

A comparative clinical study of Ashwagandha and Shephalica on Gridhrasi

Kumari A^{1*}, Kumar S², Laxmi A³, SN Tiwari⁴

DOI:10.21760/jaims.10.6.7

^{1*} Anjali Kumari, Post Graduate Scholar, Department of Dravyaguna, Government Ayurvedic College and Hospital, Patna, Bihar, India.


² Sumit Kumar, Assistant Professor, Department of Rasa Shastra and Bhaisajya Kalpana, Jeevak Ayurvedic College, Chandauli, Uttar Pradesh, India.

³ Anuradha Laxmi, Post Graduate Scholar, Department of Rasa Shastra and Bhaisajya Kalpana, Government Ayurvedic College and Hospital, Patna, Bihar, India.

⁴ SN Tiwari, Professor, Department of Dravyaguna, Government Ayurvedic College and Hospital, Patna, Bihar, India.

In India 70% to 80% of population complaints of lower back pain, making it most common condition. Today the lives of vast number of people lie in the hand of health care system, which have a vital and continuing responsibility to maintain the health of people throughout the lifespan. In Charka Samhita Sciatica is described as Gridhrasi in Vatavyadhiadhyay. Sciatica is characterized by radiating sharp shooting pain from back of thigh. Gesture of extremity normally increase the tolerate. Sciatica appears to constriction or injury of the sciatic nerve or its source. The Ashwagandha and Shephalika contains all above explained properties with easily available in our surrounding. It improves quality life of sciatica patients. The present study was planned to evaluate the efficacy of Ashwagandha and Shephalika on Gridhrasi.

Keywords: Gridhrasi, Sciatica, Ashwagandha, Shephalika

| Corresponding Author | How to Cite this Article | To Browse |
|--|---|---|
| Anjali Kumari, Post Graduate Scholar, Department of Dravyaguna, Government Ayurvedic College and Hospital, Patna, Bihar, India. Email: anjalikumari.ak775@gmail.com | Kumari A, Kumar S, Laxmi A, SN Tiwari, A comparative clinical study of Ashwagandha and Shephalika on Gridhrasi. J Ayu Int Med Sci. 2025;10(6):45-49. Available From https://jaims.in/jaims/article/view/4516/ |  |

Manuscript Received
2025-05-12

Review Round 1
2025-05-24

Review Round 2
2025-06-04

Review Round 3
2025-06-14

Accepted
2025-06-24

Conflict of Interest
None

Funding
Nil

Ethical Approval
Yes

Plagiarism X-checker
11.36

Note



© 2025 by Kumari A, Kumar S, Laxmi A, SN Tiwari and Published by Maharshi Charaka Ayurveda Organization. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License <https://creativecommons.org/licenses/by/4.0/> unported [CC BY 4.0].



Introduction

Ayurveda means knowledge of life and life style. *Ayurveda* popularly used among Indians as traditional medicine. The unique feature of *Ayurveda* is its two purposes, promotion of health and prevention of disease. *Dravyaguna* is the backbone of *Ayurvedic* treatment. As from the beginning drugs obtained from the plants are the main source to cure the diseases and restore quality of life. We have the longest unbroken health tradition which has not only a stream of practitioners but also a textural and theoretical background.

It has important role in developing different type of system of medicine all over the World. Literary study was divided into two segment drug analysis and disease analysis. In *Ayurvedic* drug review, various source of *Ashwagandha*[1] and *Shephalika*[2] were compiled from various texts e.g. *Vedic*, *Samhita Madhyamakala* and *Nighantukala*.

Withania somnifera and *Nyctanthes arborescens* described in detail according to their taxonomic position, family characters, genus characters, genus key, species key, synonyms, vernacular names, botanical characters, distribution etc. in modern drug review. In the pharmacognostical part of the experimental study, morphological and microscopic identifying characters of both the plant were studied.

In physicochemical study, standard physicochemical parameters along with qualitative analysis of both the plant were carried out. Clinical study was carried out to assess comparatively in sciatic pain of *Withania somnifera* and *Nyctanthes arborescens*.

Aims and Objectives

1. To assess the potency of *Ashwagandha Churna* and *Shephalika Patra Churna* in the supervision of Sciatica.
2. To compare the efficacy of both drugs separately and in mixed form.
3. To note down the adverse effects if observed.

Materials and Methods

Criteria for selection

Case with characteristics of sciatica, either attending OPD or IPD of Govt. Ayurvedic College & Hospital Patna (Bihar) were selected for the present study.

Inclusion Criteria

1. Age between 20 years to 70 years.
2. Patients with history of sciatica was included in the study.

Exclusion Criteria

1. Age below 20 years & above 70 years.
2. Patients have any other complications.
3. Patients with chronicity of more than 10 years.
4. Patients suffering with T.B. spine, tumours of spine, focal neuropathy and any septic or infectious disease of spine.
5. Patients suffering with Diabetes or Diabetic neuropathy, Gout, Rheumatoid Arthritis and fracture of hip bone.

Criteria for Assessment

Objective Criteria

1. Straight leg raising test (SLR test)
2. Walking Time (for 20 meters)
3. Lab Investigation, ESR, CRP, Serum Creatinine, CBC, RBS, L-S spine x- ray (AP & LAT. View)

Statistical Analysis

The data collected on basis of examination made about many variables was subjected to statistical study in terms of mean, standard deviation (SD) and Standard error (SE). Paired 't' test was used for the assessment of the effect in single groups and unpaired 't' test was used to compare the effect in both the groups.

$P < 0.05$ was considered as statistically non-significant and $P < 0.01$ was considered as statistically significant and $P < 0.001$ was considered statistically highly significant.

Observation and Results

60 patients had given their consent and were registered for the clinical trial divided into three groups. During clinical trial 3 patients were dropped out.

Group A

This group was treated with *Ashwagandha*. Out of 19 patients in group A after completion of treatment 3 patients were cured and 41.18 patients showed markedly improvement. 27.78% patients showed improved result, remaining 5.56% patients were unchanged.

Group B

This group was treated with *Shephalika*. Out of 19 Patients 3 was cured and 66.67% patients showed markedly improvement. 52.94% patients showed improved result. Remaining 5.88% patients were unchanged.

Group C

This group was treated with *Ashwagandha* & *Shephalika*. Out of 19 Patients, 9 was cured and 96% patients showed markedly improvement and 4% showed Improvement.

Table 1: Grouping of patients

| Type | No. of Patients | | | Total | % |
|--------------|-----------------|---------|---------|-------|-----|
| | Group A | Group B | Group C | | |
| Registered | 20 | 20 | 20 | 60 | 100 |
| Completed | 19 | 19 | 19 | 57 | 95 |
| Discontinued | 1 | 1 | 1 | 3 | 5 |

Table 2: Prakriti wise Distribution

| SN | Prakriti | Group A | Group B | Group C | Total | % |
|----|-------------|---------|---------|---------|-------|-------|
| 1. | Vata-Pitta | 03 | 07 | 04 | 14 | 23.33 |
| 2. | Vata-Kapha | 12 | 09 | 10 | 31 | 57.41 |
| 3. | Kapha-Pitta | 04 | 03 | 05 | 12 | 22.22 |

Prakriti - Maximum no. of patients were of *Vatakaphaja*[5] (57.41%) followed by *Kaphapittaja*[6] (22.22%) *Vatapittaja*[7] 23.33% respectively.

Table 3: Distribution according to the types of Gridhrasi

| SN | Types | Group A | Group B | Group C | Total | % |
|----|--------------|---------|---------|---------|-------|-------|
| 1. | Vataja | 07 | 09 | 06 | 22 | 36.66 |
| 2. | Vata-kaphaja | 12 | 10 | 13 | 35 | 64.81 |

Table 4: Chief Complaint wise Distribution

| SN | Chief Complaint | Group A | Group B | Group C | Total | % |
|----|-----------------|---------|---------|---------|-------|-------|
| 1. | Ruk | 19 | 17 | 18 | 54 | 100 |
| 2. | Toda | 14 | 14 | 17 | 45 | 83.33 |
| 3. | Stambha | 14 | 14 | 15 | 43 | 79.63 |
| 4. | Muhuspananda | 6 | 5 | 8 | 19 | 35.18 |
| 5. | Tenderness | 9 | 8 | 14 | 31 | 57.40 |
| 6. | Gaurava | 7 | 6 | 3 | 16 | 29.63 |
| 7. | Arochaka | 4 | 7 | 8 | 19 | 35.18 |
| 8. | Supti | 14 | 11 | 14 | 39 | 72.22 |

Effects of Therapy on chief complaint

Table 5: Effect of Ashwagandha (Group A) on subjective parameters of 19 Gridhrasi patients.

| Subjective parameters | Mean | | % Relief | SD | SE | 't' Value | 'p' value | S |
|-----------------------|------|------|----------|------|------|-----------|-----------|----|
| | BT | AT | | | | | | |
| Ruk | 2.63 | 0.74 | 72 | 0.74 | 0.17 | 11.20 | <0.001 | HS |
| Stambha | 1.05 | 0.32 | 70 | 0.65 | 0.15 | 4.92 | <0.001 | HS |
| Muhuspananda | 1.21 | 0.53 | 56.52 | 0.82 | 0.19 | 3.64 | <0.01 | S |
| Toda | 1.26 | 0.26 | 79.20 | 0.75 | 0.17 | 5.85 | <0.001 | HS |
| Tenderness | 1.89 | 0.32 | 83.33 | 0.96 | 0.22 | 7.16 | <0.001 | HS |
| Gaurava | 0.47 | 0.16 | 66.67 | 0.58 | 0.13 | 2.36 | <0.05 | NS |
| Supti | 0.79 | 0.21 | 73.33 | 0.69 | 0.16 | 3.64 | <0.01 | S |
| Arochaka | 0.95 | 0.42 | 55.55 | 0.61 | 0.14 | 3.75 | <0.01 | S |

EFFECT OF ASHWAGANDHA (GROUP A)

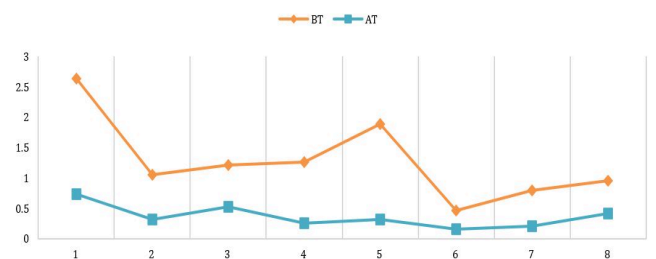


Table 6: Effect of Ashwagandha (Group A) on objective parameters of 19 patients of Gridhrasi.

| Objective parameters | Mean | | % Relief | SD | SE | 't' Value | 'p' value | S |
|----------------------|-------|-------|----------|-------|------|-----------|-----------|----|
| | BT | AT | | | | | | |
| S.L.R. | | | | | | | | |
| Affected left leg | 34.74 | 64.74 | 86.36 | 21.21 | 4.87 | 6.16 | <0.001 | HS |
| Affected Rt. leg | 23.68 | 46.58 | 96.67 | 19.60 | 4.50 | 5.09 | <0.001 | HS |

Table 7: Effect of Shephalika (Group B) on subjective parameters of 19 Gridhrasi patients

| Subjective parameters | Mean | | % Relief | SD | SE | 't' Value | 'p' value | S |
|-----------------------|------|------|----------|------|------|-----------|-----------|----|
| | BT | AT | | | | | | |
| Ruk | 2.59 | 1.29 | 50 | 0.68 | 0.17 | 7.78 | <0.001 | HS |
| Stambha | 1.24 | 0.65 | 47.62 | 0.62 | 0.15 | 3.92 | <0.01 | S |
| Muhuspananda | 0.76 | 0.41 | 46.15 | 0.61 | 0.15 | 2.4 | <0.05 | NS |
| Toda | 1.18 | 0.65 | 45 | 0.51 | 0.12 | 4.24 | <0.01 | S |
| Tenderness | 1.53 | 0.88 | 42.31 | 0.70 | 0.17 | 3.80 | <0.01 | S |
| Gaurava | 0.76 | 0.41 | 46.15 | 0.49 | 0.12 | 2.95 | <0.05 | NS |
| Supti | 1.23 | 0.59 | 52.38 | 0.70 | 0.17 | 3.80 | <0.01 | S |
| Arochaka | 0.82 | 0.47 | 42.86 | 0.49 | 0.12 | 2.95 | <0.01 | S |

EFFECT OF SHEPHALIKA (GROUP B)



Table 8: Effect of Ashwagandha & Shephalika (Group C) on subjective parameters of 19 patients of Gridhrasi.

| Subjective parameters | Mean | | % Relief | SD | SE | 't' Value | 'p' value | S |
|-----------------------|------|------|----------|------|------|-----------|-----------|----|
| | BT | AT | | | | | | |
| Ruk | 2.33 | 1.06 | 54.76 | 0.83 | 0.19 | 6.56 | <0.001 | HS |
| Stambha | 1.17 | 0.61 | 47.62 | 0.92 | 0.22 | 2.56 | <0.05 | NS |
| Muhuspandana | 1.39 | 0.89 | 36 | 0.62 | 0.15 | 3.43 | <0.01 | S |
| Toda | 1.5 | 0.61 | 59.26 | 0.83 | 0.20 | 4.53 | <0.001 | HS |
| Tenderness | 01 | 0.39 | 61.11 | 0.70 | 0.16 | 3.72 | <0.01 | S |
| Gaurava | 1.78 | 0.56 | 68.75 | 1.11 | 0.26 | 4.65 | <0.001 | HS |
| Supti | 0.61 | 0.28 | 54.55 | 0.59 | 0.14 | 2.38 | <0.05 | NS |
| Arochaka | 0.33 | 0.17 | 50 | 0.38 | 0.09 | 1.84 | <0.05 | NS |

EFFECT OF ASHWAGANDHA & SHEPHALIKA (GROUP C)

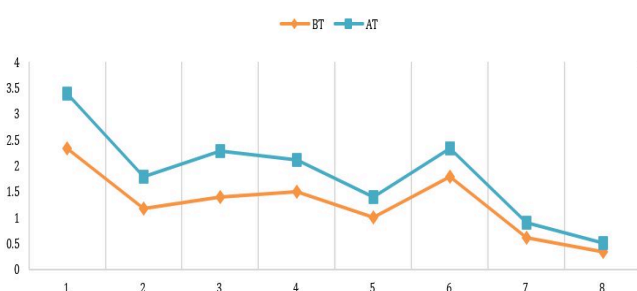
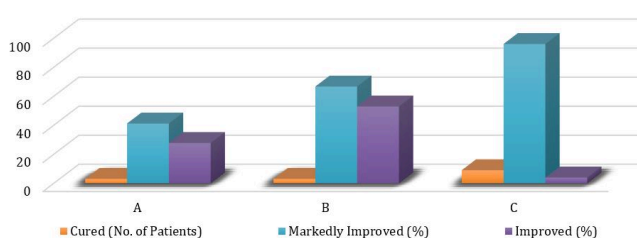


Table 9: Total Effect of Therapies on Both Groups

| Groups | Cured (no. of patient) | Markedly Improved (%) | Improved (%) | Unchanged (%) |
|--------|------------------------|-----------------------|--------------|---------------|
| A | 3 | 41.18 | 27.78 | 5.56 |
| B | 3 | 66.67 | 52.94 | 5.88 |
| C | 9 | 96 | 4 | 0 |

Total Effect of the Therapy



Total Result of Therapies

Group A

This group was treated with *Ashwagandha*. Out of 19 patients in group A after accomplishment of treatment 3 patients were relieved from sign and symptoms and 41.18 patients were noticeably improved. 27.78% patients showed improved result. Remaining 5.56% patients were unchanged.

Group B

This group was treated with *Shephalika*. Out of 19 Patients 3 was cured and 66.67% patients showed markedly improvement. 52.94% patients showed improved result. Remaining 5.88% patients were unchanged.

Group C

This group was treated with *Ashwagandha* and *Shephalika*. Out of 19 Patients 9 was cured and 96% patients showed marked improvement and 4 patient showed improvement.

References

- Patwardhan B, Panse GT, Kulkarni PH. Ashwagandha: a review. J Nat Integr Med Assoc. 1998;30:7. [Crossref][PubMed][Google Scholar]
- Agnivesha A. Charak Samhita. Tripathi AB, editor. 5th ed. Varanasi: Chaukhamba Surbharati Prakashana; 1997. p. 471 [Crossref][PubMed][Google Scholar]
- Sharma K, Dandiya PC. Withania somnifera Dunal: Present status. Indian Drugs. 1992;29:247. [Crossref][PubMed][Google Scholar]
- Council of Scientific and Industrial Research (CSIR). Withania somnifera L. (Dunal) (Ashwagandha). The Wealth of India – Raw Materials. Vol. X. New Delhi: CSIR; 1976. p. 81–5 [Crossref][PubMed][Google Scholar]
- Tiwari R, Chakraborty S, Saminathan M, Dhama K, Singh SV. Ashwagandha (Withania somnifera): Role in safeguarding health, immunomodulatory effects, combating infections and therapeutic applications: A review. J Biol Sci. 2014;14:77–94. [Crossref][PubMed][Google Scholar]
- Sharma K, Dandiya PC. Withania somnifera Dunal: Present status. Indian Drugs. 1992;29:247. [Crossref][PubMed][Google Scholar]

7. Scarfiotti C, Fabris F, Cestaro B, Giuliani G. Free radicals, atherosclerosis, ageing and related dysmetabolic pathologies: Pathological and clinical aspects. *Eur J Cancer Prev.* 1997;6(Suppl 1):S31-6. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 8. Bhattacharya SK, Muruganandam AV. Adaptogenic activity of *Withania somnifera*: an experimental study using a rat model of chronic stress. *Pharmacol Biochem Behav.* 2003;75(3):547-55. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 9. Arora S, Dhillon S, Rani G, Nagpal A. In vitro antibacterial/synergistic activities of *Withania somnifera* extracts. *Fitoterapia.* 2004;75(3-4):385-8. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 10. Kuboyama T, Tohda C, Komatsu K. Neuritic regeneration and synaptic reconstruction induced by withanolide A. *Br J Pharmacol.* 2005;144(7):961-71. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 11. Harikrishnan B, Subramanian P, Subash S. Effect of *Withania somnifera* root powder on circulatory lipid peroxidation and liver marker enzymes in chronic hyperammonemia. *E-J Chem.* 2008;5:872-7. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 12. Archana R, Namasivayam A. Antistressor effect of *Withania somnifera*. *J Ethnopharmacol.* 1998;64(1):91-3. [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 13. Sharma PV. Priya Nighantu. 1st ed. Varanasi: Chowkhamba Surabharati Prakashana; 2004. p. 42, verses 190-92 [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 14. Vaidya BG. Nighantu Adarsha. Vol. I. 1st ed. Varanasi: Chawkhamba Vidya Bhavan; 1968. p. 838 [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 15. Vaishya ALS. Shaligrama Nighantu. Harishankar SL, editor. 3rd ed. , 4th reprint. Bombay: Shri Krishna Das Prakashana; 1995. p. 520 [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 16. NaraHari P. Raja Nighantu. Tripathi I, editor. 4th ed. Varanasi: Chowkhamba Krishna Das Academy; 2006. Chapter 8, Verse 129, p. 257 [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
 17. Central Council for Research in Ayurveda and Siddha (CCRAS). Database on Medicinal Plants Used in Ayurveda. Vol. 4. New Delhi: Publication Dept. of CCRAS, Govt. of India; 2002. p. 470-83 [\[Crossref\]](#)[\[PubMed\]](#)[\[Google Scholar\]](#)
- Disclaimer / Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Journals and/or the editor(s). Journals and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.