo</td>
<td>NIH-CPSI</td>
<td>Significant decrease of CPPS</td>
<td>20</td>
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<tr>
<td>Cornel et al., 2005 (USA)</td>
<td>Non reported</td>
<td>men (n=31)</td>
<td>Biofeedback + breathing exercises 1x/week for 3 weeks and 1x/week for 2-4 weeks</td>
<td>No</td>
<td>NIH-CPSI, Pelvic floor assessment</td>
<td>81% decrease of urinary symptoms; 87% decrease of pain symptoms; 74% increase of quality of life</td>
<td>16</td>
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<tr>
<td>Anderson et al., 2005 (USA)</td>
<td>Prospective study</td>
<td>men (n=138)</td>
<td>Trigger points myofascial therapy + relaxation technique 1x/week for 4 week and 1x/2 weeks (12 weeks)</td>
<td>Paradoxal Relaxation Therapy (PRT)</td>
<td>VAS, NIH-CPSI, PPSS GRA</td>
<td>72% of patients reported clinical improvement and 25% showed a decrease of urinary and pain scores</td>
<td>16</td>
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</tbody>
</table>

# Figure 1. PRISMA flow diagram of th sistematic literature search and selection