ABSTRACT
In modern era early hair fall has been caused because of various factors like busy schedule (improper Dinacharya and Ritucharya), pollution, unhealthy diet, hormonal imbalance, stress, faulty hair care, infectious diseases, nervous disorders, toxic substances, injury, and severe radiation. Ayurveda Science has also mentioned the hair loss under the heading of Khalitya. According to Ayurveda texts, all the Ahar and Vihar (diet and lifestyle) which is going to aggravate the Vata and Pitta (primary) becomes the nidan of Khalitya. Acharya Charaka mentioned that Tejas by involving Vatadi Dosha when scorches up the scalp, it results in Khalitya. According to Chakrapani word Tejas here denotes Dehoshma as well as Pitta Dosha. As per other Ayurveda texts, the basic principles of pathogenesis of Khalitya include dushti of elevated Pitta along vata dosha and rakta kapha dushti. The medical term for baldness is alopecia; any type of hair fall is called alopecia. The main victims who are facing the Khalitya (hair-fall) are youngsters. As per quotation in Charak Samhita, the poison which by nature is destructive of life, if taken in the proper manner, acts as an elixir. So the aim of this study is to elaborate & explore the effect of some Visha and Upvisha dravya like Vatsnabh, Langli, Gunja, Snuhi, Arka, Dhatura and Chitrak etc in the treatment of Khalitya. These drugs and its formulation are indicated in Khalitya as local application on scalp. These contents have Laghu, Rukhsha, Tiknsa, Katu, Ushna, Kushthaghna and Krimighana properties can help the breakdown of the pathogenesis of Khalitya. Several types of oils and Lepa of vish and upvisha for Abhyang (Massage) greatly improve the blood circulation, thus increasing the nutrition of the hair roots & scalp. Thus the Vish or Upvisha or its formulation is one of the best choices in Ayurveda to prevent and cure Khalitya.

KEYWORDS
Khalitya, Visha-Upvisha and its formulations etc
INTRODUCTION

Hair-fall is a universal problem, having affected both sexes of all races. Hair plays an important role in making body externally beautiful. Healthy and good looking long hair makes a person mentally enthusiastic and healthy. The estimated prevalence of alopecia areata is approximately 1 in 1000 people, with a lifetime risk of approximately 2%. For most patients the onset is before the age of 30; however, the disorder may occur at any age. Men and women are equally affected. The magnification of industrialization and urbanization has posed the greater danger due to pollution, contamination of water, air and due to other intrinsic factors. These along with indiscriminate dietary habits like excessive intake of salts, sweets, alkalis, starchy, fried foods, spicy irritant foods such as chilly, mustard, garlic etc. along with alcoholic drinks leads to hair fall. In Ayurvedic medical science, gradual falling of hair is termed as Khalitya. Multifarious types of oils (chemical oils), shampoos, soaps and pharmaceutical propaganda for promoting hair growth actually make the condition worse. In the present era, there is a no satisfactory answer to this problem. The main aim of this article is to explore the clinical efficacy of various Visha-Upvisha and its formulations describe in Ayurveda text to cure the Khalitya. As the drug is mentioned in Visha-Upavisha Varga and has toxic a profile, so Maharishis have advocated Sodhansanskara (purification) before its therapeutic application which reduces the toxicity of these plants and also enhance the potency and efficacy of the drugs, so that it can be used safely.

AIMS AND OBJECTIVES

1. To re-evaluate the Khalitya in various classical Ayurvedic literature.
2. To elaborate and discuss the role of Visha-Upvisha and its formulations in Khalitya.

MATERIALS AND METHODS

This article is based on a review of Ayurvedic texts and research papers. Materials related to Khalitya have been collected. Ayurvedic texts mainly used in this study are Brihatriyi, Laghutriyi and other Ayurvedic books. We have also referred journals and search various websites to collect information on the relevant topics.

CONCEPTUAL STUDY

DEFINITION

In Charak Samhita, the disease Khalitya also has been included in Urdhvajatrugat Roga. Acharya Vagbhata has also
described Khalitya in Shirogata rogas under the caption of Urdhavajatrugata Rogas. In Sushruta Samhita, Acharya Sushruta elucidates Khalitya as a synonym of Kshudra Roga along with its pathogenesis in the Nidanasthana.

Acharya Charaka mentions that Tejas by involving Vatadi Dosha when scorches up the scalp, results in Khalitya. According to Chakrapani word Tejas here denotes Deha Ushma as well as Pitta Dosha.

In Sushruta Samhita, this disease is described as “Khalitya” or “Indralupta” or “Ruiya”. According to Acharya Sushruta, Pitta along with Vata by involving the roots of hair (rom-koopa) causes fall of hairs and thereafter Shleshma along with Rakta obstructs the channel of the rom-koopa leading to the stoppage of regeneration of the hair.

Acharya Vagbhatta differentiated Indralupta and Khalitya by saying that in Khalitya, loss of hair occurs gradually that in Indralupta, pathology is common in both.

**NIDANA (Causative Factors)**

The first and foremost line of treatment in almost all diseases is Nidana Parivarjana. Hence, Nidana plays a role of utmost importance in the perspective of the treatment. Each and every disease is having its own nidana. Etiology of Khalitya is mentioned in different diseases and an indirect way at various places. The specific etiological factors mentioned in various places by Acharyas is described are as follows in table 1.

<table>
<thead>
<tr>
<th>The specific etiological factors of Khalitya mentioned in Ayurveda</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lavanrasaatisevan(^{11})</td>
</tr>
<tr>
<td>2. Ksharaatisevan(^{13})</td>
</tr>
<tr>
<td>3. Pitta dosha dominance(^{15})</td>
</tr>
</tbody>
</table>

**1. LAVANRASA ATISEVAN:**

Too much use of Lavan Rasa results in Kaphavriddhi. It leads to Agnimandya and obstruction of Srotas. This in turn leads to Pittavridhi. Thus due to Kaphapitta vridhi, there is obstruction of Romakupas due to which proper Keshotpatti does not take place and due to obstruction of Srotasa, these are malnutrition of Kesh, resulting in Khalitya.

**2. KSHARA SEVAN:**

Excessive use of Kshara leads to Pitta prakopa due to its Usna and Tikshna Guna. The Sthansamshraya of this Pitta takes place in the scalp i.e. Shirogata Keshabhoomi. This leads to obstruction of Srotasa thus resulting in Prakopa of Vata, Pitta and Kapha resulting in Khaliya.

**3. PITTA DOSHA DOMINANCE:**
As per Acharyas Charaka and Acharya Sushruta, Pitta dosha is responsible for Khaliya. Acharyas have described common and specific etiological factors for Khaliya. A comparative study of these factors reveals that importance is given to Acharanas and psychological factors along with the Ahara and Viharaja nidana.

4. **USHAR BHOOMI:**

Food and water found in this type of soil contain large amounts of Lavana and Kshara. Hence, people staying in this region are more prone to Khaliya.

5. **DUSTA-PRATISYAYA**

(PERNICIOUS RHINITIS):

If all Pratisyaya get excessively aggravated due to the negligence of appropriate treatment or due to the intake of unwholesome food, then this leads to Dusta-Pratisyaya. As a result of this, the disease of the head like Khaliya is caused.

6. **Taking of excess Lavan during pregnancy**

As per Acharya Vagbhatta, taking of excess Lavan rasa during pregnancy would be result in congenital hair loss (Khaliya).

**PURVARUPA**

Clinically, this is important for early diagnosis, treatment and prognosis. No specific Purvarupa has been mentioned for Khaliya in the classical texts, but we can interpret the Purva Rupa of Khaliya the initial occurrence of hair fall where the hair fall just started and the number of hair fall is moderate.

**RUPA**

The features / Rupa will indicate the manifestation of the disease. These are the signs and symptoms of the disease. Rupa (sign & symptoms) of Khaliya is concerned very little explanation is found in Ayurveda classics. Thus the cardinal symptom of Khaliya is a gradual loss of hair. Ashtang Samgrahakara has classified Khaliya in four types & its symptoms which are as follow in table 2:

<table>
<thead>
<tr>
<th>Types of Khaliya</th>
<th>Rupa (sign &amp; symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vataja Khaliya</td>
<td>Keshbhoomi seems as Agnidagdha.</td>
</tr>
<tr>
<td>2. Pittaja Khaliya</td>
<td>The scalp seems as surrounded by the Siras (veins). Sweat may be found all over the scalp.</td>
</tr>
<tr>
<td>3. Kaphaja Khaliya</td>
<td>The color of the scalp is more or less same as the color of skin but here it appears as Ghana and Snigdha.</td>
</tr>
<tr>
<td>4. Tridoshaja Khaliya</td>
<td>Features of all the three Doshas are observed. The scalp appears as burnt and it seems nail like appearance.</td>
</tr>
</tbody>
</table>

Acharya Harita has mentioned this disease by the name of Keshaghna and denoted one additional type of Khaliya that is Raktaj Khaliya. According to Acharya Harita the signs and symptoms of Khaliya described as follows in table 3

<table>
<thead>
<tr>
<th>Types of Khaliya</th>
<th>Rupa (sign &amp; symptoms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vataja Khaliya</td>
<td>Ruksha and Pandura scalp</td>
</tr>
<tr>
<td>2. Pittaja Khaliya</td>
<td>Red and burnt scalp</td>
</tr>
<tr>
<td>3. Kaphaja Khaliya</td>
<td>Snigdha scalp</td>
</tr>
<tr>
<td>4. Raktaj Khaliya</td>
<td>Sappaka (Pus)</td>
</tr>
<tr>
<td>5. Sannipatija Khaliya</td>
<td>All characters of 3 dosha</td>
</tr>
</tbody>
</table>
**SAMPRAPTI**

The whole process initiating from intake of Nidana to the complete manifestation of the disease is known as Samprapti. Samprapti can be defined as, the continuous changes accompanying a disease process in the body from dosha dushti till the manifestation of lakshanas. The description of Samprapti of Khalita according to the various texts of Ayurveda may be summarized as under:

*Acharya Charaka* stated that Tejas combining with Vatadi doshas reaches the Shira Kapala and burns out the hair follicle and produces Khalita in a person\(^{20}\). Thus, *Acharya Charaka* has evolved the involvement of all the two Doshas viz. Vata, Pitta in the occurrence of Khalita. Kapha Dosha is not considered in this Samprapti.

*Acharya Sushruta* says that “The Pitta, vitiated by its own factors penetrates into the Romakoopa and there it unites with the Vata to shatter the hair”. Then the Shleshma along with the Shonita obstructs the Romakoopa which leads to the stoppage of regeneration of hair\(^{21}\). Thus, *Acharya Sushruta* has considered the involvement of all the three Doshas viz. Vata, Pitta and Kapha along with Shonita in the occurrence of Khalita.

**FLOW CHART OF SAMPRAPTI OF KHALITYA:**

\[
\begin{align*}
\text{Nidana Sevana} \\
(Ruksha, Lavana, Kshar, Ushna, Tikshna Ahara sevsan and Manastapa etc.)
\end{align*}
\]

\[
\begin{align*}
&\text{Agni Dushti} \\
&\text{Tridosha prakopa with rakta dushti} \\
&\quad \text{Pitta Prakopa} \quad \text{Vata Prakopa} \quad \text{Kapha Prakopa}
\end{align*}
\]

\[
\begin{align*}
&\text{Rakta-Rasa Dushti and Pittoshma} \\
&\quad \text{Asthikshaya and} \\
&\quad \text{Lomakupa Paka} \\
&\quad \text{KESHTOPATTI AVARODHA}
\end{align*}
\]

\[
\begin{align*}
&\text{Siramukha Avarodha} \\
&\quad \text{KESHTOPATTI AVARODHA}
\end{align*}
\]
SAMPRAPTI GHATAKA:

1. **Dosha:**
   - Pitta: Pachaka, Bhrajaka
   - Vata: Saman, Vyan
   - Kapha: Tarpaka

2. **Dushya:**
   - Dhatu: Asthi, Rasa, Rakta
   - Mala: Sweda, Kesh

3. **Srotasa:**
   - Asthivaha, Rasavaha, Raktavaha, Swedavaha, Manovaha.

4. **Srotodusti:** Sanga

### MANAGEMENT

There are many **Visha-Upvisha dravya** and its formulations to treat **Khalitya** describes in **Ayurveda** texts which are as follow in table 4 and 5:

**Table 4** Classical oil formulations of Visha-Upvisha for external application in Khalitya:

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Name of Visha &amp; Upvisha</th>
<th>Type of Poisons</th>
<th>Classical oil formulations for external application</th>
</tr>
</thead>
</table>
| 1.      | Vatsnabh                | Visha           | Snuhayadi Tailam"
| 2.      | Langli                  | Upvisha         | Snuhayadi Tailam, Bhringraj Tailam" |
| 3.      | Gunja                   | Upvisha         | Gunjadi Tailam", Snuhayadi Tailam, Bhringraj Tailam" |
| 4.      | Snuhi                   | Upvisha         | Snuhayadi Tailam |
| 5.      | Arka                    | Upvisha         | Snuhayadi Tailam |
| 7.      | Bhallataka              | Upvisha         | Bhallatakadi Tailam" |
| 8.      | Chitraka                | Sthavar Visha   | Maltiyadi Tailam, Kutannatadi Tailam, Jatyadi Tailam, Chitrakadhyia Tailam, Karanjadi Tailam |

**Table 5** Classical Lepa formulations of Visha-Upvisha for external application in Khalitya:

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Name of Visha &amp; Upvisha</th>
<th>Types of Poisons</th>
<th>Classical Lepa formulations for external application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Vatsnabh</td>
<td>Visha</td>
<td>Gunjadi Lepa&quot;</td>
</tr>
<tr>
<td>2.</td>
<td>Langli</td>
<td>Upvisha</td>
<td>Langali mula Lepa&quot;</td>
</tr>
<tr>
<td>4.</td>
<td>Dhatura</td>
<td>Upvisha</td>
<td>Dhaturadi Lepa&quot;, Dhaturapatra Rasa Lepa&quot;</td>
</tr>
<tr>
<td>5.</td>
<td>Bhallataka</td>
<td>Upvisha</td>
<td>Bhallatakadi Lepa&quot;, Tiladi Lepa&quot;</td>
</tr>
<tr>
<td>6.</td>
<td>Arka</td>
<td>Upvisha</td>
<td>Tiladi Lepa</td>
</tr>
<tr>
<td>7.</td>
<td>Arsenic</td>
<td>Sthavar Dhatu Visha</td>
<td>Marichyadi Lepa&quot;</td>
</tr>
<tr>
<td>8.</td>
<td>Snake Poison</td>
<td>Jangam Visha</td>
<td>Sarpa Kshara Lepa&quot;</td>
</tr>
</tbody>
</table>

**DISCUSSION**

There are so many other factors **Matra, Kala, Kriya, Bhumi, Deha, Dosha**, **Gunantra** which can modify the effect of poison. But doses, combination and **Yuktiyuktatva** are key factors which may
modify the effect of Visha equal to Amrita and the effect of Bhesaj may term equal to Teeksha Visha, therefore the combination of various Dravya and Yukti becomes most important as stated by Agnivesh. So, poisonous drugs prove more efficacious than normal prescription drugs due to their inherent properties.

Khalitya is a disease of Pitta dosha involving with Vata thereafter Shleshma along with Shonita obstructs the channel of the Rom-koopa leading to the stoppage of regeneration of the hair. Thus this stage needs Uddipan and Lekhana karma to combat the local action of Kaphadosha. According to the modern concept of regeneration and growth of hair with reference to this disease, one of the modes of local treatment suggests the need of activation of the hair follicles through prompting of mild irritant drugs. Vatsnabh, Langli, Gunja, Snuhi, Arka, Dhatura, Karveer, Bhallataka and Chitrak etc is a local irritant. As irritants, accelerate the intracellular activities that might have relation with stimulation of regrowth of hair. Due to their Ruksha, Tikshana, Laghu, Ushna and Sookshma Srotoganni property clears the obstructions of hair roots leading the Roma-Koopa Vishodhana. These Visha-Upvisha and its formulations like oil and Lepa for Abhyanga (massage) greatly improve the blood circulation and promotes the absorption of the drug, thus increasing the nutrition of the hair roots and scalp.

These drugs having Laghu, Ruksha and Sukhna guna, Tikta and Katu Rasa, Katu Vipaka and Ushna Virya which is intended to have a Tridoshashamak effect. Vishaghna, Kandughna and Jantughna properties of these drugs remove the local infection and help in checking the hair fall and thus help in the cessation of the further process of Khalitya.

**CONCLUSION**

From all this, it can conclude that in Ayurveda various Visha- Upvisha dravya which is indicated in Khalitya (Hair-Fall) has a strong possibility to break down the pathogenesis. Various researchers also proved the effectiveness of Visha- Upvisha dravya and its formulations to treat Khalitya. So formulations prepared by these poisonous plants are more efficacious and fast acting.
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