Systematic review on published studies on Matrabasti as an Ayurvedic intervention in Udavartini Yonivyapad (Primary Dysmenorrhea)

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ABSTRACT

Objectives: Udavartini Yonivyapad (Primary Dysmenorrhea) a prevalent condition characterized by severe menstrual pain, has been addressed through various treatment modalities. This review aims to provide an updated perspective on the use of Matrabasti as an Ayurvedic intervention for Primary Dysmenorrhea. Methods: This study systematically reviewed thirteen published research studies on Matrabasti as an intervention for Udavartini Yonivyapad (Primary Dysmenorrhea), following PRISMA guidelines. Searches were conducted on databases including Pubmed, Google Scholar, Cochrane library, DHARA, AYUSH Portal & Scopus, encompassing literature published in English language. A detailed analysis and exploration was made of the strengths, limitations, implications, and future research directions of the summarized studies. Results: These studies include 3 RCTs, 3 single group studies, and 7 single case studies with sample sizes varying from 50 to 10 participants. Treatment duration ranges from 7 to 9 days, starting mid-cycle or post-menstruation cessation, spanning 2 to 5 consecutive cycles. Some studies involve oral medication in conjunction with Matrabasti or alternative-day Ksheerabasti and Anuvasana/Sneha Basti. Assessment methods predominantly employ the visual analogue scale and multidimensional scoring. The review covered diverse formulations including Dashamoola Taila, Tila Taila, Phala Taila, Hingwadi Taila, Trivrutta Taila, Shatapushpa Taila, Sahacharadi Taila, Dhanwantaram Taila, Dashamoola Ksheerapaka and Mahanarayan Taila. Conclusion: Ayurvedic interventions, particularly Matrabasti formulations, present a diverse and promising avenue for managing Udavartini Yonivyapad (Primary Dysmenorrhea). The formulations, derived from classical Ayurvedic texts, showcase efficacy in balancing Vata Dosha, reducing pain severity and all associated symptoms, and improving overall well-being.

Key words: Primary Dysmenorrhea, Udavartini Yoni Vyapad, Kashtartava, Matrabasti

INTRODUCTION

The research articles summarized above offer valuable insights into the efficacy of Ayurvedic therapies in managing Udavartini Yonivyapad (Primary Dysmenorrhea) and highlight the potential of specific Ayurvedic interventions, such as Matrabasti therapies using varying herbal formulations, in providing relief from painful menstruation while considering the holistic principles of Ayurveda. However, it is important to note that these studies are limited in sample size and further research is needed to validate the findings and establish generalizability. Additional research should also explore the long-term effects beyond 3 to 5 months of follow up. By evaluating the outcomes of various treatment approaches and interventions, these studies contribute to the growing body of evidence supporting the use of Ayurveda in addressing menstrual disorders. The comprehensive examination of subjective and objective parameters, along with the statistical evaluation, enhances the understanding of the effectiveness of Ayurvedic management for
dysmenorrhea. In the subsequent sections, a detailed analysis and exploration of the strengths, limitations, implications, and future research directions of the summarized studies will be presented. This holistic perspective aims to provide a comprehensive understanding of the potential of Ayurvedic interventions in the management of Udavartini Yonivyapad (Primary Dysmenorrhea).

**MATERIALS AND METHODS**

**Study design**

A systemic review on clinical trials of Udavartini Yonivyapad (Primary Dysmenorrhea) published between January 2010 to December 2023 was conducted in January 2024, according to predefined guideline provided by PRISMA.

**Criteria for selection of studies**

All analysis was based on previous published studies. Randomized Controlled Trials, Single group and Case studies published on Udavartini Yonivyapad (Primary Dysmenorrhea) were included. Studies without relevant statistical analysis of results and without mention of p value for outcomes were excluded.

**Inclusion criteria**

1. Studies on Primary Dysmenorrhea/ Udavartini Yonivyapad / Kashtartava
2. Studies which primarily administered Matrabasti, or anal route of medication with or without oral route of medication

**Exclusion criteria**

1. Studies which had included different treatment modalities like Uttarabasti, Yoga Asana, and oral medication without any Basti Chikitsa were excluded.
2. Studies which had not stated statistical analysis of treatment outcome on subjective parameters
3. Also, which have not reported p values of results were not included.
4. Studies not published in open-access journals were excluded.

**Data extraction**

The literature search initially yielded 40 articles with relevant trials, which was compiled from search engines Pubmed, Google Scholar, Cochrane library, DHARA, Web of Sciences, Scopus. Out of these, 13 studies got included in this review. Keywords were Primary Dysmenorrhea, Udavartini Yonivyapad, Kashttrtava, Matrabasti. All the databases were searched by 1 independent investigator, which was last updated December 2023.

**RESULTS**

We summarised and tabulated all 14 studies with their sample size, materials and methods, criteria of assessment and results in Table 1:

<table>
<thead>
<tr>
<th>Study Name</th>
<th>Sample Size</th>
<th>Methodology</th>
<th>Measurement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>A comparative study of Dashamoola Taila Matrabasti and Tila Taila Matrabasti in Kashtartava (dysmenorrhea)⁴⁰</td>
<td>40 women diagnosed with primary dysmenorrhea</td>
<td>Age - 15–25 years Group A received Dashamoola Taila Matra Basti and group B received Tila Taila Matra Basti. 60 ml per day for 7 days each cycle for 2 cycles</td>
<td>VAS, Multidimensional scoring system</td>
<td>There was complete remission of symptoms in 38.89% in group A and in 35.39% in group B, while there was marked improvement in 50% in group A and 47.65% in group B</td>
</tr>
<tr>
<td>A clinical study to evaluate the efficacy of Phala Taila Matra Basti in Kashtartava w.s.r. To Primary Dysmenorrhoea ⁴¹</td>
<td>30 women diagnosed with primary</td>
<td>Age – 18-30 years Group A received Phala Taila Matrabasti and group B received Dashamoola Khseera</td>
<td>VAS, Multidimension</td>
<td>Each medicine was found to be effective within the group with a highly significant p value &lt;0.001 and mean difference. But</td>
</tr>
<tr>
<td>Study Title</td>
<td>Study Type</td>
<td>Intervention</td>
<td>Outcome Measures</td>
<td>Percentage of Improvement</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------------</td>
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<tr>
<td>Role of Dashmool Siddha Taila Matrabasti in the management of Kashtartava</td>
<td>Single case study</td>
<td>Dashmool Siddha Taila Matrabasti 60 ml per day for 7 days each cycle for 2 cycles</td>
<td>VAS</td>
<td>High in Group B.</td>
</tr>
<tr>
<td>Physiological study of primary dysmenorrhea (Kashtartava) and efficacy of Matrabasti on it: a case study</td>
<td>Single case study</td>
<td>Til Taila Matrabasti which contains: Til Taila (Koshna)(60 ml), Saindhav(1 gm). 9 days for 2 consecutive menstrual cycles.</td>
<td>VAS</td>
<td></td>
</tr>
<tr>
<td>Management-of-Kashtartava-through-Hingwadi-Taila-Matra-Basti-a- casestudy</td>
<td>Single case study</td>
<td>Hingwadi Taila M- 30 ml for 7 days was given along with oral medication for consecutive 3 cycles.</td>
<td>VAS</td>
<td></td>
</tr>
<tr>
<td>The clinical study of efficacy of Trivrutta Taila Matra Basti in Udavarta Yoniivyapad</td>
<td>50 women diagnosed with primary dysmenorrhea</td>
<td>Trivrutta Taila Matra Basti 60 ml per day for 7 days each cycle for 3 cycles</td>
<td>VAS, multidimensional scoring system</td>
<td></td>
</tr>
<tr>
<td>Clinical study on therapeutic effect of Dashamoola Ksheerapaka and Dhanvantari Taila Matra Basti in Udavartini yoniivyapad w.s.r to dysmenorrhea</td>
<td>10 women diagnosed with dysmenorrhea</td>
<td>Dhanvantara Taila Matra Vasti 60 ml for 7 days along with Dashamoola Ksheerapaka 50ml twice a day for 1 month orally after cessation of menstruation. Duration – for 5 months</td>
<td>VAS, multidimensional scoring</td>
<td>These drugs showed extremely significant improvement in Intensity &amp; duration of pain (65 % and 55 %). Nausea and anorexia also showed significant improvement. Not much change was noticed in breast tenderness, diarrhoea and on amount of blood loss.</td>
</tr>
<tr>
<td>Efficacy of Dashamoola Ksheera Niruha and Mahanarayana Taila Anuvasana Basti as Yoga Basti schedule in the management of Udavartini Yoniivyapat (Primary Dysmenorrhea)</td>
<td>30 women diagnosed with primary dysmenorrhea</td>
<td>Dashamoola Ksheera Basti and Mahanarayana Taila for 8 days for 2 consecutive cycles after cessation of each cycle</td>
<td>VAS</td>
<td></td>
</tr>
<tr>
<td>Efficacy and comparison of shatapushpataila Matrabasti with shatapushpachurna in Kashtartava (Dysmenorrhoea)</td>
<td>22 women diagnosed with primary dysmenorrhea</td>
<td>Shatapushpa Churna – 10 gm in three divided doses / day for 3 days. Group B treated by Satapushpa Taila Matrabasti - 30 ml once a day for 3 days before menstruation, for 3 consecutive cycles.</td>
<td>VAS</td>
<td></td>
</tr>
<tr>
<td>Role of Sahacharadi Taila Matrabasti in management of Udavartini Yoniivyapad w.s.r. To Primary Dysmenorrhea: A Case Study</td>
<td>Single case study</td>
<td>Matrabasti with 60 ml Sahacharadi Taila</td>
<td>VAS</td>
<td></td>
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</tbody>
</table>
Role of Dashmool Tail Matra Basti In The Management of Udavartini Yonivyapad W.S.R. To Dysmenorrhea - A Case Study[14]

<table>
<thead>
<tr>
<th>Role of Dashmool Tail Matra Basti In The Management of Udavartini Yonivyapad W.S.R. To Dysmenorrhea - A Case Study[14]</th>
<th>Single case study</th>
<th>Dashmool Tail Matra Basti 60 ml per day. Duration of the treatment was 7 days in each cycle for two consecutive cycles.</th>
<th>VAS</th>
<th>The study shows that Dashmool Tail Matra Basti is effective in relieving the symptoms of Udavartini Yonivyapad (Dysmenorrhea).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of Dashmool Tail Anuvason Basti on Udavarta Yonivyapat w.s.r. to dysmenorrhea - a case study[15]</td>
<td>Single case study</td>
<td>Dashmool Tail Basti 60 ml per day 8 days / Prior menses for 3 months</td>
<td>VAS</td>
<td>The study shows that Dashmool Tail Basti is effective in relieving the symptoms of Udavartini Yonivyapad (Dysmenorrhea).</td>
</tr>
</tbody>
</table>

**DISCUSSION**

**Udavartini Yonivyapad** (Primary Dysmenorrhea) is mainly characterised by pain during menstruation.[16] The Samprapti mainly involves *Pratiloma Gati* of Vata and *Kruchra Vimochana* of Rajah.[17] The selected studies encompassed a range of formulations mainly acting as vata anulomana and *shoola prashamana* including *Dashamoola Taila, Tila Taila, Phala Taila, Dashamoola Ksheerapaka, Hingwadi Taila, Trivrutta Taila, Shatapushpa Taila, Sahacharadi Taila, Dhanwantaram Taila and Mahanarayana Taila.* These formulations were administered in the form of *Matrabasti* to assess their efficacy in managing *Udavartini Yonivyapad* (Primary Dysmenorrhea).

**Strengths of the Studies**

The strengths of the studies are the inclusion of subjective and objective parameters to evaluate treatment outcomes, the use of statistical analysis to assess effectiveness, and consideration of the basic treatment principles of *Ayurveda* in the design and implementation of the interventions. The studies also provide detailed descriptions of the *Ayurvedic* interventions used, allowing for replication and implementation in clinical practice of the interventions. The inclusion of statistical analyses with mean values, standard deviations, t-values, and significance levels for various parameters enhances the rigor and reliability of the findings. The transparency and clarity in describing the probable mode of action and treatment rationale also contribute to the credibility and applicability of the findings in the context of *Ayurvedic* medicine.

**Limitations of the Studies**

While the studies present compelling evidence supporting the efficacy of *Matrabasti*, it is essential to acknowledge their limitations. One notable limitation is the relatively small sample size, which may impact the generalizability of the findings. A larger and more diverse sample would enhance the external validity of the results, providing a broader scope of the effectiveness of the interventions across different populations. Additionally, the absence of specific limitations mentioned within the studies themselves is a potential limitation. Including a transparent discussion of the study's constraints and potential sources of bias would further strengthen the credibility and transparency of the research. Furthermore, the duration of follow-up in the studies may be considered a limitation, as it affects the assessment of long-term effects and sustainability of the treatment outcomes. Extended follow-up periods would offer insights into the prolonged effectiveness and potential relapse of symptoms.

**CONCLUSION**

In conclusion, the research articles provide valuable evidence supporting the efficacy of *Ayurvedic* interventions, specifically *Matrabasti* therapy in managing Primary dysmenorrhea. The studies demonstrated significant relief in the severity of pain, with one intervention showing better overall
treatment effects compared to the other. The holistic approach of Ayurveda, addressing the root cause of the condition and emphasizing individualized treatment, was evident in the discussions of all the studies.

While the findings are promising, it is crucial to address the limitations, such as the need for further research with larger sample sizes to validate the effectiveness and generalizability of these interventions. Additionally, the long-term effects and potential side effects of Ayurvedic treatments should be explored in future studies.

REFERENCES


How to cite this article: Srushti Susarla, Anupama V. Systematic review on published studies on Matrabasti as an Ayurvedic intervention in Udavartini Yonivyapad (Primary Dysmenorrhea). J Ayurveda Integr Med Sci 2024;2:129-133. http://dx.doi.org/10.21760/jaims.9.2.20

Source of Support: Nil, Conflict of Interest: None declared.