

Ayurvedic Management of Yuvanapidika with W.S.R. Acne Vulgaris in an Adolescent: A Case Report

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ABSTRACT

Yuvanapidika, described under Kshudra Roga in Ayurveda¹, closely resembles Acne vulgaris, a chronic inflammatory disorder of the pilosebaceous unit characterized by comedones, papules, pustules, nodules, and cysts.² It affects approximately 85–90% of adolescents during puberty,³ making it one of the most common dermatological conditions worldwide. In Ayurveda, Yuvanapidika is primarily attributed to the vitiation of Kapha, Vata, and Rakta Dosha.⁴ Although self-limiting, it can lead to facial scarring, post-inflammatory pigmentation, and considerable psychosocial distress, necessitating timely intervention.⁵ Conventional treatment includes topical retinoids, benzoyl peroxide, and antibiotics, which may be associated with adverse effects and antimicrobial resistance.⁶ Ayurveda advocates Shamana Chikitsa using internal formulations and Lepa Kalpana⁷ to address the underlying Dosha-Dushya Samprapti while promoting healthy skin. Therefore, the present study was undertaken to evaluate the efficacy of Ayurvedic formulation for yuvanapidika. A 16-year-old female patient presented with Acne (facial), papules with burning sensation and pain on forehead. Her symptoms significantly improved after receiving medicine for both internal and external application. The treatment approach, including the use of Nimbadi Kashaya orally and lodhradi lepa internally. The papules resolved and the itching, pain and burning sensation disappeared..

Keywords: Yuvanapidika, papules, nimbadi Kashaya, lepa...

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CASE REPORT

A 16-year-old female presented to the Kaumarbhritya Outpatient Department with complaints of recurrent painful papules predominantly over the forehead, associated with

pruritus and erythema. The lesions had been recurring intermittently for the past one year and healed with post-inflammatory hyperpigmentation. She had previously received topical adapalene-clindamycin combination therapy and oral doxycycline for approximately six months

without significant clinical improvement. As she was unwilling to continue conventional treatment, she sought Ayurvedic management. The patient reported occasional aggravation of lesions following the use of soaps, face washes, and cosmetic creams. There was no history of fever, psoriasis, eczema, melasma, thyroid dysfunction, polycystic ovary syndrome, chronic systemic illness, or previous surgical interventions. A comprehensive clinical evaluation was performed using modern dermatological assessment and Ayurvedic diagnostic principles.

Personal history:

family history- patient has no significant family history

Diet: Mixed (consumes non-vegetarian food approximately two times per week)

Appetite: Decreased

Bowel: Irregular (once every alternate day)

Micturition: Regular (5–6 times/day)

Sleep: Disturbed due to pain

Addiction: No addictions

General Examination

Blood Pressure: 130/90 mmHg

Pulse Rate: 78 bpm

Respiratory Rate: 18/min

Temperature: 98°F

Pallor: Absent

Icterus: Absent

Cyanosis: Absent

Clubbing: Absent

Oedema: Absent

Ashtavidha Pariksha :

Nadi (pulse rate)- 78/min

Sparsha (touch)- Samsheetoshna (normal)

Mala (bowel)- Vibandha

Mutra (frequency of micturition)- 4-5 times per day

Shabda (speech)- Spastha (clear)

Drik (vision)- Normal

Jivha (tongue)- Saama (coated)

Aakriti (body built)- Madhyam (medium)

Dashavidha Pariksha :

Prakriti : Vata-Pitta

Vikriti: Pitta, Kapha, Rasa, Rakta, Meda (humour constitution of body and blood tissues)

Sara (quality of tissues): Asthisara (quality of bone tissue)

Samhanana (built of body): Madhyam (average)

Pramana (anthropometric measurements): Madhyam (average)

Satmya (adaptability): Amla (sour), Lavana (savory) Rasa (taste)

Satva (mental strength): Madhyam (average)

Vyayamashakti (exercise capacity): Madhyam (average)

Aharashakti (food and digestion capacity): Madhyam (average)

Vaya (age): 16 years

Systemic examination:

Respiratory system- Chest is bilaterally symmetrical, with no abnormal sounds heard.

Cardiovascular system- S1S2 normal.

Musculoskeletal system- Superficial and deep reflexes are intact

Gastrointestinal system- Soft, non tender, non palpable.

Local examination:

On local examination, multiple open and closed comedones, inflammatory reddish papules, and 2–3 pustular lesions were observed predominantly over the forehead. The lesions measured approximately 1–4 mm in diameter and were distributed over seborrheic (oily) skin. The inflammatory lesions were tender on palpation, with no evidence of discharge. Areas of post-inflammatory hyperpigmentation were present over the forehead. No nodules, cysts, sinus tracts, or acne scars were identified.

Nidana (Aetiology): The patient consumes oily, spicy, sour and junk food and having indigestion, disturbed sleep, constipation.

Samprapti (Pathogenesis):

Due to the patient's dietary and lifestyle factors, vitiation of pitta pradhana tridoshas which causes Ras-Rakta-Meda, and swedovaha strotodushti, Romakupa srotorodha, resulting in the development of Yuvanapidika.

Samprapti Ghataka (Pathogenic factors):

Dosha (regulatory functional factors of body): Pitta, kapha pradhana tridosha

Dushya (vitiation of functional factors of body): Rasa (plasma), Rakta (blood), Meda (fat), Sweda (sweat)

Agni (metabolic factor): Dhatwagni (tissue metabolism), Jataragni (digestive fire)

Strotasa (channels): Rasavaha (channels carrying plasma), Raktavaha (channels carrying blood), Medovaha (channels carrying fat)

Rogamarga (pathway of disease): Abhyantara (internal)

Udbhavasthana (place of origin): Amashaya (stomach)

Vyaktasthana (manifestation site): Mukha (face)

Swabhava (nature): Chirkari (chronic)

Diagnosis: Yuvana pidika (Acne vulgaris)

Assessment criteria :

AYURVEDIC GRADING SCALE ⁸

Subjective

Ruja (pain)

Kandu (Itching)

Daha (burning)

Objective

Shalmali kantik sadrush

Shotha (inflammation)

Strava (discharge)

Paka (stage of inflammation)

Grading of parameters

Grades Symptoms	0	1	2	3	4
Number of Pidikas	No Pidika	Number of Pidikas < 5	Number of Pidikas > 5 but < 10	Number of Pidikas >10 but < 20	Number of Pidikas >20
Area occupied by Pidikas (nose, chin, forehead, cheek, upper chest, upper back)	No Pidikas	Any 1 part of face	Any 2 part of face	Any 3 part of face	Whole face with or without chest & back
Kandu (itching)	No kandu	Occasionally Kandu	Frequently	continuous	
Daha (burning)	No daha	Occasionally	Frequently	continuous	
Raag (redness)	No redness	Mild	Moderate	Severe	
Srava (discharge)	No srava	Very less need not to mob	Needs mobbing	Profuse	
Vedana (pain)	No Vedana	No Vedana	On simple touch	Without touching	

Drug	Dose	Duration
Lodhradi lepa	Local application with water	30 days
Nimbadi Kashaya	10 ML BD with lukewarm water after meal	30 days

Treatment plan: When the patient visited OPD, only Shamana chikitsa was planned.

Diet and lifestyle are advised during treatment

GLOBAL ACNE GRADING SYSTEM (GAGS):⁹

The Global Acne Grading System (GAGS) divides the face, chest, and upper back into six anatomical regions with weighting factors: forehead (2), right cheek (2), left cheek (2), nose (1), chin (1), and chest/upper back (3).

Each type of lesion is given a Grade depending on severity:

No lesions = 0

Comedones = 1

Papule = 2

Pustules = 3

Nodules = 4

Score for each area (Local Score) is calculated using the formula:

Local Score = Factor × Grade (0-4)

Global Score is the sum of Local Score and Acne Severity was graded using the Global Score

Pathya (Do's):

Green leafy vegetables, wheat, rice, moong dal, fruits, lukewarm water in sufficient quantity to drink, homemade food, While exposure to dust and smoky areas, cover the face with cloth. Adherence to a regular dinacharya (consistent diet and sleep routine) was advised.

Apathya (Don'ts):

Junk food, curd, pickles, cold drinks, non-veg, tea, alcohol, excess sweets, excess spices, fried food, and food articles having excess fat content. Ratrijagaran (night awakening), Divaswapna (daytime sleeping), manual rupturing of acne, excessive exposure to sunlight, and dust.

Follow-up and outcome

Changes in ayurvedic grading scale after intervention

Sign and symptoms	Before treatment	1st follow up	2nd follow up
Number of Pidikas	3	2	0
Area occupied by Pidikas	1	1	0
Kandu (itching)	2	1	0
Daha (burning)	2	1	0
Raag (redness)	2	1	1
Srava (discharge)	1	0	0
Vedana (pain)	2	1	0

Changes in GAGS after intervention

	Before treatment	1 st follow up	2 nd followup
Total Score	12	5	0

After 15 days; during first follow-up: The texture and size of the lesion got reduced, along with the reduction in burning ,pain and other symptoms.

At the second follow-up (Day 30): No new acne lesions were observed following the intervention, and complete remission was achieved after one month of treatment. No adverse effects were reported during the treatment period.



Before treatment



After treatment

DISCUSSION:

In the present case, there was a history of regular consumption of Vidahi (sour and pungent), Abhishyandi¹⁰ (potential elements causing obstruction in channels), and Virrudha¹¹ (incompatible) food such as fast food, salty, and oily substances with the habit of Adhyashana¹² (consuming food without earlier meal completely digested), Ratri Jagaran (late night sleep), and Divaswapana¹³ (day time sleep). These etiological factors may be the cause for vitiation of Kapha-Pitta and Rakta, further causing secondary vitiation of Vata due to Srotas avarodha (sebaceous glands in this pathogenesis) resulting in the formation of Pidika (eruptions) on the face with clinical presentation as acne with pain, itching, and discoloration of skin. Kapha-Pitta-Rakta pacifying treatment was planned according to the principles of the management of Yuvana pidika

Lodhradi Lepa :¹⁴

Lodhradi Lepa, containing Lodhra, Dhanyaka, and Vacha, acts by pacifying the vitiated Kapha, Pitta, and Vata Doshas. Its Madhura, Tikta, and Kashaya Rasa, along with Snigdha, Ruksha, and Ushna/Sheeta properties, help alleviate Daha (burning sensation), Shotha (inflammation), Vedana (pain), and Raga (redness) while improving Twak Varna (skin complexion).^{15,16,17} The Ruksha, Ropana, and Lekhana properties facilitate drying of the papules, promote healing, and aid in the drainage of pustular contents. Additionally, the Kashaya Rasa contributes to Rakta Prasadena

(purification of vitiated blood), thereby helping to resolve skin disorders such as Yuvanapidika.

The therapeutic effects of Lodhradi Lepa can also be explained by its pharmacological activities. Its ingredients are rich in flavonoids and tannins, which possess potent antioxidant properties that protect the skin from oxidative stress and inflammation.^{18,19} The formulation exhibits anti-inflammatory, analgesic, and antibacterial activities,^{20,21} helping to reduce pain, erythema, swelling, and the microbial load associated with acne lesions. Furthermore, tannins promote tissue repair by enhancing capillary formation and accelerating wound healing, thereby contributing to faster resolution of acne lesions and improved skin appearance.²²

Nimbadi Kashaya :

Nimbadi Kashaya²³, comprising Nimba, Amrita, Vishwa, Amalaki, Bibhitaki, Haritaki, Patola, Brihati, Vasa, and Nisha, acts on the Samprapti of Yuvanapidika by correcting Rasa, Rakta, and Medo Dhatvagni, thereby breaking the disease process at multiple levels. Nimba and Amrita, owing to their Tikta-Kashaya Rasa and Krimighna properties, alleviate Kapha-Pitta Dushti at the level of Rasa and Rakta Dhatu. Triphala helps normalize Jatharagni and Dhatvagni, thereby correcting Agnimandya and ensuring proper Dhatu Poshana.

Patola and Vasa, with their Kaphapittahara and Twagdosahara properties, alleviate Meda Dushti and Swedavaha Srotodushti, the principal sites involved in the

Samprapti of Yuvanapidika. Nisha (Haridra), owing to its Varnya and Vranaropana properties, promotes Twak Prasadana and facilitates lesion healing. Thus, Nimbadi Kashaya acts on the principle of Viparita Guna Chikitsa, wherein Katu, Tikta, and Kashaya Rasa Pradhana Dravyas mitigate Kapha-Pitta-Meda Sammurchana, thereby interrupting the Samprapti of Yuvanapidika and may leads alleviate clinical features of yuvanapidika.

The therapeutic efficacy of Nimbadi Kashaya may be attributed to the synergistic pharmacological actions of its phytoconstituents. Bioactive compounds such as quercetin, berberine, gedunin, chebulagic acid, and curcumin exhibit anti-inflammatory, antioxidant, antimicrobial, sebostatic, and wound-healing activities.^{24,25} These compounds inhibit Cutibacterium acnes proliferation and biofilm formation, suppress NF-κB-mediated inflammatory pathways, reduce pro-inflammatory cytokine release, regulate sebum production, and accelerate healing of acne lesions, thereby contributing to the clinical improvement observed in acne vulgaris.²⁶

CONCLUSION :

Acne vulgaris is a common chronic and relapsing disorder that requires timely and appropriate management to prevent recurrence and its associated physical and psychosocial consequences. The present case demonstrates that an individualized Ayurvedic approach based on Pancha Nidana and Samprapti, employing only two formulations—Nimbadi Kashaya for internal administration and Lodhradi Lepa for external application—resulted in complete remission of lesions with relief from associated symptoms, without any adverse effects or recurrence during the follow-up period. The favorable clinical outcome achieved with this minimal therapeutic intervention highlights the potential efficacy of these Ayurvedic formulations in the management of Yuvanapidika.

REFERENCE

1. Sushruta. Sushruta Samhita, Nidana Sthana, Kshudraroga Nidana Adhyaya, Chapter 13, Verse 38-39. Trikamji Acharya Y, editor. Varanasi: Chaukhambha Sanskrit Sansthan; reprint.
2. Sutaria AH, Masood S, Saleh HM, Schlessinger J. Acne Vulgaris. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Aug 17. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK459173/>
3. Fox L, Csongradi C, Aucamp M, du Plessis J, Gerber M. Treatment modalities for acne. *Molecules*. 2016;21(8):1063.
4. Sushruta. Sushruta Samhita, Nidana Sthana, Kshudraroga Nidana Adhyaya, Chapter 13, Verse 38. Trikamji Acharya Y, editor. Varanasi: Chaukhambha Sanskrit Sansthan; reprint.
5. Dawson AL, Dellavalle RP. Acne vulgaris. *BMJ*. 2013;346:f2634.
6. Walsh TR, Efthimiou J, Dréno B. Systematic review of antibiotic resistance in acne: an increasing topical and oral threat. *Lancet Infect Dis*. 2016;16(3):e23-e33.
7. Sharangadhara. Sharangadhara Samhita, Madhyama Khanda, Chapter 5, Verse 7; also Uttara Khanda, Lepadi Vidhi Adhyaya, Chapter 11. Rao GP, editor. Varanasi: Chaukhambha Sanskrit Sansthan; 2013.
8. Deshpande MA, Kulkarni S, Deshpande A. Evaluation of combined efficacy of Lodhradi lep with Khadirashtak kwath in Mukhdushika. *International Journal of Ayurvedic Medicine* [Internet]. 2023 Apr 4;14(1):260–7.
9. Doshi A, Zaheer A, Stiller MJ. A comparison of current acne grading systems and proposal of a novel system. *Int J Dermatol*. 1997;36(6):416-418.
10. Agnivesha. Charaka Samhita, Nidana Sthana, Prameha Nidana Adhyaya, Chapter 4, Verse 6. Revised by Charaka and Dridhabala; Acharya YT, editor. Varanasi: Chaukhambha Surbharati Prakashan; 2000.
11. Agnivesha. Charaka Samhita, Sutra Sthana, Atreyabhadrapyaya Adhyaya, Chapter 26, Verses 81-102 (Viruddha Ahara — 18 types of incompatible food combinations, including desha, kala, and samskara viruddha). Revised by Charaka and Dridhabala; Acharya YT, editor. Varanasi: Chaukhambha Surbharati Prakashan; 2000.
12. Vagbhata. Ashtanga Hridaya, Sutra Sthana, Matrashitiya Adhyaya, Chapter 8, Verse 39. Paradkar HS, editor. Varanasi: Chaukhambha Sanskrit Sansthan; reprint.
13. Vagbhata. Ashtanga Hridaya, Sutra Sthana, Dinacharya Adhyaya, Chapter 7, Verses 33-34, 57-58. Paradkar HS, editor. Varanasi: Chaukhambha Sanskrit Sansthan; reprint.
14. Shri Kaviraj Ambikadatta Shastri Ayurvedacharya (2018) Bhaisajya Ratnavali. Varanasi: Chaukhambha Prakashana. Page no. 949.
15. API. The Ayurvedic Pharmacopoeia of India. Part I, Vol. I. New Delhi: Government of India, Ministry of AYUSH; 2001. Monograph on Lodhra (Symplocos racemosa).
16. API. The Ayurvedic Pharmacopoeia of India. Part I, Vol. I. New Delhi: Government of India, Ministry of AYUSH; 2001. Monograph on Dhānyaka (Coriandrum sativum).
17. API. The Ayurvedic Pharmacopoeia of India. Part I, Vol. I. New Delhi: Government of India, Ministry of AYUSH; 2001. Monograph on Vācā (Acorus calamus).
18. Ninfali P, Antonelli A, Frati A, Scarpa ES. C-glycosyl flavones from Avena sativa L. and their antioxidant activity. *Phytother Res*. 2009;23(4):503-9.
19. Gollnick HPM, Zouboulis CC. Not all acne is acne vulgaris: insights from comedones and inflammatory lesions. *Br J Dermatol*. 2014;171(Suppl 1):17-22.
20. Gupta R, Kumar V, et al. Systematic review of

- preclinical studies about effects of *Coriandrum sativum* L. on inflammatory mediators. *Inflammopharmacol.* 2022;30(4):1131-1141. doi:10.1007/s10787-022-01000-3
21. Gupta R, Kumar V, et al. *Coriandrum sativum* L. review also supports anti-inflammatory potential, which is often used to justify reduced inflammatory burden in acne lesions. *Inflammopharmacol.* 2022;30(4):1131-1141. doi:10.1007/s10787-022-01000-3.pubmed.ncbi.nlm.nih
22. Gupta R, Kumar V, et al. *Coriandrum sativum* L. review also supports anti-inflammatory potential, which is often used to justify reduced inflammatory burden in acne lesions. *Inflammopharmacol.* 2022;30(4):1131-1141. doi:10.1007/s10787-022-01000-3.pubmed.ncbi.nlm.nih
23. Sahasrayoga. Kaṣāya Yoga. Nimbādi Kaṣāya; indicated in Vidradhi; anupāna: Makshika, Guggulu.
24. Miao Y, Wu Y, Xie S, et al. Inhibitory effect of quercetin on *Propionibacterium acnes*-induced skin inflammation. *Int Immunopharmacol.* 2021;96:107557. doi:10.1016/j.intimp.2021.107557.
25. Zhang X, Li X, Wang Y, et al. The antibacterial activity of berberine against *Cutibacterium acnes*: its therapeutic potential in inflammatory acne. *Front Microbiol.* 2024;14:1276383. doi:10.3389/fmicb.2023.1276383.
26. Kim SH, Lee JH, et al. Gedunin mitigates *Cutibacterium acnes*-induced skin inflammation by inhibiting the NF-κB pathway.. ...