

“A Comparative Clinical Study On The Role Of Vaman Karma And Shaman Yoga In The Management Of Yuvan Pidaka W.S.R. To Acne Vulgaris.”

¹*Dr. Chakraborty Subhrajyoti, ²Prof (Dr.) Chowdhury S.N, ³Dr. Singh Shailendra, ⁴Prof (Dr.) Ghosh Sukumar⁴

Abstract

Background - Ayurveda is an ancient discipline of indigenous medicine as well as a way of life for people. Yuvan Pidaka, also known as acne vulgaris, is one of the issues that affects 85% of adolescents and young adults. It results in an ugly appearance that could affect the sufferers' social and personal lives. Numerous herbs and mixtures are available in ayurvedic therapy to treat Yuvan pidaka.

Objective - To assess the efficacy of Vamana karma and Shamana chikitsa in the management of Yuvan pidaka.

Materials & methods - Total 60 patients were selected from the OPD & IPD of the Institute after getting approval from the Institutional Ethics Committee (SVP/564/2017 dated 29/5/2017). Out of 60 patients divided into two groups A & B, 30 patients were treated with Vamana karma & Dhanyakadi lepa and in another group 30 patients were treated with oral administration of Manjistha churna followed by local application of Dhanyakadi lepa.

Results - Total 55 patients out of 60 patients completed the therapeutic protocol. The statistical interpretation was found highly significant in Group A patients i.e., $p < 0.001$ in comparison to Group B patients.

Conclusion - The prescribed treatment shows significant results in Yuvan pidaka and no untoward effect was noted during the period of the study. The data generated by this study will provide a new dimension in the management of Yuvan pidaka vis-à-vis Acne vulgaris.

Introduction -

The most significant and attractive organ is the face. The face conveys a person's personality. The phrase "**Face is the index of mind**" often used. It reflects all emotions, including happiness, sadness, rage, excitement, etc. The face determines the overall beauty of the body. The ancient science of Ayurveda has a distinct understanding of beauty and has shown to be an effective, long-lasting treatment without any negative side effects. Among the 56 *Upangas*, face appears to be at the top of the list, according to *Acharyas*. This most significant and attractive organ is impacted by a number of adolescent defects, which occur between the ages of 16 to 30 years or the wonder years of a person's life. Humans undergo several changes as society advances, including the development of sex-differentiating traits in both males and females. Puberty or *Yuvavastha* is the age at which either sex experiences the typical facial eruptions known as *Yuvanapidaka* or *Mukhadushika*. The disease has cosmetic importance as it affects the beautiful organ, face.

Yuvana Pidaka, which is categorised under *Kshudra roga*, is an unpleasant illness that primarily affects teenagers. Both *Brihatrayee* and *Laghutrayee* have the condition mentioned. It is brought on by *Rasavaha* & *Raktavaha Srotas*-related morbid *Kapha*, *Vata*, & *Rakta dosha*¹. Although this sickness does not pose a threat to life, it undoubtedly has an impact on lifestyle, daily activities, and social reticence. *Yuvanapidaka* can be related with Acne vulgaris on the basis of sign and symptoms.

By definition, acne is a multifactorial, long-term inflammatory condition of the sebaceous glands². It is distinguished by the development of Comedones (both white & black) Papules (red tender bumps) Pustules (small pus filled lesions) less frequently nodules or cysts (large, solid painful pus-filled lumps beneath the surface of the skin), pain & in some cases scarring³.

¹PhD Scholar, Department of Kayachikitsa, Banaras Hindu University, Varanasi,
Email : ayurvedacharyasubhra@gmail.com, MOBILE NO- 7980816373

²H.O.D & Professor, Department of Dermatology, College of Medicine & Sagore Dutta Hospital, Kolkata

³Senior Medical Officer and Ex Assistant professor, Govt. of West Bengal

⁴H.O.D & Professor, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education and Research

*Address for corresponding- Department of kayachikitsa, Dhanwantari bhavan, Banaras Hindu University, Varanasi-221005

In the modern medical system, benzoyl peroxide, antibiotics, and retinoids are administered as topical agents, while oral antibiotics, hormonal therapy, and isotretinoin are administered systemically. Oral antibiotics are quite expensive and have serious side effects, including stomach upset, dizziness, and light-headedness. Therefore, there is a need for research into more effective, safer, and more affordable topical and oral medications. There are numerous Ayurvedic formulations for treating *Yuvan piadaka* and *Shodhan karma* has given utmost significance. Therefore, a trial of *Shodhan* and *Shaman* therapy for the treatment of *Yuvan Pidaka* has been conducted in this study.

Materials and methods-

a) Study Area: - The selection of patients was done randomly irrespective of their sex, Religion, Occupation, Socio-economic status. Patients were selected on the basis of clinical criteria.

b) Study Population: - From the OPD & IPD of kayacikitsa Department of Institute of Post Graduate Ayurvedic Education & Research at Shymadas Vaidya Shastra Pith Hospital, Kolkata.

c) Study Period: - 18 months. Individual patient for 6 months & follow up will be done in 4 weeks interval.

d) Sample Size: - 60 patients.

e) Sample Design: - Patients were divided into two groups consisting of thirty each.

Group A- Treated with *Vamana karma* followed by local application of *Dhanyakadi lepa*.

Group B - Treated with *Dhanyakadi lepa* & oral administration of *Manjistha churna*.

i) Inclusion Criteria-

- Patients having classified symptoms of *Yuvana pidaka* were selected irrespective of caste, religion & profession.
- Age group in between 12 to 30 years of either sex. Those who were ready to give written consent in prescribed proforma.
- Patients who were willing to give photograph.

ii) Exclusion Criteria-

- Diseases like Diabetes Mellitus, Hypertension, Bronchial asthma, severe form of Acne such as, Gram –ve folliculitis, acne fulminans, pyoderma faciale, acne conglobata.
- Treated case & those who were in wash period.
- Pregnancy and lactation.
- Patients unwilling for treatment for 6 months were excluded.

iii) Informed Consent- The consent of patient with signature and date were taken in three languages viz. Hindi, English, Bengali.

f) Selection of Drugs: -

All the component of drug were purchased from the local market and verified by the experts. They were brought to the Apothecary (Pharmacy) Department of Institute of Post Graduate Ayurvedic Education & Resarch, Shyamadas Vaidya Shastra Pith Hospital for preparation of the medicine.

Preparation of Medicine: -

Manjistha Churna (*Rubia cordifolia*)

Root of *Manjistha* was washed and dried under sunlight and made into fine powder form.

Ingredient of *Dhanyakadi lepa*-

- *Dhanyaka* (*Coriandrum sativum* Linn)
- *Lodhra* (*Symplocos racemosa* Roxb)
- *Vacha* (*Acorus calamus* Linn)

All the ingredients of the drug were collected. Then it was washed and dried under direct sunlight. It was made into powder form separately and were given to the patients along with water in *lepa* form.

g) Grouping of Patients: -

Total 60 patients were divided into two groups equally, Group A & Group B.

h) Drop Out:-

Total 5 patients out of 60 patients did not complete the therapeutic protocol and hence excluded from the clinical study.

Table -1: Grouping of Patient, Administration of Drug & Therapy, Vehicle and Duration of Treatment-

Group	Drug& Therapy	Form of Administration	No. of Patients	Duration of Treatment
Group A	<i>Saindhav lavan, Madhu, Madan phal, Yasthimadhu, Vacha, + Dhanyaka, Lodhra, Vacha</i>	<i>Vaman Karma</i> + Locally (paste form)	27	180days (24 weeks)
Group B	<i>Dhanyaka, Lodhra, Vacha + Manjistha</i>	Locally (paste form) +Oral	28	180days (24 weeks)

i) Assessment Criteria:-

The patients were assessed on the basis of relief of signs and symptoms. To assess the effect of therapy, all the signs and symptoms were aligned a scoring pattern following Visual Analog Scale (VAS) depending upon their severity.

1) Scoring on the basis of number of lesions.

Number of lesions	Score
Less than 10	1
10 - 15	2
15 - 20	3
More than 20	4

2) Scoring on the basis of size of the lesions.

Size of the lesions	Score
Less than 2mm	1
2mm – 5mm	2
5mm – 1cm	3
More than 1cm	4

3) Scoring on the basis of Area of distribution (Comprehensive Acne Severity System).

Area involved	Score
Clear	1
Only in face (mild)	2
Face & back (moderate)	3
Face, back & chest (severe)	4

4) Scoring on the basis of Inflammation of the lesions.

Inflammatory lesions	Score
No inflammation	1
Few to several	2
Several to many	3
Numerous / extensive	4

5) Scoring on the basis of Severity of the disease.

Severity	Score
Comedones, occasional papules (mild)	1
Papules, comedones, few pustules (moderate)	2
Predominant pustules, nodules (severe)	3
Mainly abscesses widespread scarring (cystic)	4

j) Statistical Evaluation of Result:-The statistical analysis was carried out by mean \pm standard deviation (SD) and standard error (SE). The comparison between two groups were done by student pair't' test. A p value of <0.05 was considered as level of significance.

Results –

The therapeutic trial was conducted in all the 60 patients out of which 55 patients completed the protocol. Effect of *Vaman karma* with *Dhanyakadi lepa* on Group A patients of *Yuvan pidaka* (*Acne vulgaris*)

Table- 2: Statistical data showing effectiveness of therapy in Group A.

Criteria n= 27	Mean Score		% of Relief	SD (+)	SE (+)	't' test	P value
	BT	AT					
Size of lesions	3.04	1.70	44.07%	0.876	0.168	7.93	P < 0.001
Number of lesions	2.92	1.44	50.68%	0.579	0.111	13.35	P < 0.001
Severity	2.41	0.78	67.63%	0.629	0.121	13.46	P < 0.001
Type of lesions	2.55	1.29	49.41%	0.712	0.137	9.19	P < 0.001
Area of distribution	3.26	1.81	44.47%	0.697	0.134	10.77	P < 0.001

It is evident from the table- 2, that among all the parameters of *Yuvan pidaka* (Acne vulgaris) in **Group A** like Size of lesions, Number of lesions, Type of lesions, Severity & Area of distribution; the result was statistically highly significant i.e. p < 0.001.

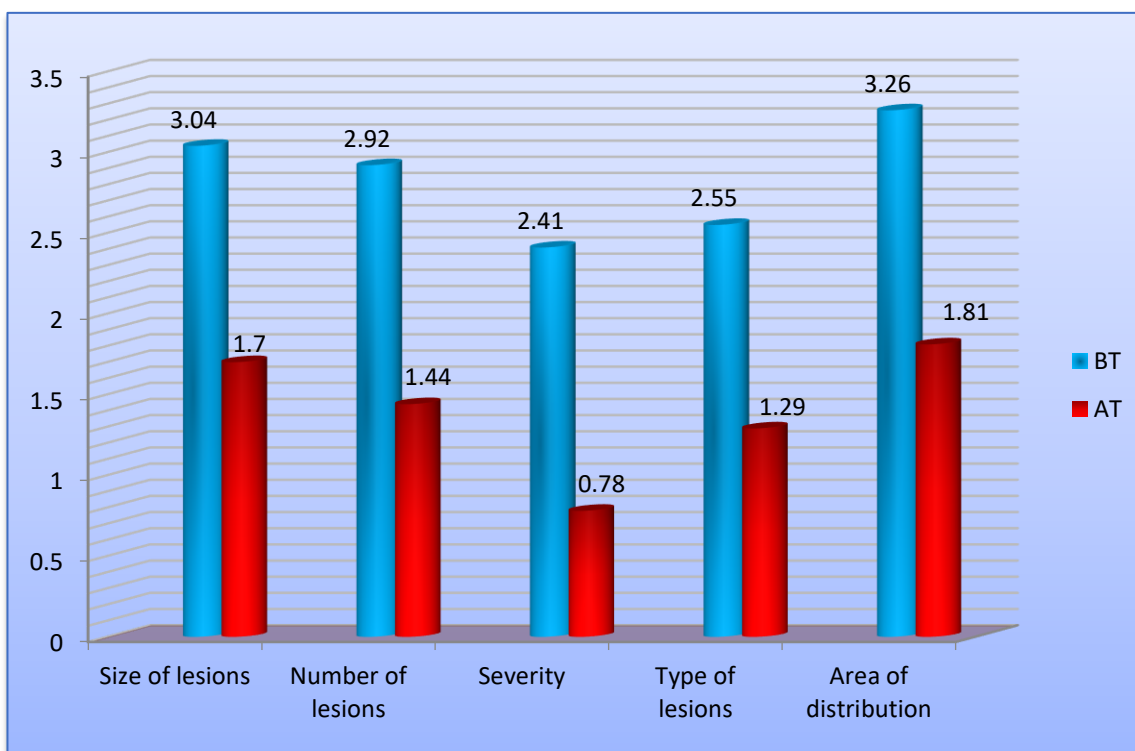


Fig 1: Effect of *Vaman karma* with *Dhanyakadi lepa* on Group A patients of *Yuvan pidaka*.

Effect of *Dhanyakadi lepa* & *Manjistha churna* on Group B patients of *Yuvan pidaka* (Acne vulgaris).

Table- 3: Statistical data showing effectiveness of therapy in Group B.

Criteria n= 28	Mean Score		% of Relief	SD (+)	SE (+)	't' test	P value
	BT	AT					
Size of lesions	2.25	2.10	6.67%	0.356	0.067	2.134	P < 0.02
Number of lesions	2.18	1.96	10.09%	0.417	0.078	2.715	P < 0.01
Severity	2.2	2.07	5.91%	0.314	0.059	1.801	P < 0.05
Type of lesions	1.82	1.64	9.89%	0.428	0.081	2.197	P < 0.02
Area of distribution	1.64	1.53	6.7%	0.315	0.06	1.833	P < 0.05

It is evident from the table – 3, that among all the parameters of *Yuvan pidaka* (Acne vulgaris) in **Group B** like Size of lesions, Number of lesions, Type of lesions, Severity & Area of distribution. The result was statistically significant i.e., p < 0.01 in Number of lesions, p < 0.02 in Size of lesions & Type of lesions, whereas p < 0.05 in both Area of distribution as well as Severity of Acne lesions.

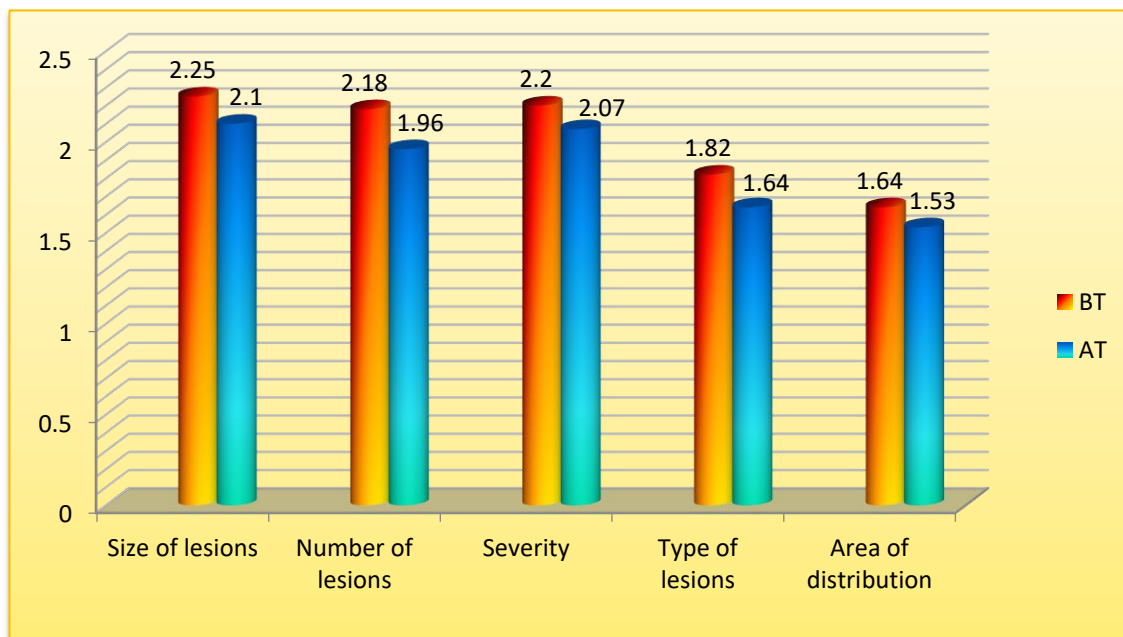


Fig 2: Effect of *Dhanyakadi lepa* & *Manjistha churna* on Group B patients of *Yuvan pidaka*.

Table- 4: Comparative photos of both groups' earlier and later states.

Group	Before	After
A		
B		

Discussion-

Acne vulgaris can appear clinically in a variety of ways, including comedonal lesions with inflammatory papules, pustules, and nodules on the face, back, and chest. Similar to the *Shalmali kantak* referenced in Ayurvedic writings, it depicts. Thus, it is comparable to Acne vulgaris. The predisposing factors for acne vulgaris were discussed in modern dermatology texts, including genetic factors, lifestyle and environmental variables, dietary issues—particularly high glycemic diets—and dairy products like yoghurt and cheese. Similar to this, every Ayurvedic source highlights *Viruddha- ahar*, *Visamasan*, *Mithya-apachar*, etc. as risk factors for illness occurrence.

Based on the fundamental principle of Ayurveda, which states that the goal of treatment is to break the *Samprapti* chain causing any disease, medications with *Kapha Vatahara*, *Rakta Sodhak*, *Sothahara*, *Vedana- Sthapana*, *Vrana-Ropan*, *Ushana-Veerya*, *Lekahna*, and *Srotoshodhana* qualities were used.

In light of all of these considerations, management favoured *Shodhan* therapy (*Vamana Karma*) and *Shamana* therapy (*Shamana yoga* and *lepa* for topical application).

The present study shows that maximum number of cases were belonging to 21 – 25 years of age group (total incidence were 46.67%) followed by next higher incidence from 15 – 20 years i.e., 28.33%, where it is found that the females i.e., 58.33% were the maximum sufferer in comparison to males i.e., 41.67%. In this study it was observed that most of the patients i.e., 31.67% were from 1 month – 6 months followed by next higher incidence of 30% were more than 6 months – 1 year and it was found that 51.67% patients were having no family history while 48.33% patients having family history of *Yuvan pidaka* (~Acne vulgaris). The study reveals that 38.33% patients prefer for oily foods and 36.67% patients were fond of dairy foods. According to Ayurveda, the excessive intake of milk products & oily substances vitiates the *Kapha dosha* as well as *Meda dhatu*, where as excessive intake of irritant and spicy (*Tikshna*) food article vitiate *Pitta* and *Rakta doshas*. This study reveals that 38.33% of patients were using cosmetics and 30% had aggravation during stress followed by 23.33% patients had an exacerbation in summer. Maximum patients came with involvement of face only i.e., 86.67%, because of the maximum number of sebaceous glands found on this site and also the size of the glands are comparatively large.

Effect of therapy in response to **Severity**, the treatment showed highly significant result in **Group A** i.e., $p < 0.001$, whereas in **Group B** significant result was obtained i.e., $p < 0.05$.

Effect of therapy in response to **Size of acne lesions**, the treatment showed highly significant result in **Group A** i.e., $p < 0.001$, whereas in **Group B** significant result was obtained i.e., $p < 0.02$. Effect of therapy in response to **Number of acne lesions**, the treatment showed highly significant result in **Group A** i.e., $p < 0.001$, whereas in **Group B** significant result was obtained i.e. $p < 0.01$. Effect of therapy in response to **Type of acne lesions**, the treatment showed highly significant result in **Group A** i.e. $p < 0.001$, whereas in **Group B** significant result was obtained i.e. $p < 0.02$. In respect to **Area of distribution**, the treatment showed highly significant result in **Group A** i.e. $p < 0.001$ and whereas in **Group B** significant result was obtained i.e., $p < 0.05$.

PROBABLE MODE OF ACTION OF VAMANA KARMA –

Probable pharmacological action of *Vamaka dravya* work in collaboration with each other to produce emesis. Due to *Ushna guna*, it produces *Pachana*, *Dahana*, *Svedana* and spreading of the drug at cellular level. *Lavana* produces *Vishyandana* in the body. *Tikshna guna* of *Vamaka dravya* is responsible for its quick action, *Sodhana*, *Pachana*, *Chhedana* and *Sravana* of *doshas* in their own places. The *Vamana dravya* enters at the level of the micro circulatory channels (*Srotas*) with the aid of *Sukshma guna*, leading to *Pachana* and *Vishyandana* of *doshas* and finally guiding *doshas* towards *Koshtha*, from which they are readily expelled. *Vamana* is created by *Vamaka Dravyas* because of their "*Urdhwa Bhagahara Prabhava*"⁴.

PROBABLE MODE OF ACTION OF DRUG –

Manjistha Churna- It contains *Madhur*, *Tikta*, and *Kashaya rasa*, with *Guru guna*, *Usna virya*, and *Katu vipak*⁵ dominating. It demonstrates *Tridosha shamaka* property and treats *Daha* and *Vrana* as a result. *Prashadan* and *Varnya's* property is *Madhur Rasa's*. As a result, it makes the skin fairer and gives it a wonderful texture. *Tikta rasa* possesses the properties of *Dipan* and *Pachan*, potentiating *Jatharagni* and *Dhatwagni* as a result, which decreases the development of *ama* and stops the *dhatu saithailya*.

Dhanyakadi Lepa – By applying *lepa* to lesions that grow in the opposite direction from the hairs, the active ingredients can enter the *romakupa* and be absorbed through the *swedavaha srota*. *Kandu* and *daha* are lessened by the *lepa's Kapha-Pitta shamaka* property of *dhanyak*⁶ and *lodhra*⁷, whereas *Vedana* (pain) is lessened by the *Vata shamaka*⁸ property of *Vacha*. Whereas *Madhur rasa* has property of *Kshina khata sandhankar*, so it improves the scar formation (*vrana vasthu*).

Limitation –

Small sample population and brief study time precluded drawing any firm conclusions.

Conclusion–

In compared to taking *Manjistha churna* and *Dhanyakadi lepa* orally, *Vaman karma* with *Madanphaladi yoga* and external application of *Dhanyakadi lepa* functions considerably and yields superior outcomes. It suggests that *Vaman Karma* has a clear role in the administration of *Yuvan Pikaka*. The current clinical investigation has not revealed any negative

outcomes. In comparison to Group B patients, the statistical interpretation was determined to be extremely significant in patients in Group A, i.e., $p < 0.001$.

Reference–

1. Singhal, G.D., Susruta Samhita, Delhi, Chaukhamba Sanskrit Pratishthan: Vol-I; 2007; ch-13/37, page-596.
2. Burns T, Breathnach S, Cox N, Griffiths C, Rook's Text book of Dermatology; 7 th ed. Vol.43: Black well science, 2004; 43.1- 43.75.
3. Gollnick HP, Schulte A. pathogenesis and pathogenesis – related treatment of acne. J Dermatol, 1991; 18: 489-91.
4. Sharma, R.K., Dash, Bhagwan., Caraka Samhita, Varanasi, Chowkhamba Sanskrit Series Office, Vol-VI , 2013; ch-1/4, page-3.
5. Sastry, J.L.N., Dravyaguna Vigyana, Chaukhamba Orientalia, Varanasi, Vol-II, 2010, pg-279.
6. Sastry, J.L.N., Dravyaguna Vigyana, Chaukhamba Orientalia, Varanasi, Vol-II, 2010, pg-264 - 265.
7. Sastry, J.L.N., Dravyaguna Vigyana, Chaukhamba Orientalia, Varanasi, Vol-II, 2010, pg-323.
8. Sastry, J.L.N., Dravyaguna Vigyana, Chaukhamba Orientalia, Varanasi, Vol-II, 2010, pg-547.