

VIDARI KANDA IN MANAGEMENT OF KARSHYA – A DRUG REVIEW

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Abstract:

One of the most significant medications, vidarikanda, is thoroughly discussed in every Ayurvedic textbook. It is a perennial climber with a woody tuberculated stem and extensive tuberous roots, and is more frequently referred to as Indian kudzu. The many qualities of the Nighantus are generally mentioned throughout. It is utilised in numerous formulations that are mentioned in the Ayurvedic Samhita for a range of purposes and the treatment of ailments. Numerous studies on Vidarikand's properties and a variety of disorders have been conducted.

Aims and Objects: This essay attempts to clarify, assess, and analyse the therapeutic benefits of Vidarikanda in Karshya roga.

Material and Method: The Ayurvedic text book, its commentaries, the modern medicine text book, and different clinical papers published in the index journal have all undergone a rigorous assessment.

Result and Discussion: Due to the wonderful properties of Vidarikanda, which include Madhur Rasa, Shita Veerya, Guru, Snigdha Guna, as well as Brihani, Vrashya, Jivniya, Rasayan, Stanya, Shukral, and Balya, its range of usage for treating illnesses is greatly expanded. Many ailments, including Jwara, Raktapitta, Rajayakshma, Apasmar, Kshatksina, Kasa, Vatavyadhi, Vatarakta, Klevya, and others, are treated using its formulations. Additionally, it appears in the formulations of Vranaropak and Balavarna Vardhak. It has favorable anti-inflammatory, antioxidant, galactagogue, cardiogenic, rejuvenating, and nootropic effects.

Keywords: vidari, vidarikanda, Pueraria tuberosa, karshya, Vidarikandadi Yog, leanness

Introduction:

The ancient science of Ayurveda offers a fundamental philosophy for the identification, treatment, and management of all diseases. According to Ayurveda, ailments do not need to be named in order to be treated; instead, they can be cured by understanding the Nidan, Dosha, Prakriti, and Adhistan. Ayurveda, Unani, Siddha, Homoeopathy, and Folk medicine are all frequently utilized as traditional alternative medical treatments in India to treat various illnesses. The AYUSH system of medicine has classified and documented approximately 7,000 plant medicines, making India one of the modern civilizations best known for its rich resource of medicinal plants (National Medicinal Plants Board, Government of India, 2020). The plant Pueraria tuberosa (Roxb. ex Willd.) DC. (Fabaceae), often known as Indian Kudzu (vidarikand), is one of the medicinally significant plants addressed in this article. It is a widespread perennial climber with huge tuberous roots that grows quickly throughout India, Pakistan, and Nepal (Figures 1-4) (Indian Medicinal Plant Database) (Keung, 2002).

According to estimates from the World Health Organisation (WHO), 65 to 80 percent of individuals worldwide seek out herbal treatments to treat their primary medical ailments (Robinson and Zhang, 2011). One of the most significant medications, vidarikand, is extensively and in-depth covered in all Ayurvedic textbooks, including Brihatrayi, Laghutrayi, and Nighantus.

In the Himalayan mountain range, *P. tuberosa* lianas have also been observed to grow at elevations of 4,000 feet (*Pueraria tuberosa*—Vikaspedia, 2020). It is referred to as vidari (vidarikand) in Ayurveda. According to the Ayurvedic Pharmacopoeia of India (2001), this plant's tuber is delicious and is frequently used to cure fever, menorrhagia, skin conditions, wounds, bronchial asthma, and jaundice.

This article focused on the effectiveness of Vidarikand in karshya vayadhi with supporting evidence from science.

Aim & objectives:

1. To compile, elucidate, assess, and discuss the therapeutic properties of vidarikand.
2. To describe, assess, and discuss the medicinal benefits and therapeutic effects of Vidarikand in Karshya roga

Materials & Method:

The Ayurvedic text book and its corresponding commentaries have undergone a thorough assessment. The databases PubMed, ScienceDirect, Web of Science, PubChem, Google Scholar, SciFinder, and Scopus were used to find pertinent research on *P. tuberosa*. The publications on traditional usage, the pharmacology of extracts, and numerous phytoconstituents extracted from various portions of *P. tuberosa* that were published in English before September 2020 were included in this review. *Pueraria tuberosa* plant, Indian kudzu, vidari kand, tuber extract, traditional usage, phytochemical ingredients, pharmacological activity, and in silico, in vitro, and in vivo investigations were the keywords utilised to retrieve pertinent studies.

The following criteria were used to determine which data were included: (a) peer-reviewed, published scientific publications; (b) ethnopharmacological research; (c) tuber extracts using various solvents; (d) investigations on the mechanisms of action of plant extracts and their phytoconstituents; and (e) in vitro, in vivo, and in silico studies. Studies that used extracts from other *Pueraria* species were also excluded, as were letters to the editors, case studies, conference abstracts, any unpublished data, and reports. Additional exclusion criteria included (a) repetitious research and material that didn't fit the inclusion requirements; (b) studies performed with those extracts.

Plant Description:

"Vidarikand" is another name for the climber *Pueraria tuberosa* L., which is a member of the Fabaceae family and has a woody tuberculated stem. The globose or pot-shaped tubers, which are about 25 cm (9.8 in) across, have a white, starchy, and only marginally palatable inside. The plant's root is widely used in ayurvedic treatment as well as orthodox medicine and ethanomedicine. It has been recommended for the treatment of spermatorrhoea, menopausal symptoms, hepatosplenomegaly, cardiovascular illness, and other conditions. Additionally, it has been utilised in numerous ayurvedic formulations as an immune system builder, spermatogenic, antiaging, and restorative tonic.

Drug details of vidarikanda-

Latin name: *Pueraria tuberosa* DC
Family: Leguminosae (shimbikul)
Kingdom: Plantae
Clade: Tracheophytes
Clade: Angiosperms
Clade: Eudicots

Clade: Rosids
Order: Fabales
Family: Fabaceae
Subfamily: Faboideae
Genus: *Pueraria*
Species: *P. tuberosa*

Synonyms:

Sanskrit: Ikshugandha, Vidari
 Bengali: Shimiyā, Shimiatraji, Bhui Kumdo
 English: Indian Kudju

Gujrati: Khakharvel, Vidaree, Vidareekand
 Hindi: VidareeKand, Bilaikand, Sural, Patal
 Kand

Marathi: Bendriya bel, Bindree, Vendrichavel

Tamil: Nilpushni Kezhugu

Punjabi: Siali

Telugu:

Nelagummudu

Ayurvedic Properties of Vidarikanda:

The fundamental quality of any medicine is determined by its Rasa panchak, which includes Rasa, Guna, Veerya, Vipaka, and Prabhav. Different Nighantus are described in different Vidarikandin various Varga or Gana, but the properties are the same and there are no differences to be noticed in Rasa, Guna, and Veerya.

Rasa: Madhura

Veerya: Sheeta

Guna: Guru, Snigdha

Doshaghna karma: VataPitta Shamaka

Vipaka: Madhura

Phytochemical properties of Vidarikanda:

Macroscopic

a) On a macroscopic level, dried tubers are cut into cuboidal, smooth, and light cream-colored pieces. The cut surface is creamy; fleshy; there are transverse small warts and ridges on the surface; the texture is smooth; the flavour is sweet; there is no distinctive feature. They are fibrous, 3 to 5 cm long, and 2 to 4 cm wide. Where the epidermis is present, the outer surface is light brown with transverse warts and ridges.

Microscopic

The entire root tuber's T.S. has a faintly wavy outline and no discernible epidermis. There are 3 to 4 layers of cork cells, followed by 5 to 7 layers of parenchymatous cells. The endodermis is well-developed. The cork cambium is brown in colour and 2 to 3 cells thick. The pericycle is fibrous, followed by 2 layers of stone cells filled with sand crystals. The phloem is In a macerated preparation, the crystal fibres are multicellular, articulated, and each cell has a calcium oxalate crystal inside.

Powder

Greyish-brown, flavourless, and odourless; starch-filled parenchyma, septate fibres that resemble crystal fibres, and pipette-shaped bulbs are all discernible; Under a microscope, starch, stone cells, and simple and scalariform cross perforation plates are observed in vessels; Powder treated with nitro-cellulose in amylacetate and 1N NaOH in methanol emits light green fluorescence at UV 254 nm.

Vidarikanda a drug of choice in Krusha vyadhi:

The most pervasive health and nutritional issue in poor nations is karshya (leanness). According to Acharya Charaka, a lack of food intake in sufficient amounts is the main cause of karshya (leanness). According to Acharya Dalhana, "Karshyam Mamsakshayam" refers to a person's personality, which is characterised by krusha and a slim body.

Karshya (Leanness), which is vata pradhan vyadhi, bruhan, and rasayana, has been recommended for managing it in the classics. In the Charaka Samhita's Brihaniya Mahakashaya, the chosen medication Vidarikand churna is discussed.

Having the quality of madhura rasa, Vidarikanda Shita Veerya, Guru, and Snigdh Guna calm Vata, Pitta, and Rakta dosha, and madhura vipaka, which has a vatashamak effect, aids in the synthesis of triglycerides, which is called deha vridhikarbhava. Guru, snigdha sheeth in the body, and mrudu guna, on the other hand, are directly accountable for brimhana effect in the body. Rasayan properties boost immunity and overall wellness. Dosha, Dhatu, and Malas are kept in equilibrium by the Jeevaniya property. Free radical scavenger flavone and GIT3 inflammation-reducing polyphenol are both contained in Vidarikand, which also modulates hepatic cholesterol metabolism. Vidarikand is utilised in the

treatment of numerous ailments, including those caused by Jwar, Raktapitta, Rajayakshma, Kasa, Kshatkshina, Vatarakta, Klavya, and Brimhaniya, Balya, Rasayana, Jivaniya, Vrishya, and many more.

1) Vidarikanda prayog:

फलाम्लं सर्पिषा भृष्टं विदारीक्षुरसे शृतम्।
स्त्रीषु क्षीणः पिबेद्यूषं जीवनं बृंहणं परम्॥ (च. चि. ११/८०)

According to Caraka in the Kshataksheena chikitsa chapter, mung dal prepared in Vidarikand Swarasa and ikshu Rasa is advantageous for Ksheena and Krusha Vyakti for Brihana.

2) Karshyahara Yoga:

यदा तु दुर्बलो बालः खादन्नपि च वन्हीमान्।
विदारीकंदगोधूमयवचूर्णं घृतप्लुतम्।
खादयेत्तदनु क्षीरं शृतं समधुशर्करम्॥ (भा. प्र. म. खं. ७१/१७०)

This Karshyahar Yog has been discussed by Bhavaprakash in the Balrogadhikar chapter. When combined with honey and sharkara, Vidarikanda and Godhum churna are included in Karshyahar Yoga. In youngsters who are malnourished, this must be given over an extended period of time.

Table 1: Therapeutic Ayurvedic formulations of Vidarikanda in Bruhatrayi for the treatment of karshya by Caraka:

Yoga	Rogadhikar	Reference
Chyavanprash	Rasayana	Ch.Chi.1/1/62-69
Pancham haritakyadi rasayana	Rasayana	Ch.Chi.1/1/76
Aamlak ghrit	Rasayana	Ch.Chi.1/2/4
Indrokta rasayana	Rasayana	Ch.Chi.1/4/6
Indrokta rasayana param	Rasayana	Ch.Chi.1/4/13-26
Amritprash ghrit	Kshatkshin, Daha	Ch. Chi. 11/35-43
Tryushnadi ghrit	Kshatkshin, Kasa	Ch.Chi.18/39-47
Vidaryadi kawath	Shukra, Mamsa pushti	Ch.Si. 10/28

Table 2: Therapeutic Ayurvedic formulations of Vidarikanda in Bruhatrayi for the treatment of karshya by Sushruta:

Yoga	Rogadhikar	Reference
Bhutikadi tail	Vatvyadhi (Vasti)	S.Ch.37/19-22
Kushadi asthapan vasti	Vasti	S.Ch.38/51-54

Table 2: Therapeutic Ayurvedic formulations of Vidarikanda in Bruhatrayi for the treatment of karshya by Vagbhata:

Yoga	Rogadhikar	Reference
Amritprash ghrit	Kasa, Nastshukra, Kshatkshin	A.H.Chi.3/94-101
Dhatri ghrit	Kasa, Mamsa shukra vardhak	A.H.Chi.3/108-109

Chyavanprash	Rasayana	A.H.U.39/33-41
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Discussion:

Vidarikand is a very significant medicine that has been known since ancient times. The value of Vidarikand in therapeutic management is something that Acharyas are already aware of. To treat and prevent the numerous diseases, they utilised Churna, Kwath, Lepa, Ghrta, and Taila singly or in combination, either internally or physically. Due to these superior qualities, the range of application for Vidarik, which can balance Vata, Pitta, and Raktadosha and has Brihani, Vrashya, Jivniya, Rasayan, Stanya, Shukral, Balya, Varnya, Kanthya, Mutral, and Dahahar properties, is greatly expanded for treating disorders.

Vidari is recommended in Kshaya (Wasting), Shosha (Emaciation), Daurbalya (Debility), Sthairyakrita (Stabilising), and other classical indications also.

It is of madhura rasa medicament. Prinana, Jivana, Tarpana, and Brinhana are among the main elements of the Madhura rasa, which is predominately composed of the prithvi-jala mahabhuta. These activities make the medication more effective at boosting the body's physical power. Additionally, Sushruta regards it as Dhatuvarhdhana.

The bulk of body tissues is increased by the Guru guna present in the medication through its Tarapana and Brimhana effects. Guru qualities and physical development go hand in one. By virtue of its Snehana and Mridukarana qualities, the Snigdha guna relieves Rukshata and Kharata of dhatus.

The activity of vidari's madhura vipaka as a Brinhana medication has an extra benefit. Similar to Madhura rasa, Madhura Vipaka has the properties of Sarvadhātu Poshaka, Balya, Brihmana, Jeevniya, Prinana, and Sthairyakara, which aid in the growth of new body tissues and nourish existing ones.

The body loses strength as a result of the vata dosha. This medication can improve Vata and increase Sharira Bala (muscle strength). The drug's Pittahar effect suggests that the digestive fire's Agni vikriti has to be corrected.

Pachan (metabolism and digestion), and Amatratwatushmana (reduced heat production). This specific medication effect aids in enhancing the processes of metabolism and digestion, and consequently, the process of generating energy.

Balya medicines give the body a reviving strength. The drug's brinhana action causes the body to produce healthier dhatus. Rasayana medications are intended to strengthen the body both qualitatively and quantitatively by increasing all of the sharira dhatus. The Santarpan characteristic aids in boosting body weight and strength. Sthairyakara is useful for giving the body rigidity.

Vidarikanda has nootropic and growth hormone-inducing characteristics. Vidarikanda may encourage body weight increase and physical strength by inducing the growth hormone. Research on Vidarikanda suggests that Pueraria tuberosa extract (PTE) has considerable anxiolytic and anti-stress characteristics, supporting the clinical usefulness of the herb indicated in Ayurveda.

Conclusion:

Vidarikanda contains Madhur Rasa, Shita Veerya, Guru, Snigdha Guna, and it pacifies Vata, Pitta, and Raktadosha. It also contains Brihani, Vrashya, Jivniya, Rasayan, Stanya, Shukral, Balya, Varnya, Mutral, and Dahahar, which are mentioned in Ayurvedic texts. Hence, it is the drug of choice in kshaya roga.

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