The Efficacy of Manual Therapy for Treatment of Dyspareunia in Females: A Systematic Review

Jennifer Trahan, SPT, BS; Erin Leger, SPT, BSE; Marlena Allen, SPT, BS; Rachel Koebele, SPT, BS; Mary Brian Yoffe, SPT, BS; Corey Simon, DPT, PhD; Meryl Alappattu, DPT, PhD; Carol Figuers, MS, PT, EdD

Background

- Dyspareunia is recurrent or persistent genital pain associated with sexual intercourse
- Approximately 20-50% of all women will experience dyspareunia at some point in their lives
- Dyspareunia may be associated with several different factors such as endometriosis, uterine retroversion, irritable bowel syndrome, anxiety, depression, or abuse
- Manual therapy (MT) involves skilled hands-on techniques used clinically to relieve musculoskeletal pain
- The systematic efficacy of MT for alleviating pain due to dyspareunia has not been researched in depth

Purpose

- The purpose of this review was to evaluate the efficacy of MT in treating dyspareunia in females

Methods

Study Design

- Systematic Review: Medline, Embase, CINAHL
- Inclusion Criteria: Females (ages 18-75) clinically diagnosed with dyspareunia; MT utilized as sole treatment intervention for dyspareunia
- Exclusion Criteria: Studies published in a language other than English, that utilized MT combined with any other type of physical therapy intervention, or included male, currently pregnant, and/or individuals currently diagnosed with cancer, a sexually transmitted disease, vulvovaginal infection, or a dermatologic condition

Four studies satisfied the inclusion criteria and were included in the review

<table>
<thead>
<tr>
<th>Study</th>
<th>Type of MT</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silva et al (2017)</td>
<td>Transvaginal massage using Thiele technique</td>
<td>5 min session; 1x/week; duration 4 weeks</td>
</tr>
<tr>
<td>Wurn BF et al (2011)</td>
<td>Wurn technique</td>
<td>20 hours total; varied frequency</td>
</tr>
<tr>
<td>Wurn LJ et al (2004)</td>
<td>Uterovesical and myofascial release</td>
<td>20 hours total; varied frequency</td>
</tr>
<tr>
<td>Zoorob et al (2014)</td>
<td>Levator massage, myofascial/trigger point release, intravaginal stretching and compression maneuvers</td>
<td>6-10 60 min sessions</td>
</tr>
</tbody>
</table>

Female Sexual Function Index Domain Scores

<table>
<thead>
<tr>
<th>Domain</th>
<th>Questions</th>
<th>Score Range</th>
<th>Factor</th>
<th>Min Score</th>
<th>Max Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire</td>
<td>1, 2</td>
<td>1-5</td>
<td>0.6</td>
<td>1.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Arousal</td>
<td>3, 4, 5, 6</td>
<td>0-5</td>
<td>0.3</td>
<td>0</td>
<td>6.0</td>
</tr>
<tr>
<td>Lubrication</td>
<td>7, 8, 9, 10</td>
<td>0-5</td>
<td>0.3</td>
<td>0</td>
<td>6.0</td>
</tr>
<tr>
<td>Orgasm</td>
<td>11, 12, 13</td>
<td>0-5</td>
<td>0.4</td>
<td>0</td>
<td>6.0</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>14, 15, 16</td>
<td>0 (or 1-5)</td>
<td>0.4</td>
<td>0</td>
<td>6.0</td>
</tr>
<tr>
<td>Pain</td>
<td>17, 18, 19</td>
<td>0-5</td>
<td>0.4</td>
<td>0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

- In all studies, there were statistically significant improvements in the pain domain score of the Female Sexual Function Index (FSFI)
- Total FSFI scores improved across all studies (p<.05), excluding the chronic pelvic pain group, a subset of one study
- In Zoorob et al, MT was compared to levator trigger point injections (LTPi). Improvement was faster in the LTPi group but overall FSFI scores were higher in the MT group

Quality Assessment

- The PEDro Scale and Modified Downs and Black Quality Assessment tools were used to assess risk of bias
- One study (Zoorob et al) was of good quality
- Two studies (Silva et al; Wurn BF et al) were of fair quality
- One study (Wurn LJ et al) was of poor quality

Results

Conclusions

- Despite statistically significant improvements across all studies, limited high quality evidence supports dyspareunia to be alleviated in females by the use of MT
- Heterogeneity of interventions makes comparison difficult
- Further randomized control trials with larger sample sizes and additional controls are necessary to verify findings

Clinical Relevance

- Clinicians should recognize that MT may be appropriate for patients with dyspareunia
- It is unclear which types of MT and treatment times are most effective
- Further research is necessary in order to establish clinical guidelines for the use of MT on females with dyspareunia

Acknowledgements / References

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