Therapeutic study of palash beej (seed of butea monosperma) in the management of krimi w.r.t intestinal worm.

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ABSTRACT
Palash is Buteamonosperma Lam. Kuntze. It is a medium sized deciduous tree which is widely distributed throughout the greater part of India. Palash belongs to family Fabaceae and is popularly known as ‘flame of the forest’ being used in traditional medicines. It has been found to have antimicrobial, wound healing, antifungal, anti diarrheal, hypoglycemic, It contains butrin, isobutrin, butin, palasitrin, and butein. The widespread uses of Palash in traditional system of medicine have resulted in their extensive chemical analysis for their bioactive principles. This article briefly reviews the pharmacology of Palash and its effect on krimi.

Keywords: Ayurveda, Palash, Buteamonosperma, Fabaceae,

INTRODUCTION
Palash (Buteamonosperma Lam. Kuntze) is a commonly used herb in Ayurvedic medicine.

Scientific Classification [4]
Kingdom: Plantae
Division: Magnoliophyta (Spermatophyta)
Class: Magnoliopsida (Dicotyledons)
Order: Fabales (Rosales)
Family: Fabaceae
Genus: Butea
Species: monosperma.

Vernacular names [5]
Material and methods

A. For literary review
Literary review of *Palash Seed* has explored from classical texts viz. *Carakaa Samhita*, *Sushruta Samhita*, *Ashtanga Sangraha*, *Ashtanga Hridaya*, *Chikitsa granthas* and *Nighantus* viz. *Raja nighantu*, *Dhanvantari nighantu*, *Bhaishajya Ratnavali* and articles published in various journals.

B. For phytochemical study:
*Palash* seed were collected by rural area of Patna identified by the teacher of Dravyaguna department in Faculty of *Ayurveda* in Patna. Macroscopic and microscopic evaluation was carried out with different parts of plant. They were pulverized in the mechanical grinder to a moderate fine powder to carry out microscopic studies and were stored in a well-closed airtight vessel for further analysis.

C. For clinical study

Dose, Duration of Treatment and Follow up

The research study entitled “An open labeled randomized study to assess the efficacy and safety of Palash beej churna was an observational clinical trial done.

Research Design

The study was a single open prospective randomized clinical trial conducted over a period of one week (follow up for 1 months) to evaluate symptomatic and subjective improvement in patients of Krimiroga.

Inclusion Criteria

- Either sex ageing between 5-14 years
- Patients having classical symptoms of *Krimi roga* and
presence of Ova/cyst/worms in stool examination

Exclusion Criteria

1. Patients having severe illness or complication
2. Patients requiring immediate medical intervention
3. Participating in any other clinical trials.

Study Population
Total 20 patients of either sex with confirmed Krimiroga as per the sign and symptoms were enrolled in the study.

Criteria for Selection of Drug
Palashbeej churna presented in the powder form for oral administration.

Dose of Drug – 3-2-5gm BD with plain water.

Diagnostic Criteria
An elaborate case paper incorporating the points of historytaking, previous medication, past illness and physical examination was prepared. It mainly emphasized on signs and symptoms of Krimiroga. Routine laboratory investigation like CBC and Stool examination (Ova/cyst) was made to rule out the conditions.

Criteria for Assessment
The assessment was made before and after the treatment on scoring of signs and symptoms of Krimiroga. Scoring pattern was developed according to severity of symptoms. Results were analyzed statistically as per the assessment chart.

Subjective Parameters
Symptoms were evaluated on the basis of 0=Normal, 1-Mild,2-Moderate and 3-Severe.
   • Fever
   • Paleness of complexion
   • Anal Itching
   • Abdominal pain
   • Lassitude
   • Anorexia
   • Nausea
   • Vomiting
   • Loose stool

Objective Parameters
   • Evaluation of Stool examination – Presence of Ova and cyst in microscopic examination was evaluated as: Absent – 0, Present – 1.

Assessment of total effect: The total effect of therapy was assessed as follows:

Assessment Score
   • Complete cure 100%
   • Marked Relief > 75 to 99%
   • Moderate Response > 50 to 75%
   • Mild Improvement > 25 to 50%
   • No response 0 to 25%

Observation
The effect of Palash beej churna was studied in 20 patients suffering from Krimiroga, fulfilling the inclusion criteria.

   • Effect of Therapy:
   The effect of therapy on all subjective and objected parameters has been documented in tables. The effect of test drug on all cardinal symptoms is showing a highly significant result in anal itching, abdominal pain, lassitude, anorexia and loose stool after completion of one week treatment. Stool examination for ova and cyst showed a highly significant result.

   • Overall Effect of Therapy
   The overall assessment considering all the parameters outlined in the assessment criteria, the final result shows that 65% of patients had marked relief and 15% each had moderate and mild
improvement. 5% patient (one patient) was completely cured after treatment.

**Table 1. Effect of palashbeejchurna on selected 20 patient**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>BT</th>
<th>AT</th>
<th>Differtial Mean</th>
<th>% Relief</th>
<th>SD</th>
<th>SE</th>
<th>T value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>.700</td>
<td>.300</td>
<td>.400</td>
<td>57.14</td>
<td>.521</td>
<td>.11</td>
<td>1.925</td>
<td>p&gt;.01</td>
</tr>
<tr>
<td>Paleness</td>
<td>1.100</td>
<td>.450</td>
<td>.650</td>
<td>59.09</td>
<td>.420</td>
<td>.10</td>
<td>3.299</td>
<td>P&lt;.01</td>
</tr>
<tr>
<td>Anal itching</td>
<td>2.250</td>
<td>.700</td>
<td>1.350</td>
<td>68.88</td>
<td>.623</td>
<td>.13</td>
<td>7.566</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>1.800</td>
<td>.650</td>
<td>1.250</td>
<td>63.88</td>
<td>.312</td>
<td>.08</td>
<td>6.046</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Lassitude</td>
<td>1.600</td>
<td>.550</td>
<td>1.050</td>
<td>65.63</td>
<td>.301</td>
<td>.08</td>
<td>5.971</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Anorexia</td>
<td>1.400</td>
<td>.550</td>
<td>.850</td>
<td>60.71</td>
<td>.351</td>
<td>.112</td>
<td>4.834</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Nausea</td>
<td>1.000</td>
<td>.550</td>
<td>.400</td>
<td>40.00</td>
<td>.501</td>
<td>.092</td>
<td>2.179</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Vomiting</td>
<td>.570</td>
<td>.350</td>
<td>.200</td>
<td>40.36</td>
<td>.402</td>
<td>.114</td>
<td>1.265</td>
<td>p&gt;.01</td>
</tr>
<tr>
<td>Loose stool</td>
<td>.750</td>
<td>.400</td>
<td>.500</td>
<td>73.33</td>
<td>.501</td>
<td>.112</td>
<td>3.584</td>
<td>P&gt;.01</td>
</tr>
</tbody>
</table>

**Table 2. Overall effect of Palash Beejchurna in 20 patients of Krimiroga**

<table>
<thead>
<tr>
<th>Result</th>
<th>Number of Patient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mild improvement</td>
<td>04</td>
<td>15</td>
</tr>
<tr>
<td>Marked relief</td>
<td>12</td>
<td>65</td>
</tr>
<tr>
<td>Moderate response</td>
<td>03</td>
<td>15</td>
</tr>
<tr>
<td>Complete cure</td>
<td>01</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**DISCUSSION:**

This study was conducted as ‘An open labeled, randomized prospective study to assess the efficacy and safety of Palash Beej churna.’ The results of this study demonstrate that most of the patients got marked relief after completion of treatment.

The anthelminthic activity of alcohol and ethyl acetate extracts of Palash (Buteamonosperma) were noticed against earthworms (Pheretimaposthum), roundworms (Ascardiagalli) and tapeworms (Raillietinaspiralis).[10]

The safety and tolerability of study medications was assessed based on adverse events reported by patients or observed by the investigator during evaluation. No clinically significant adverse effect neither reported by the patients nor observed by the researcher during the study.

**CONCLUSION:**

*Palash Beejchurna* provided better result in all the cardinal symptoms of the disease and on the stool examination. The present study has shown positive
results on Krimi roga through Palash Beej churna preparations. These drugs were very much effective in clearing the intestinal parasites.

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REFERENCES:

9. Agnivesha, Charaka, Dridhabala, CharakaSamhita, Edited by Yadavaji Trikamaji, Fifth Edition,

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