# A study on effect of *Nasya Karma* and *Thiladilepa* in treatment of *Yuvana Pidaka* (Acne vulgaris) – A Case Report

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# Abstract:

Yuvana Pidaka, a disease mentioned under Kshudra Roga, occurs due to vitiation of KaphaDosha, Vata Dosha and Raktha Dhatu. It can be correlated with acne vulgaris which is a common cosmetic problem among the people. Nasya Karma is one of the therapeutic measures described in authentic texts in treatment of YuvanaPidaka. Gotukola Nasya and Thiladilepa are used by Sri Lankan traditional physicians to treat YuwanaPidaka. Therefore, it was decided to observe the effects through a case study using this treatment. Nasya Karma using Gotukola Nasya was carried out for three consequent days followed by external application of Thiladilepa for fourteen days. After the Nasya Karma, pain and Medogarbha (eruptions containing fat inside) were partially relieved. Seborrhea was aggravated. After completion of entire treatment pain, Pidaka, Ghana, Medogarbha, scars, papules, pustules, seborrhoea were partially relived. Closed comedones, open comedones and nodules were unchanged. Nasya eliminates vitiated Dosha accumulated in the body, especially in Utthamanga (above the clavicle). Hence, Nasya Karma is effective in treatment of YuvanaPidaka as it is a disease occurring in Utthamanga Pradesha. When Ayurveda pharmacodyanamic properties of ingredients of Gotukola Nasya and Thiladilepa are taken in to consideration, they pacify vitiated Vata and Kapha Dosha. Hence, this treatment regime is effective in treatment of Yuvana Pidaka. It was concluded that conducting Nasya Karma using GotukolaNasya followed by application of Thiladilepa is beneficial in treatment of Yuvana Pidaka.

Key words: Acne vulgaris, Gotukola Nasya, Nasya Karma, Thiladilepa, Yuwana Pidaka,

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# Introduction:

Yuvana Pidaka is described under Kshudra *Roga* and it is also known as *Mukhadushika*. Shalmali Kantakarah Pidaka (eruptions resembling the thorns of Shalmali tree), Sarujo (painful), Ghana (thick), Medogarbha (containing fat inside) and Mukhe Yunam (appearing on the face of youths) are the clinical features described in Ayurveda.<sup>[1,2]</sup> Yuvana Pidaka can be corelated with acne vulgaris. Clinical features of acne vulgaris are pustules, inflammatory seborrhea. nodules. inflammatory papules, black heads/open comedones, white heads/close comedones, and scars.<sup>[3]</sup>

*Nasya Karma* is mentioned as one of therapeutic measures in treatment of *Yuvana Pidaka*. <sup>[4]</sup> Dr. Manel Weerasinghe, retired medical officer, Ayurvedic teaching hospital, Borella performs *Nasya Karma* in treatment of *Yuvana Pidaka* using *GotukolaNasya*. Dr.Nandrani Karunarathne,

retired medical officer, Ayurvedic teaching hospital, Borella used *Thiladilepa* to treat patients suffering from *Yuvana Pidaka* effectively. But no known scientific study has been conducted to evaluate the effects of these treatments. Therefore, present study was conducted to evaluate the effects of these treatments.

# **Case Report:**

A 23 year old male patient suffering from *Yuvana Pidaka* (acne vulgaris) was selected from Ayurveda teaching hospital, Borella, Sri Lanka. The patient had complaints of *Pidaka* (eruptions), *Ghana* (hard), *Saruja* (pain), *Medogarbha* (eruptions containing fat inside), Seborrhea (greasy skin), open comedones (blackheads), close comedones (whiteheads), papules, nodules, pustules and scars. The patient was thoroughly examined and severity of the symptoms were recorded using a specially prepared proforma. The grading of the symptoms are given below.

#### Grading scale of symptoms:

1.	Pidaka (Eruptions)		
	Nil	0	No eruptions
	Mild	1	1-5 eruptions
	Moderate	2	6-10 eruptions
	Severe	3	11-15 eruptions
	More severe	4	More than 15 eruptions
2.	Saruja (Pain)		
	Nil	0	No pain
	Mild	1	Occasionally
	Moderate	2	Intermittent
	Severe	3	Often
	More severe	4	Always
3.	Ghana (Hard)		
	Nil	0	No eruptions
	Mild	1	1-5 eruptions

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	Moderate	2	6-10 eruptions
	Severe	3	11-15 eruptions
	More severe	4	More than 15 eruptions
4. 1		-	taining fat inside)
	Nil	0	No eruptions
	Mild	1	1-5 eruptions
	Moderate	2	6-10 eruptions
	Severe	3	11-15 eruptions
	More severe	4	More than 15 eruptions
5. (	Open comedones	Blackhea	±
	Nil	0	No Blackheads
	Mild	1	1-5 Blackheads
	Moderate	2	6-10 Blackheads
	Severe	3	11-15 Blackheads
	More severe	4	More than 15 Blackheads
6. (	Close comedones	(Whitehea	
	Nil	0	No Whiteheads
	Mild	1	1-5 Whiteheads
	Moderate	2	6-10 Whiteheads
	Severe	3	11-15 Whiteheads
	More severe	4	More than 15 Whiteheads
7. I	Papules		
	Nil	0	No Papules
	Mild	1	1-5 Papules
	Moderate	2	6-10 Papules
	Severe	3	11-15 Papules
	More severe	4	More than 15 Papules
8. I	Nodules		
	Nil	0	No Nodules
	Mild	1	1-5 Nodules
	Moderate	2	6-10 Nodules
	Severe	3	11-15 Nodules
	More severe	4	More than 15 Nodules
9. I	Pustules		
	Nil	0	No Pustules
	Mild	1	1-5 Pustules
	Moderate	2	6-10 Pustules
	Severe	3	11-15 Pustules
	More severe	4	More than 15 Pustules
10. 5	Scars	~	
	Nil	0	No Scars
	Mild	1	1-5 Scars
	Moderate	2	6-10 Scars
	Severe	3	11-15 Scars
	More severe	4	More than 15 Scars

Before commencement of the treatment, patient's consent was obtained. The patient was treated for seventeen days. Nasya Karma had been performed three consequent days (Day1- Day3) using Gotukola Nasya. From fourth day to seventeenth day (Day4- Day17), the patient had been treated with external application of 5g of paste of Thiladilepa. The paste was applied on face where Pidaka was present. The mixture was left for 20 minutes and was rinsed off with fresh water. Further, the patient was advised to take his normal diet and to avoid use of soap, face wash, fairness creams, night creams on face. Further, he was instructed to avoid cosmetic cleanups or facials.

# Method of preparation of *Thiladilepa*:

Five grams (5g) of seeds of *Sesamum indicum* (Family: Pedaliaceae; Sinhala name: *Tala*) were mixed with 5ml of juice of lime (*Citrus medica*) and ground well. This paste was used as Thiladilepa.

# Method of preparation of *Gotukola Nasya*:

Twenty five grams (25g) of fresh leaves of *Centella asiatica* (Family: Apiaceae; Sinhala name: *Gotukola*) were crushed. Then it was strained using a clean cotton cloth and the juice was extracted by squeezing. 2ml of juice of *C. asiatica* was mixed with 2ml of bee's honey. This mixture is used as *Gotukola Nasya* 

#### Procedure of NasyaKarma:

In the present study, NasyaKarma was conducted around 10.00 a.m. The patient was made to lie on the bed with his face upwards while extending arms and legs downwards. The head was tilted back a little by slightly raising the neck. Then sesame oil was applied on the patient's face and neck (SnehanaKarma). After applying oil. fomentation (SwedaKarma) was carried out using hot water steam. A thick towel was immersed in boiling water and wrung dry. Then the towel unfolded slowly. The steam rising from the towel was used for fomentation.

Gotukola Nasya was warmed to body temperature using a hot water bath. Six drops of medicament was instilled in to one nostril after closing the other nostril. Then the patient was advised to inhale the juice. Then medicament was put into other nostril, and the patient was advised to inhale the juice again as before. Then the palms and the soles of the patient were rubbed vigorously. The patient was advised to spit out the secretions and measured the volume of secretions. The patient was also advised to avoid swallowing the secretions.

After completion of *Nasya Karma*, *Pashchath Karma* such as *Gandusha* (warm water gargling) and medicated *Dhumapana* were performed. *Dhumapana* was carried out by inhaling (through the nose) smoke arising from burned *DhumaVarti* using a wick prepared by wrapping a mixture of Turmeric powder and Ghee, in a cotton cloth.

# **RESULTS:**

In the present study after the *Nasya Karma*, *Saruja* (pain) and *Medogarbha* (eruptions containing fat inside) were partially relieved. After completion of entire treatment (*NasyaKarma* followed by external application of *Thiladilepa*), *Saruja* and *Medogarbha* were completely relieved. *Pidaka* (erruptions), *Ghana* (hardnes), scars, papules, pustules, seborrhea were partially relived. Close comedones, Open comedones, Nodules remained unchanged as given in table 1.

Symptoms	Before	After		After	entire
	treatment	Nasyal	Karma	treatme	nt
			of		of
	Grade	Grade	% relief	Grade	% relief
Pidaka (Eruptions)	3	3	0%	1	66.7%
Saruja (Pain)	3	2	33.3%	0	100%
Ghana (Hard)	3	3	0%	1	33.3%
Medogarbha (Eruptions containing fat inside)	2	1	50%	0	100%
Seborrhea (Greasy skin)	3	3	0%	3	0%
Open comedones (Blackheads)	1	1	0%	1	0%
Close comedones (Whiteheads)	3	3	0%	3	0%
Papules	3	3	0%	2	33.3%
Nodules	2	2	0%	2	0%
Pustules	3	3	0%	2	33.3%
Scars	4	4	0%	1	75%

**Table-1: Percentage of reduction of symptoms:** 

# **Discussion:**

*Yuvana Pidaka* is a skin condition that arises due to vitiation of *Vata, Kapha Dosha* and *RakthaDhatu*. Under the *Chikithsasutra* of *Yuvana Pidaka, Nasya Karma* is described as one of the therapeutic measures in authentic Ayurveda texts. It eliminates vitiated *Dosha* accumulated in the body, especially in *Utthamanga*. <sup>[5]</sup>*Yuvana Pidaka* is a disease occurring in *UtthamangaPradesha*. Hence *Nasya Karma* is effective in treatment of *Yuvana Pidaka*. Ingredients of GotukolaNasya have the *UshnaVeerva* MadhuraVipaka and properties. Therefore, it reduces vitiated VataDosha. These ingredients consist of Thiktha Rasa, KashayaRasa, Ruksha Guna, Laghu Guna, Ushna Veerya which help to reduce vitiated KaphaDosha. [6] Hence it pacifies diseases occurred by vitiation of Vata, Kapha Dosha including Yuvana Pidaka (table 2). Collagen enhancement, anti-oxidant and anti-bacterial properties of ingredients of Gotukola Nasva are scientifically proven. <sup>[7,8,9,10]</sup> Due to these

properties *Gotukola Nasya* is beneficial in treatment of *Yuvana Pidaka* (table 3).

Ingredients of *Thiladilepa* has *Amla Rasa*, *Guru Guna*, *Snigdha Guna*, *Ushna Veerya* and *Madhura Vipaka*. Hence it reduces vitiated *Vata Dosha*. These ingredients have the properties of *Katu Rasa*, *Thiktha Rasa*, *Ruksha Guna*, *Laghu Guna*, *Ushna Veerya* and Katu *Vipaka*. <sup>[11,12]</sup> Therefore it reduces vitiated *Kapha Dosha*. Hence *Thiladilepa*  pacifies diseases occurred by vitiation of *Vata* and *Kapha Dosha* including *Yuvana Pidaka* (table 4). Anti-oxidant, antiinflammatory, analgesic and anti-bacterial properties of ingredients of *Thiladilepa* are scientifically proven. <sup>[13-17]</sup> Due to these properties *Thiladilepa* is beneficial in treatment of *Yuvana Pidaka* (table5).

Table 2: Ayurveda pharmacodynamic properties of ingredients of Gotukola Nasya:

Ingredient	Rasa	Guna	Veerya	Vipaka
Centella asiatica	Thiktha, Kashaya	Laghu	Sheetha	Madhura
Bee's honey	Madhura	Laghu , Vishada, Ruksha	Ushna	Madhura

Ingredient	Scientifically proven bio-activities
Centella asiatica	Collagen enhancement <sup>[7]</sup> Anti-oxidant <sup>[8]</sup> Antibacterial <sup>[9]</sup>
Bee's honey	Anti-bacterial <sup>[10]</sup>

#### Table 4: Ayurveda pharmacodynamic properties of ingredients of *Thiladilepa*:

Ingredient	Rasa	Guna	Veerya	Vipaka
Sesamum indicum	Katu, Thiktha, Kashaya, Madhura	Guru, Snigdha	Ushna	Katu
Citrus medica	Amla	Laghu, Ruksha	Ushna	Madhura

Ingredient	Scientifically proven bio-activities
Sesamum indicum	Anti-oxidant <sup>[13,14]</sup> Anti-bacterial <sup>[14]</sup> Anti-inflammatory <sup>[15]</sup>
Citrus medica	Anti-oxidant <sup>[16]</sup> Anti-bacterial <sup>[16]</sup> Analgesic <sup>[17]</sup> Anti-inflammatory <sup>[17]</sup>

#### Table 5: Scientifically proven bio-activities of ingredients of of *Thiladilepa*:

#### **Conclusion:**

It was concluded that conduction of *Nasya Karma* using *Gotukola Nasya* followed by application of *Thiladilepa* is beneficial in treatment of *Yuvana Pidaka* (acne vulgaris).

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