Abstract

Purpose: The purpose of this study was to evaluate the effect of Malatyadi Tailam and Til Tailam in the treatment of Khalitya. The other objectives were to study the overall benefits of Malatyati Tailam in hair fall, scalp itching, boils, dryness of hair, fine flakes, dandruff, and hair texture.

Methodology: Forty patients aged between 18 to 40 years fulfilling the clinical criteria for the diagnosis of Khalitya were selected randomly from O. P. D. and I.P.D section of P.P.J.G.M. Ayurved Hospital Boradi Dist. Dhule. The independent and dependent variables causing Khalitya were identified. The structured questionnaires were given to patients at day 1, 15 and at one month to know the effect of Malatyadi Tailam for the sign and symptoms of hair fall, scalp itching, boils, dryness of hair, fine flakes, dandruff, and hair texture. Follow-up visit was performed at day 45.

Results: Four patients from the Malatyadi Tailam group had complete relief in sign and symptoms; however no patients from the Til Tailam group had complete relief after one month of treatment. No recurrence of signs and symptoms were observed in Malatyadi Tailam group whereas from the Til Tailam group of 20 patients itching and fine flakes noted as recurrent sign and symptoms in nine patients. Thirteen patients from the Malatyadi group have at least one score improvement compared to baseline, however only seven patients have at least one score improvement from the Til Tailam group. Three patients had no signs of improvement after treatment with Malatyadi Tailam. Overall, the effect of Malatyadi Tailam was significant compared to Til Tailam in patients with Khalitya and use of Malatyadi Tailam was safe and well tolerated.

Keywords

Khalitya, Malatyadi tailam, Keshpatan
INTRODUCTION
The world is changing swiftly and there is no doubt that the world of today is full of glamour and fame. The concept of beauty is gaining more and more attention and people are now more conscious about their appearance. Hair plays an important part in the personality or the appearance of the people. Today’s changed lifestyle and in different dietary habits have made loss of the hair of the people a growing problem. Also, there are numbers of factors such as environmental conditions, pollution, and use of wrong hair care products, frequent hair styling treatments, disruption of hair growth cycle and under nourishment may contribute to hair and scalp related ailments. Especially when the hair fall starts at younger age it is unacceptable and acts as a depressant for the youngsters. Therefore, to keep healthy hair in the pink state is a necessity just like facial care.

Even thousand years ago in Ayurvedic literature numerous types of daily regimens for hair care is described in the chapter of Dinacharya and Ritucharya\(^1\). While in 21\(^{st}\) century with modern lifestyle, people are not thinking for healthy life or following the proper Dinacharya and Ritucharya. Early hair fall attributed to be result of varied factors like hormonal imbalance, faulty hair care, etc. Ayurveda teaches that beauty, health and a happy long life are achievable only by understanding how all aspects of life contributes to bring balance to the body and mind. In Ayurvedic approach, falling of hair is coined out as in term of ‘Khalitya’ under the broad heading of Shiroroga\(^1\). Importance of Shiro-abhyanga is well accepted in the treatment of khalitya. Khalitya is a disease with Vata-pitta dominancy. Increased Pitta dosha along with Vatadosha at the root of hair follicle causes hair fall and at the same time Kaphadosha with Raktdosha blocks the roots of hair follicle which results into Khalitya\(^2\).

METHODOLOGY
This was a non-interventional observational study to assess the effect of Malatyadi Tailam and Til Tailam in patients with Khalitya. Forty patients aged between 18 to 40 years fulfilling the clinical criteria for the diagnosis of Khalitya (history of acute hairfall (<6 months), boils, itching, dryness, dandruff and loss of texture) were enrolled in the study. Patients who were not willing to come for follow up were excluded from the study. Patients who have been diagnosed to have local diseases like alopecia areata, alopecia totalis, tineacapitis, folliculitis devaculans and other systemic diseases were excluded from the study. In Ayurvedic terms, patients of Arunshika, Indralupta and who were on treatment of Shirobhyanga were excluded. The patients were diagnosed for Khalitya on the basis of Lakhsana Samuchaya of the Vyadhi laid down in the different classical literature of Ayurveda\(^4\). The patients with diagnosis of diagnosis of Khalitya were selected randomly from O.P.D. and I.P.D section of P.P.J.G.M.
Ayurved Hospital Boradi Dist. Dhule. The total duration of study was 45 days including the screening of patients. There was no hospitalization planned for the study. Since the taila was local application, this was a non-interventional study. The patients were advised not to apply any other medication during the treatment cycle. The patients were randomly allocated in 1:1 ratio in one of the treatment groups either *Malatyadi Tailam* or *Til Tailam*. Patients were asked to perform gentle massage of Malatyadi or Til Tailam locally daily for 30 days.

The structure questionnaires were prepared on Ayurvedic concepts including the Asthvidha, DashvidhaPariksha and diet plan to assess study objectives. A detailed clinical history was noted and the complete physical examination was done. All the patients were examined every 15 days during the treatment and follow up was performed at day 45. A criterion of assessment was kept on the basis of relief (Complete relief – No sign and symptoms, Partial relief with at least 1 score improvement) in the signs and symptoms of the disease Khalitya. For this purpose, signs and symptoms (acute hair fall, boils, itching, dryness, dandruff and loss of texture) were given scores according to their severity before and after treatment.

**DISCUSSION**

A total of 40 patients with Khalitya were enrolled in this study. From these, 20 patients each were included from *Malatyadi Tailam* group and *Til Tailam* group, respectively. The patient’s demography details, medical history, family history, physical examination, Asthvidha and DashvidhaPariksha, diet plan, diagnosis, clinical examination of khalitya sign and symptoms were collected through structured questionnaires at day 15 and one month. Follow-up visit was performed to see any side effect of the treatment medication. Of the 40 patients, 2 patients were lost to follow-up.

**Figure 1** Number of Patients with Treatment Response to Malatyadi Tailam and Til Tailam
After one month of treatment, four patients from Malatyadi Tailam group had complete relief in signs and symptoms of Khalitya; however no patients had complete relief from Til Tailam group (Figure 1). In Malatyadi Tailam group, no recurrence of signs and symptoms were observed compared to Til Tailam with itching and fine flakes noted as recurrent sign and symptoms in nine patients. Thirteen patients in Malatyadi group had at least one score improvement compared to baseline and seven patients from Til Tailam group had at least 1 score improvement. Three patients have no signs of improvement after treatment with Malatyadi Tailam. No patient had experienced any side effects after local application of Malatyadi Tailam. The response to Malatyadi Tailam treatment was significant ($p<0.0001$) and detail statistics is presented in below Table 1.

Table 1 Summary Statistics for Patients Response to Malatyadi and Til Tailam Treatment

<table>
<thead>
<tr>
<th>Paired T Test Statistics</th>
<th>Malatyadi Tailam</th>
<th>Til Tailam</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Mean</td>
<td>1.5132</td>
<td>0.3816</td>
</tr>
<tr>
<td>StdDev</td>
<td>0.4288</td>
<td>0.2103</td>
</tr>
<tr>
<td>StdErr</td>
<td>0.0984</td>
<td>0.0482</td>
</tr>
<tr>
<td>95% CI</td>
<td>1.3065 (1.0 - 2.5)</td>
<td>0.2802 (0 – 0.75)</td>
</tr>
<tr>
<td>t Value</td>
<td>15.38</td>
<td>7.91</td>
</tr>
<tr>
<td>P value</td>
<td>&lt; 0.0001</td>
<td></td>
</tr>
</tbody>
</table>

CONCLUSION

Overall, the treatment with Malatyadi Tailam has shown better response in patients with Khalitya and use of tail was safe and well tolerated. To maintain health the causative factors should be mined and due attention should be paid for the care of hair. Further detail study is required to explore the various independent variables and effect of other surrounding factors on Khalitya.
REFERENCES


