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A comparative clinical study on the cosmetic approach in Tarunyapidaka vis-a-vis Acne Vulgaris amongst female population through Shodhana Shamana and Lepa

Dr. Sharanamma¹, Dr. Prashanth A.S.², Dr. S.G. Chavan³

¹Post Graduate Scholar, ²Principal and HOD, ³Guide and Professor, Department of Kayachikitsa, Ayurveda Mahavidhyalaya, Hubli, Karnataka, INDIA,

ABSTRACT

Tarunyapiadaka is one of the Kshudraroga and most common skin disorders. Ayurvedic medicine plays important role in the patients who are in deep depression due to disfiguration of face and Tarunyapidaka in the field of Cosmetiology. In the present study an effort has been made to formulate an effective, economic and simple remedy to help in the total cure and preventing of Tarunyapidaka. In the present study 40 Subjects diagnosed with Tarunyapidaka w.s.r to Acne Vulgaris fulfilling the Inclusion criteria were selected for study and randomly categorized into two groups as Group A and Group B each consisting of 20 subjects from OPD and IPD of department of PG studies in Kayachikitsa department of Ayurveda Mahavidhyalaya, Hubbali have been treated with Amapachana with Guduchi Churna. In group A Sadhyosnehapana with Panchatikta Ghrita. Sarvanga Abhyanga with Elaadi Taila followed by Sarvanga Swedana. And Sneha Virechana was administered with Trivruth Lehva, After Samsariana Krama, Navaka Kashava given as a Shamanoushadi along with Manjista with Madhu Lepa. In Group B Sadhyosnehapana with Panchatikta Ghrita. Sarvanga Abhyanga with Elaadi Taila followed by Sarvanga Swedana and Sneha Virechana was administered with Trivruth Lehya. After Samsarjana Krama, Gopanganadi Kashaya given as a Shamanoushadi along with Manjista with Madhu Lepa for 45 days to assess the clinical efficacy of Navaka Kashaya and Gopanganadi Kashaya. Significant changes in Subjective and Objective criteria were observed.

Key words: Tarunyapidaka, Acne Vulagaris, Navaka Kashaya, Gopanganadi Kashaya.

INTRODUCTION

Beauty is the characteristic of a person that provides a perceptional experience of pleasure or satisfaction. The concept of beauty is laid on the principles of health. In short the secret of beauty is the reflection of skin; Skin is the reflection of good health. If such important and beautiful face gets vitiated by the Doshas, it directly influences the personality of a

Address for correspondence:

Dr. Sharanamma

Post Graduate Scholar, Department of Kayachikitsa, Ayurveda Mahavidhyalaya, Hubli, Karnataka, INDIA, E-mail: dr.sharanamma24@gmail.com

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person. Among them one of the aliment which affects the face is Tarunyapidaka.^[1]

Tarunyapidaka is also known as Yauvanapidaka, as it occurs in Tarunya or Yauvana Avastha of the individuals.^[2] Among the Ayurveda classics, Acharya Sushruta mentioned Tarunya Pidaka as one among the "Kshudra Roga" and is due to disturbed state of Kapha, Vata and vitiation of Raktadhatu, and also involvement of Pitta due to its Ashrayashrayibhava. Acharya Charaka mentioned Tarunyapidaka while explaining Bahya Rogmarga,^[3] which implies that its Adhisthana is Twak. There we find the vitiation of Rasadhatu also. Acharya Bhavamishra has quoted Swabhava^[4] (the natural cause) as one of the causative factors. Acharya Sharangdhar has mentioned Tarunyapidaka as the Mala of Shukra Dhatu^[5] along with Vaktra Snigdhata (unctuousness of face). Acharya Vagbhata has mentioned presence Shukra in Stree (women)^[6] also. Shukra of Pradurbhava takes place in adolescence, hence

ORIGINAL ARTICLE Sept-Oct 2020

prevalence is more in this age group. It was also recorded 54% in women and 40% in men over 25 years of age.^[7] As a matter of cosmetology, females are more concerned about their beauty. The area where the trial was conducted, the availability of female subjects was more than male subjects. So this research work was highlighted among the "female population".

We find a ray of light in Ayurveda as it is has two basic principles i.e., Maintenance of health in healthy and prevention of disease in diseased. For Maintenance of beauty of skin especially of face various measures like *Abhyanga, Bashpaswedana, Nasya* etc. are explained in *Dinacharya*. For prevention of *Tarunyapidaka, Shodhana* modalities such as *Vamana, Virechana, Nasya* and *Raktamokshana*, various types of *Lepa* are told.^[8]

Present study included Amapachana with Guduchi Churna as it is said "Rogah Sarveapi Mandaanou".^[9] Virechana Karma is one of the prime treatment modality for Rakta, Pitta and Santharpana Janita *Vikara*,^[10] along with it, it also has a significant role in mitigation of Vata and it is one of Shodhana Karma advocated prior to administering Shamanoushadhi. As it said that "Dosha Evam Hi Sarvesham Rogaanam Eka Karanaam"^[11] without involvement of Dosha, disease can't manifest. As mentioned earlier, all the three Dosha's as well as Rasa, Rakta, Meda and Shukra Dhatus are involved directly or indirectly in the formation of Samprapti of the Tarunyapidaka. Formulations which contain drugs having properties like Raktashodaka, Varnya, Kushtagna, Kandugna, Pittashamaka and Kapha-Vatahara would be beneficial to bring back the balanced state of affected Dosa-Dushya. For the present clinical study two formulations-Kashaya^[12] herbal Navaka and Gopanganadi Kashaya^[13] are selected. Navaka Kashaya contain drugs like Manjishta, Katuki, Guduchi, Nimba, Vacha etc. which have the qualities Raktashodhaka, Pittashamaka, of Kaphahara, Kusthaana and Varnya. Gopanganaadi Kashaya contains drugs like Sariva, Chandana, Kamala, Utphala, Hribera etc. which have the qualities of Raktashodaka, Raktaprasadaka, Varnya,

Pittashamaka. Above formulations are selected for the study based on the observations of many experienced practitioners widely practicing and have got better results in the management of Tarunyapidaka. Local application directly acts on skin lesions, so along with Antha Parimarjana Chikitsa, Bahiparimarjana Chikitsa also plays an important role in Tarunyapidaka, hence Lepachikitsa^[14] was selected for both the groups which acts as Raktaprasadaka, Kaphagna, Varnya, Kusthagna and Tvachya. In the present clinical study, 40 subjects were selected incidentally and placed randomly into two groups, Group A and Group B, with 20 subjects in each group. Classical signs and symptoms form the main diagnostic criteria and also studied for the assessment criteria.

Group A received Amapachana with Guduchi Churna,^[15] Sadhyosnehapana with Panchatikta Grutha,^[16] Abhyanga with Elaadi Taila,^[17] Atapasevana, Virechana with Trivruth Lehya^[18] followed by Samsarjana Krama, Navaka Kashaya as Shamanaushadhi and Manjista with Madhu as Bahya Lepa.

Group B received Amapachana with Guduchi Churna, Sadhyosnehapana with Panchatikta Grutha, Abhyanga with Elaadi Taila, Atapasevana, Virechana with Trivruth Lehya followed by Samsarjana Krama, Gopanganaadi Kashaya as Shamanoushadhi and Manjista with Madhu as Bhahya Lepa.

In both groups *Lepa* as follow up was done for 45days in both the groups and they were advised to attend the OPD every 15 days for general checkup and for recording changes observed in them.

AIM AND OBJECTIVES

- 1. To study *Tarunyapidaka* and Acne Valgaris in detail.
- 2. To evaluate the efficacy of *Virechana Karma* in the management of *Tarunyapidaka*.
- 3. To evaluate the efficacy of *Manjista Lepa* in the management of *Tarunyapidaka*.
- To compare the efficacy of Navaka Kashaya and Gopanganadi Kashaya in the management of Tarunyapidaka.

MATERIALS AND METHODS

The patients were selected and registered after their fulfillment of diagnostic criteria of *Tarunyapidaka* (Acne Vulgaris). The patients were thoroughly questioned and examined on the basis of proforma which includes both Subjective and Objective criteria's. Ethical Clearance and informed consent were obtained before conducting the clinical trial.

Inclusion Criteria

- 1. Subjects presenting with signs & symptoms of *Tarunyapidaka* (Acne Vulgaris)
- 2. Subjects of age group between 15 to 30 years were included.
- 3. Subjects of female sex were included.
- 4. Subjects who were fit for *Virechana* & *Lepa Karma*.

Exclusion Criteria

- 1. Subjects having *Pidaka* other than face and other *Kshudraroga* and *Kushtaroga*.
- 2. *Pidaka* produced due to side effect/allergic reaction of any drug applied earlier.
- 3. Subjects suffering from systemic and metabolic pathologies.
- 4. Subjects contraindicated for *Virechana* and *Lepa Karma* were excluded.

Table 1: Showing the parameters of study

Subjective Parameters	Objective Parameters
Vaivarnya	Papules
Ruja	Pustules
Kandu	Size of <i>Pidaka</i>
Srava	Number of <i>Pidaka</i>
Oiliness of face	
Dryness of face	

Study Design - A Randomized Clinical Study

Study Size

A minimum of 40 subjects diagnosed with *Tarunyapidaka* fulfilling the diagnostic and inclusion criteria were incidentally selected and randomly categorized into two groups as Group A and Group B each consisting of 20 Subjects for the clinical study excluding the dropouts

Sept-Oct 2020

Intervention

Table 2: Showing Intervention of Group A

ORIGINAL ARTICLE

Aamapachana	Guduchi Churna Dose : 3gms of <i>Churna</i> with warm water before food. (Till <i>Nirama Laxana)</i>
Snehapana	<i>Sadhyo Snehapana</i> with Panchatikta Ghrita Dose- <i>Madhyama Matra</i> (as per <i>Agni, Kostha</i> of patient)
Vishrama Kala	Abhyanga with Elaadi Taila followed by Nadi Swedana.
Virechana	Trivrut Lehya (Based on Roga and RogiBala).
Paschat Karma	Samsarjana Krama depending on Vega/Shuddhi
Shamana Yoga	Navaka Kashaya.
Matra & Anupana	15ml-20ml twice a day, before food & Ushnodaka.
Lepa	Manjista Churna with Madhu.
Method	Mrudu Sweda (steaming) with Nimbodaka. 1/4 th Anguli (approx 0.31cm) thick Lepa will be applied once daily.
<i>Chikitsa Kala</i> Follow –up	45 days. Every 15 days

Table 3: Showing Intervention of Group B

Aamapachana	Guduchi Churna
	Dose : 3gms of <i>Churna</i> with warm water before food.(Till <i>Nirama Laxana).</i>
Snehapana	SadhyoSnehapana with Panchatikta Ghrita Dose- <i>Madhyama Matra</i> (as per <i>Agni, Kostha</i> of patient).

Dr. Sharanamma et al. A comparative clinical study on the cosmetic approach in Tarunyapidaka

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ORIGINAL ARTICLE

Sept-Oct 2020

Vishrama Kala	Abhyanga with Elaadi Taila followed by Nadi Swedana.
Virechana	Trivrut Lehya (Based on <i>Roga</i> and <i>Rogi</i> Bala).
Paschat Karma	Samsarjana Krama depending on Vega/Shuddhi.
Shamana Yoga	Gopanganaadi Kashaya.
Matra & Anupana	15ml-20ml twice a day before food & <i>Ushnodaka.</i>
Lepa	Manjista Churna with Madhu.
Method	Mrudu Sweda(steaming) with Nimbodaka. 1/4 th Anguli (approx 0.31cm) thick Lepa will be applied once daily.
<i>Chikitsa Kala</i> Follow-up	45 days. Every 15 days

Overall assessment of treatment

The overall assessment of both the groups will be assessed according to the grades given below;

Table4:Showingtheoverallassessmentoftreatment

Overall Assessment	Grade of Improvement
Complete Relief	100% improvement
Marked Relief	75 to 99% improvement
Moderate Relief	50 to 74% improvement
Mild Relief	26 to 49% improvement
Unchanged	<25% or No improvement

Table 5: Showing the effect of therapy on Subjectiveand Objective parameters in Group A

Para mete	Mea	an	M ea			S.E	'ť	P val	Re mar
r	B T	A T	n ement dif f	Improv ement				ve	k
Vaiva rnya	2. 3	0. 9	1.4	60.87%	0.4 89	0.1 09 5	12. 48	<0. 00 1	S S
Ruju	1. 9	0. 2 5	1.6 5	86.84%	0.4 8	0.1 07	16. 8	<0. 00 1	S S

Kand u	0. 9 5	0. 9	0.9 5	94.73%	0.5 9	0.1 31	7.0 20	<0. 00 1	SS
Srava	1. 6	0. 1 5	1.4 5	90.63%	1.1 13	0.2 49 1	5.4 84 4	<0. 00 1	SS
Oilin ess of face	1. 9 5	0. 4	1.5 5	79.08	0.6 70	0.1 50	10. 08 6	<0. 00 1	SS
Dryn ess	0. 1	0. 0 5	0.0 5	50.00%	0.2 17	0.0 48 7	1.0 04 6	>0. 00 1	S N S
Size of pidak a	1. 6	0. 8	0.8	50.00%	0.3 57	0.0 79	10. 38	<0. 00 1	SS
Num ber of <i>Pidak</i> a	1. 7	0. 7 5	0.9 5	55.88%	0.4 35 8	0.0 97	12. 50	<0. 00 1	SS
Pustu les	0. 9	0. 0 5	0.8 5	94.44%	0.7 92 1	0.1 77 2	4.6 78	<0. 00 1	SS
Papul es	2. 4	0. 9	1.5	62.50%	0.5 91 6	0.1 32	11. 05 4	<0. 00 1	SS

Table 6: showing comparing effect of therapy onSubjective & Objective parameters.

Assess ment Param eters	Group A			Group B			Unp test vs G	Re ma rk		
(N=40, D.F=3 8)	M ea n	S. D	S.E	M ea n	S. D	S.E	S. D	t _{cal}	Ρ	
Vaivar nya	1. 4	0.4 89	0.1 09 5	1. 25	0.3	0.0 67	0. 12 7	1.1 85 1	0. 00 5	S S
Ruju	1. 85	0.4 8	0.1 07	1. 3	0.4 58	0.1 02	0. 14 8	3.7 07 4	0. 00 5	S N S

Kandu	0. 95	0.5 9	0.1 31	0. 7	0.6 40	0.1 43 2	0. 19 5	1.2 84 4	0. 00 5	SS
Srava	1. 4	1.1 13	0.2 49 1	0. 9	0.7 68	0.1 71 8	0. 30 2	1.6 53 6	0. 00 5	S S
Oiline ss	1. 55	0.6 70	0.1 50	0. 75	0.5 3	0.1 20 4	0. 19 1	4.1 88 0	0. 00 5	S N S
Dryne ss	0. 05	0.2 17	0.0 48 7	0. 3	0.5 56	0.1 24	0. 13 3	1.8 73 2	0. 00 5	S S
Size of <i>Pidaka</i>	0. 85	0.3 57	0.0 79	0. 6	0.4 89	0.1 09	0. 13 5	1.8 46 6	0. 00 5	S S
Numb er of <i>Pidaka</i>	1. 25	0.4 35 8	0.0 97	0. 9	0.5 38	0.1 20 4	0. 15 5	2.2 60 7	0. 00 5	S S
Pustul es	0. 85	0.7 92 1	0.1 77 2	0. 55	0.8 04 3	0.1 79 9	0. 25 2	1.1 88 5	0. 00 5	S S
Papul es	1. 5	0.5 91 6	0.1 32	1. 4	0.5 83	0.1 29 7	0. 18 6	0.5 38 4	0. 00 5	S S

Table 7: Showing the Overall effect of study on bothGroup A & Group B

Remark	Group A	%	Group B	%	Total	%
Complete	01	05%	00	00%	01	2.5%
Marked Improvement 75% & above	06	30%	02	10%	08	20%
Moderate Improvement 50 to 74%	12	60%	11	55%	25	57.5%
Mild Improvement 25– 49 %	01	05%	07	35%	08	20%
No Improvement	00	00	00	00	00	00

ORIGINAL ARTICLE Sept

Sept-Oct 2020

Below 25 %

DISCUSSION

Discussion is the most essential part of Research work which helps to explain the interpretation on findings and judgment on clinical study. In present study, various aspects of *Tarunyapidaka* from Ayurveda and Modern perspective have been explored. Ayurveda put attention on cosmetology and considers the well physical appearance for women for the purpose to admire the world through her beauty. In *Tarunyapidaka*, valve of cosmetic not present due to disfiguration of the face by pidaka, so in present study an attempt was made to solve the issues of disfiguration of face and conquering cosmetic value through herbal sources as dealt in Ayurvedic science.

Discussion on Virechana

In the present study Virechana therapy is taken as Shodhana karma because prior to administering Shamana and Lepa, Shodhana is advocated. If Shodhana karma is not administered priorly, its like dyeing in dirth cloth. Tarunyapidaka is due to Kapha vata and rakta vitiation. It is a Raktapradoshaja vikara. Rakta and Pitta has Ashrayaashryi Sambanda. Acharya have mentioned that Virechana is one among the treatment for Raktapradoshaja Vikara and Pittaja Vikara and hence it has been selected as a treatment for Virechana. Trivrutta is best drug for Virechana. It is good for all persons having as it is Sukha Virechana. Trivritta having Laghu, Ruksha, Tikshna Gunas, Katu Tikta Rasa, Ushna Veerya and Pittaghna property. Lehya Yogas of Trivritta are used as Virechana mentioned in Charaka Samhita. By these all properties and Virechana action of drug Trivritta Lehya removes vitiated Pitta from the body and relief of sign and symptoms of Tarunyapidaka.

Discussion on Navaka Kashaya

It is used as *Shamana Oushadhi* in present clinical study. *Navaka Kashaya* contains the ingredients like *Manjista, Lodra, Katuki, Vacha, Amalaki, Vibhitaki, Haritaki, Haridra* and *Nimba,* all ingredients are having equal proportion, to be used in *Kustha Roga* and have *Kusthaghna* properties. In *Rasa, Tikta Pradhana Rasa,*

ORIGINAL ARTICLE Sep

Sept-Oct 2020

in *Guna-Laghu Ruksha Guna*, In *Virya-Ushna Virya* and *Katu Vipaka Pradhana*. As the pathogenesis of *Tarunyapidaka* mentioned in classics, *Kapha* and *Vata Dosha* vitiate and they do the *Avarodha* of *Srotas*. Due to *Srotoavarodha* the *Pidaka* formation happen.

In order to break the pathogenesis drugs having *Tikta Katu Rasa* reduces the vitiated *Kapha Pitta Dosha*. *Laghu Ruksha Guna* also helps in pacifying the vitiated *Kaphapitta Dosha*. Due to *Ushna Virya* the *Avarodha* of *Srotas* is reduce out. The mentioned drugs were also reported for anti acne action in various researches.

Discussion on Gopanganadi Kashaya

It is used as Shamana Oushadhi in present clinical study. Gopanganadi Kashaya its name suggest that in ancient days Gopikas use to have this Kashaya to achieve the Mukhasoudharya forever. It contains -Sariva, Chandana, Kamala, Gopanga, Ushira. Madhuka, Utphala, Shatavari, Sunthi, Yastimadhu all ingredients are having equal proportion, to be used in Pittaja Jwara Roga and have Kaphapittashamaka properties. In Rasa - Kashaya Pradhana Rasa, in Guna - Laghu Snigdha Guna, In Virya – Sheeta Virya Pradhana and Katu Vipaka Pradhana. As Kashaya Rasa is having Rakta Shodhana property acts on vitiated Rakta Dhatu and purifies it. By cleansing the blood, it cures the skin diseases and enhances the skin complexion. Major of drugs contain Flavonoid which are proven to posses good antioxidant property. Antioxidants protect the skin from the oxidative damage. Tannin promotes the healing process by increasing capillary formation. Shatavari has action on hormonal imbalance. Sunthi does Deepana Pachana action. This Yoga helps in Samprapti Vighatana of Tarunyapidaka.

Probable mode of action of Manjista Madhu Lepa

The drug *Manjista* is described in *Caraka Samhita* in *Varnya Mahakashaya*. *Raktashodhaka* property of *Manjista* helpful in increasing superficial blood circulation and Stimulating the generation of cells locally. *Kaphaghna* and *Lekhana* properties of *Madhu* destroy the sebum, hyperkeratinization and reduce the *Pidaka*.



CONCLUSION

We can concluded that, as compare to modern view, the holistic approach of Ayurveda system of medicine is effective without any complication and side effects because Ayurveda focuses on rebalancing individuals and not just treating diseases, its treatment are having low potential for iatrogenesis or side effect. In addition, they tend to promote the systemic health and well-being of the individual. This being the case, it makes sense to first approach cosmetic by correcting disfiguration through Ayurvedic treatment. Tarunyapidaka is disease condition which consists of various clinical symptoms, such as Shalmalikantakavat Pidaka, Kandu, Ruja. This study shows both the treatments like Navaka Kashaya and Gopanganadi Kashaya along with Virechana and Lepa shows

effectiveness in *Tarunyapidaka* w.s.r. to Acne vulgaris. Though both the groups provided Statistically significant results in subjects of *Tarunyapidaka*, but the overall percentage of improvement provided by *Navaka Kashaya* with *Virechana* and *Lepachikitsa* is 66.83%, while *Gopanganadi Kashaya* 55.75% of improvement along with *Virechana* and *Lepa Chikitsa*. *As* comparatively *Navaka Kashaya* showed more effective on all parameters like *Vaivarnya*, *Ruja*, *Srava*, *Kandu*, Oiliness of face, Size of *Pidaka*, Number of *Pidaka* Papules and Pustules. While *Gopanganadi Kashaya* showed more effective on Dryness of face compared to *Navaka Kashaya*.

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