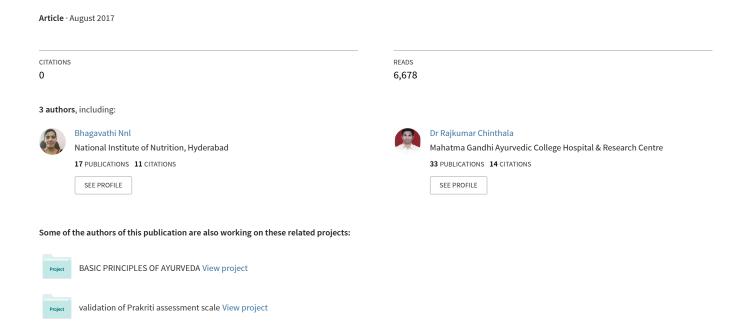
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Review Article

EXPLORING HIRSUTISM THROUGH AYURVEDIC PERSPECTIVE

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ABSTRACT

Ayurveda the science of life emphasizes on healthy lifestyle and diet for the prevention of disease. But today's lifestyle is characterized by impaired diet and regimen paving way towards many non-communicable, metabolic and lifestyle disorders. Hirsutism is one such multi factorial and a polygenic endocrinopathy. It is characterized by the male pattern of hair growth in females. Though the problem appears to be a cosmetic one yet hyper androgenism is the lynchpin behind the entire pathogenesis. Its etiology has a wide perspective viz., idiopathic, PCOS, drug induced, tumors etc. Although the term Hirsutism is no where mentioned directly in the literature of Ayurveda, but certain terms which correlate with the features of Hirsutism can be found such as 'Atiloma' in Charaka Samhita and 'Sthulalomasha ganda' in Kasyapa Samhita. The present work is an attempt to focus on understanding Hirsutism in Ayurveda and to explore the Samprapthi and its components (pathway of manifestation). Once we understand the pathology it would pave a way towards Samprathi Vighatana and thereby treatment aspects can be ameliorated. The amalgamation of diet & regimen protocol as per Ayurveda along with the treatment can revamp the entire scenario.

Keywords: Non-communicable diseases, Hirsutism, Hyper androgenism, *Atiloma*.

INTRODUCTION

Hair is a natural ornament for which every one of us would flaunt for. Thick, long, lustrous and beautiful hair on scalp is an all time demand. Presence of hair in undesired area can be as devastating as its absence on scalp and is definitely a penance! Presence of such unwanted hair in male pattern in case of women i.e., on the chin, upper lip, periaereolar area, thighs, etc., is called as Hirsutism. Presence of beard or moustache in a man is normal while its presence in a woman can be devastating, depressing and may even cause social isolation. It's more of a cosmetic and psychological forlorn.

Causes of Hirsutism: Hirsutism is a common clinical condition seen in female patients age group ranging from post menarche to menopause. It affects around 5-10% of the women and is a common presenting complaint in the dermatological outpatient department for cosmetic reasons. The cause is mainly hyper androgenism, which may be ovarian or adrenal. It may be part of a rare metabolic syndrome, drug induced, or just idiopathic. The following table enlists the various causative factors of Hirsutism in a systematic manner.

Table 1: Showing etiology of Hirsutism

Sr. No.	Type of the Cause	Details	
1	Idiopathic	Familial increased activity of 5 α reductase	
2	Physiological	Peri and Post Menopause	
3	Racial	Mediterranean, Middle Eastern, South Asian	
4	Genetic	Androgen Sensitivity Syndrome	
5	Hormonal	PCOS Metabolic Insulin Resistance Syndrome Cushing's Syndrome Non Classical Congenital Adrenal Hyperplasia Hyper – reactio Lutealis (in pregnancy) Hypothyroidism Acromegaly	
6	Drugs	Anabolic Steroids – Danazol, HRT with Tibolone, Minoxidil, Anti epileptics – Phenytoin, Valproic acid, Diazoxide, Phenothiazines, Methyl dopa, Metclopramide, Anti mitotic –Cyclosporine	
7	Tumours	Androgen Secreting tumours of Ovary/Adrenal, Arrhenoblastoma, Leydig and Hilar Cell Tumours, Gynandroblastoma, Luteoma(In Pregnancy)	
8	Miscellaneous	Anorexia nervosa, Prolactinoma, Porphyria	

Ayurveda & Hirsutism - Literary Review: There is no direct term for Hirsutism in Ayurveda but we can decipher relative aspects from multiple references. In Charaka Samhitha Sutra sthana Astauninditeeyam Adhyaya (a chapter on eight undesirable persons), we come across 'Atiloma' and 'Aloma' individuals where excess hair on the entire body /complete absence of hair is mentioned². In Kasyapa samhitha while delineating about Graharogas the author emphasizes about Pushpaghni, one among three types of Jataharini characterized by Sthulalomasha ganda³ i.e. one with corpulent and hairy cheeks³. This presence of hair on chin can be compared with facial Hirsutism. Professor P.V.Tiwari while commenting on the same regarding Pushpaghni which is a type of curable Jataharini has opined it to be anovular menstruations with Hirsutism.⁴ Before going in depth it is necessary to go through the basics like Kesha, Loma and their physiology.

Physiological concepts related to *Kesha* (scalp hair) & *Loma* (body hair):

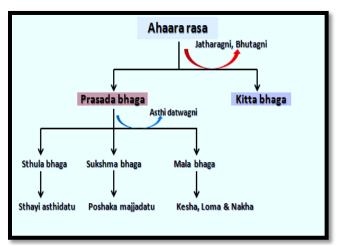


Figure 1: Flow chart depicting the physiology of *Kesha*, *Loma uthpathi* krama

Loma Uthpathi Krama: 'Loma' is a Parthiva⁵ Dravya (a substance whose composition is predominant in Prithvi maha bhoota) developed and nourished by Pitruja Bhava, one among the Shadbhava's responsible for the formation of Garbha (fetus)⁶. Kesha and Loma are the Malas of Asthi Dhatu, which are related with Sweda-vahasrotas. The Asthi Dhatu has derived from Medo Dhatu. Ahara Rasa under the action of Jatharagni and Dhatvagni gets converted into Prasadabhaga and Kittabhaga. After Uttarottara Dhatu Poshana under the action of Asthi Dhatvagni formation of Asthi Dhatu, Poshya Majja Dhatu and Kesha lomadi⁷ mala occurs.

Lomadi Mala Vruddhi:

Rasa Dhatu provides nutrition to all parts of the body. According to Charaka Samhitha in the process of digestion Ahara is transformed into Ahara Rasa (nutrition fluid) which further divides into two parts namely –Sarabhaga (nutritional dividend) and the Kittabhaga (excretory dividend). The Kitta Bhaga is responsible for the production and nutrition of Mala's like Sweda (sweat), Mutra (urine), Pitta, Kapha, Kesha (hair), Loma (body hair), Nakha (nails) etc.

According to *Susruta Samhitha*, nourishment of *Kesha* is from the end part of *Dhamani*, which are attached to the *Romakupas*.⁸

Understanding the Pathology of Kesha Lomaadi Vrudhi:

Jatharagni mandya results in Dhatvagni mandya producing abnormal Medo- Dhatu results in the formation of abnormal Asthi Dhatu and Mala Vrudhi as Kesha Lomadi Ativrudhi. To understand the pathology of Atilomata, it is essential to know the in detail description of Nidana Pancaka summarized below.

The Nidana Pancaka of Atilomata:

Table 2: Showing *Nidana*, *Purvarupa*, *Rupa*, *Upashaya*, *Sadya-Asadyata* of *Atilomata*.

Sr. No.	Nidana panchaka	Due to PCOS	Due to Genetic Cause
1	Nidana	Viruddhaahara, Akaala- bhojana, Pramitashana, Avyayama, Divaswapna	Beeja Dosha, Visha
2	Purvarupa	Atyartava/Anaartava, Sthoulya	
3	Rupa	Sthoulya, Pidika, Neelika, Daurgandhya, Vandhyatva, Atilomata	Atilomata
4	Upashaya	Chikitsa in the form of Agneya dravya Prayoga	Loma- apaharana
5	Sadhya- Asadhyata	Nava: Kruchra sadhya Jirna: Yapya	Yapya

Samprapti of Atilomata:

Due to Nidana Sevana in the form of Aaharaja and Viharaja Nidana, there will be Kapha Pradhana Tridosha Prakopa leading to Dhatvagni Mandya, involving Rasa, Mamsa, Medodhatu and Aartava - the Upadhatu of Rasa Dhatu. These lead to Ayathopacaya of Shareera resulting in the manifestation of symptoms like Sthoulya, Aartava Vaiparitya in the form of Atyartava or Anartava; Neelika, Pidika, etc. The involvement of other Gambhira Dhatu's like Asthi, Shukra leads to Vandhyatva and Atilomata.

Samprapthi Ghatakas (Composition of the manifestation):

- i. Dosha: Kapha, Vata, Pitta
- ii. **Dushya:** Rasa, Mamsa, Medo, Asthi, Shukra- in infertility cases
- iii. Srotas: Rasavaha, Mamsavaha, Medovaha, Astivaha
- iv. *Srotodusti:* Can be either of *Sanga/ Athipravrithi/ Vimarga Gamana* depending on the endocrinal pathway disturbed.
- v. **Ama:** Saama vi. **Agni:** Mandyo
- vi. **Agni:** Mandya
- vii. *Udbhava sthana:* Amasaya, Pakwasaya
- viii. Sanchara sthana: Sarva sarira
- ix. Vyakta sthana: Twak

Understanding the manifestation of Hirsutism through Ayurveda:

Atiloma is mentioned as a condition of social stigma due to disfigurement. Atiloma itself is not considered as Vyadhi, but as it produces sufferings to an individual it can be

considered as Vyadhi. Description regarding Atiloma is not found vividly in the Samhitas, possibly this could be because of its less prevalence during the then period. Still it has been quoted as one among the Ashtanindita Purusha(eight undesirable constitutions) by Acharya Charaka. Further Kasyapa Samhitha mentions about Pushpaghni Jataharini, the description of which reveals the endocrinal dysfunction as it is associated with Sthoulyata (obesity) and Vruthapushpata (futile ovulation). One among the Ashtanindita Purusha is Atiloma characterized by excessive body hair, but further explanations are unavailable. This may be considered as idiopathic Hirsutism which is different from Hirsutism due to PCOS. But Hirsutism associated with PCOS is due to hyperandrogenism and action of androgens on the hair roots. Charaka Samhitha included Atisthoulya as one among the Ashtaninditas which may be considered as a metabolic disorder. Detailed description regarding its Nidana, Purvarupa, Lakshana, Samprapti, Upadrava are mentioned in Sutra Sthana. As both these are enlisted in same context interrelation between the two conditions due to involvement of neuro-endocrinal system and metabolic disorders may be

Shmashru is considered as the Mala of Shukra Dhatu, as per the references in the commentary of Dalhana, Adamalla, etc. Prof. Premavati Tewari while describing regarding the Stree Shukra, emphasised that the Shukra can be considered as that one which helps in Deha Dharana, Prajotpadana, Harsha, Pritikaraka and Bala-Varna Upachayakara. 10 Author clarifies by saying that Shukra can be classified into Antah Shukra and Bahi Shukra. This Antah Shukra in females is responsible for the development of secondary sexual characters like development of breast, growth of pubic and axillary hair; and growth of female genital organs. Thus based on the that, if the Prajotpadaka Shukra is assumptions developed improperly or malnourished it will lead to infertility and other related conditions. If the Sarva Sharira Sthitha Shukra Dhatu, gets vitiated leading to the defect in secondary sexual characters mentioned as Stree Vyapad of 'Vartaa' by Charaka Samhitha, condition of PCOS patient usually presents with features of menstrual irregularity, obesity, infertility and other hyperandrogenic features like Hirsutism, acne etc. thus the pathology in Atiloma may include the Shukra Dushti also.

Concept of *Stree Shukra*: Further emphasizing on this in males *Shukra* includes sperms, seminal fluid, male sex hormones (testosterone), even women have *Shukra* in the entire body. Hence, there is a small amount of testosterone even in a woman's body. If this circulating testosterone is secreted more by the stroma of the ovary due to PCOS, Obesity etc., then because of the affinity of the hair follicle for testosterone the fine hair becomes virulent and it results in hirsute hair appearance. The same testosterone when acted upon the hair follicles on the scalp it results in frontal balding or loss of hair over the scalp which is seen in the hirsute women.

Treatment perspectives:

 First and foremost would be a bifid approach where treating the underlying endocrinal pathology is primary

- prerequisite, at the same time treating the cosmetic issue that is the unwanted hair externally is also equally vital.
- For depilatory purpose several *Yogas* are mentioned in various renowned treatises of Ayurveda. The following table shows the list of these *Yogas*.

Table 3: Shows the list of depilatory recipes mentioned in various treatises.

Sr. No.	Yogas	Reference
1	Harataladi churna, Harataladi lavana yoga, Sudhadi yoga, Bhallatakadi yoga	Shabdakalpadruma ¹¹
2	Shami phala has keshagna property	Charaka samhita ¹²
3	Shamibeejadi yoga, Shankha churnadi yoga, Bhallatakadi yoga, Agaragodhikadi yoga	Susruta samhita ¹³
4	2 Romasathana lepa yogas	Sarangadhara samhita ¹⁴
5	2 Romasathana lepa yogas, 4tailas – Kusumbha taila, Aragvadadi taila, Karpuraadi taila, Kshara taila	Chakradutta ¹⁵
6	Harataladi lepa, Shankhadi lepa, Anjani lepa, Palashaksharadi lepa, Shankhabhasmadi lepa, Bhallatakadi lepa Kusumbha taila, Kshara taila, Aragvadadya taila	Bhaisajya ratnavali ¹⁶
7	Harataladi lepa yoga, Koshataki beeja taila, Halahalapucha sadita sarshapa taila	Rajamartanda ¹⁷
8	There are 3 yogas for <i>Yoniromapathana</i> (removal of pubic hair), here specifically age of the female to use these recipes is mentioned as 13-14 yrs.	Haramekhala ¹⁸
9	4 Harataladi lepa yogas, 2 tailas - Halahalapucha sadita sarshapa taila, Koshamra taila	<i>Nibandha sangraha</i> on Sushrutha Samhita ¹⁹

CONCLUSION

- Regarding the approach towards the underlying pathology, there would be bifid approach again. Hirsutes are of two kinds *Sthula*(obese) and *Krusa*(thin).
- For Sthula patients, there is a vitiation of Rasa, Medo, Asthi dhatus primarily along with Tridosha that mainly involves Kapha. The main target here is Margavarodha at the level of ovaries (PCOS), thyroid gland, and it also involves Agnimandhya. Hence, Agni Vardhaka dravyas i.e., Deepana, Pachana drugs along with Srotosodhakas and Artava pravartaka dravyas are the need of the hour. eg. Lasuna, Maricha, Sathapushpa etc.,
- Apart from the above aspects *Medohara* and *Lekhana* dravyas are also required which can act at the level of *Dhatus*, eg. *Haridra*, *Tamra Bhasma*, *Kanchanara*, *Triphala*, *Pippali*.

• When it comes to lean hirsutes *Deepana*, *Pachana*, *Rasa* pradhanakara dravyas need to be administered. Apart from them *Vatahara* line of treatment is also to be done as *Apanavata* is mainly hampered along with *Vyanavata*.

With this kind of dual mode of management this complex endocrinal disorder can be managed successfully and thereby further progress can be stopped. The most important aspect while treating the external hair is that the half life of hair follicle is 6 months. Therefore to prevent further re growth of hair from follicle at least 6 months of treatment is mandatory. Finally, revalidating the efficacy of various *Romasathana yogas* where some of them are described to be giving permanent hair removal effect can be considered in research point of view. Comparing the results with that of LASER might help promoting them as these *lepas* are much more economical than LASER.

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