

“A Review on Shankhapushpi (convolvulus Pluricaulis)”

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Abstract

Shankhpushpi is an Ayurvedic medicine used for its effects on the central nervous system, particularly for stimulating memory and improving intelligence. The amount of information from Ayurvedic and other Sanskrit literature has revealed the existence of four different plant species under the name Shankhpushpi, which are used either alone or in combination with other herbs in various Ayurvedic recipes described in ancient texts. Sources include whole herbs containing the following plants, namely Convolvulus pluricaulis Choisy. (Convolvulaceae), Evolvulus alsinoides Linn.(Convolvulaceae), Clitoria ternatea Linn.(Papilionaceae) and Canscora decussata Schult. (Gentiaceae). To review the scientific work on Shankhpushpi, a review of the available scientific information regarding pharmacognostic properties, chemical components, pharmacological actions, and preclinical and clinical applications of the controversial Shankhpushpi sources was prepared. It can provide differentiation parameters and enable assessment of the variability of drug activity using different botani

Keywords: Shankhapushpi, Convolvulus Pluricaulis, Medhya.

I. Introduction

In this competitive age, everyone wants to achieve the highest goal. This is increasingly necessary at the student level in schools and universities, as the examination model in the current system is based solely on memorizing the subjects themselves. A good memory is always valued in daily life and social interactions. Shankhpushpi is a Sanskrit word meaning “plant with shell-shaped flowers”. The conch or shankha is one of the sacred instruments of Lord Shiva, commonly used in ritual worship . It Is a combination of two words (shankh + pushpa), the appearance of the flower is similar to “shankh” (shell) and “pushpa” means flower. The botanical name of the medicine is Convolvulus Pluricaulis. Choisy belongs to the Convolvulaceae family, which is found in most regions. It is a small, hairy, proportional, spreading herb often called morning glories. It is a perennial herbaceous plant with prostrate branches and small elliptical or oblong, lanceolate, blunt and spiny leaves. It has white to blue flowers, usually solitary in the upper axil or sometimes in pairs, axillary in the middle near the flower stalk, where there are two small opposing lanceolate bracts, two distinct styles that extend from the base and each one again split. To form four style branches.



During steam distillation, the fresh plant produces a straw-yellow oil with a greenish tint and a characteristic smell. This plant grows on the waste land under xerophytic conditions in northern India during the month of September and October. Bindweed is known in the suburbs and deserts of the Sahara and Sindh. It is regarded as tonic to improve memory and brain. The leaves of Shankhpushpi were traditionally used to treat chronic bronchitis and asthma; roots are used to cure childhood fever and oil extracted from plant stimulates the growth of hair. It is also one of the best beauty herbs that helps nourish all layers of skin. The alcoholic extract of the plant lowers total cholesterol, triglycerides, phospholipids and non-

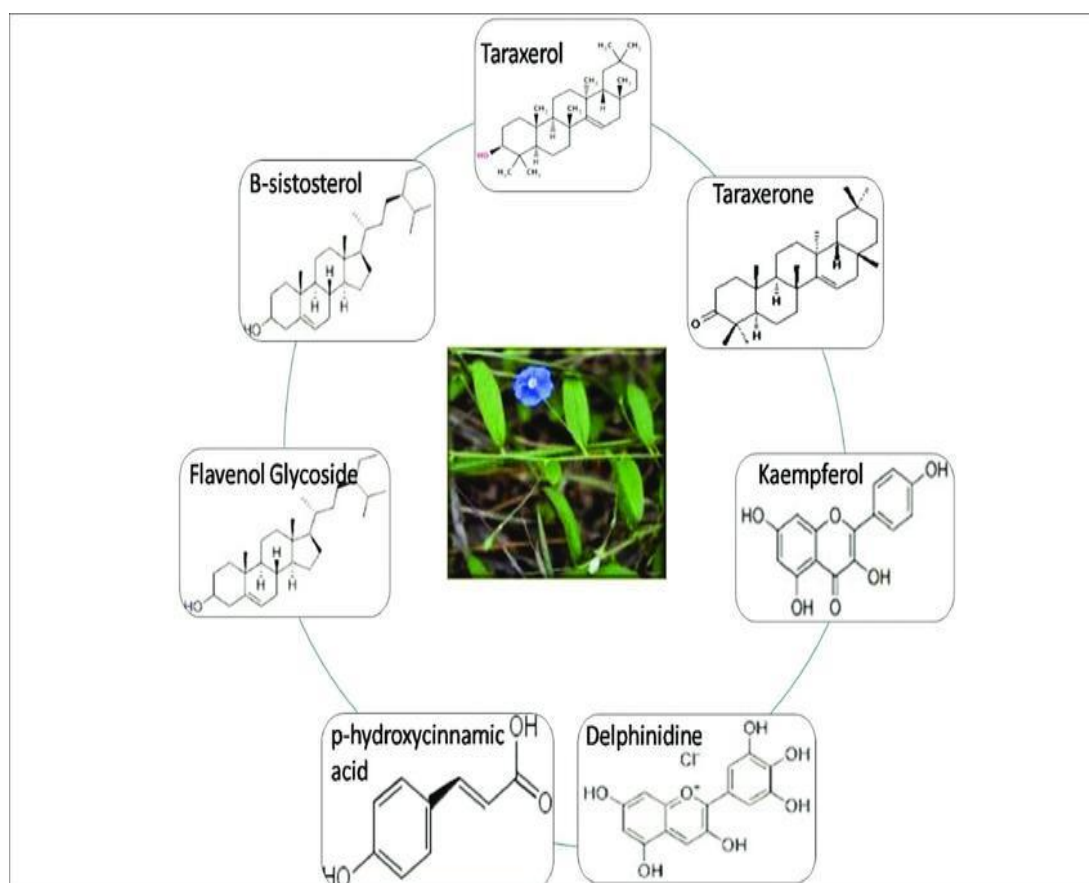
esterified fatty acids in serum. A study was conducted on this plant highlighting its antiulcer properties and its benefits in relieving the symptoms of hyperthyroidism by reducing the activity of liver enzymes.

PHYTOCHEMICAL CONSTITUENTS OF CONVULVULUS PLURICAULIS

Various chemical components are isolated from Shankhpushpi, including carbohydrates – glucose, rhamnose, maltose, sucrose and starch. It also contains proteins, amino acids and alkaloids: convoin, convosine, subhirsine and convolvidine, as well as fatty acids and waxes, hydrocarbons, aliphatics and some other biochemical substances.

1. Carbohydrates: D-glucose, maltose, rhamnose, sucrose, starch and other carbohydrates .
2. Fatty acids/volatile oils/fatty oils: fatty alcohols and hydrocarbons, myristic acid 30.9%, 66.8% palmitic acid and 2.3% linoleic acid and estriacontane.
3. Proteins and amino acids: Proteins and amino acids are also isolated from the plant.

4. Phenols/glycosides/triterpenoids/steroids: Deshpande et al. reported a chemical analysis of the whole plant of *C. pluricaulis* and found the presence of scopoletin, β -sitosterol and ceryl alcohol. The chloroform fraction contains 20 oxodotriacontanol, tetratriacontaenoic acid and 29-Oxodotriacontanol, flavonoid campferol and Phytochemical steroids .CP-1 is a phytochemical marker isolated and characterized by



Pharmacological Activities

Convolvulus pluricaulis has been extensively studied for its diverse pharmacological activities which are follows :

Antidepressant activity

Characteristically, Shankpushpi was one of the few drugs that were used an Antidepressant and to put the brain in a stress-free state. Studies on animals with induced Stress showed that Shankpushpi has depression and stress reducing properties. Further Research into the process of stress reduction has yet not been concluded .

Effects on Learning and Memory

Improvements in memory following administration of Shankpushpi extracts have been clearly demonstrated in simple memory tests such as the tube climber, passive avoidance paradigm tests and the active avoidance test. The ethanolic extract of CP, its ethyl acetate and its aqueous fractions were examined for their memory-enhancing properties. Two doses (100 and 200 mg/kg/po) of ethyl acetate and aqueous fractions of ethanolic extract were administered to separate groups of animals. Both doses of all CP extracts significantly improved the rats' memory and learning ability.

Antimicrobial, insecticidal, antifungal, antibacterial and anthelmintic activity

The whole plant was biologically tested by the leaf disk method using a food repellent, using *Spilosoma obliqua* Walker as the test insect. In laboratory studies, a new compound, 29-oxodotriacontanol, isolated from the chloroform fraction of this plant, was found to be a potent anti-nutritional ingredient. However, another compound was discovered in this plant for the first time: tetratriacontenoic acid. The crude extracts of azadirachtin and neem were used as references. The new compound (29-oxodotriacontanol) Caused an inhibition of 85.74% at a concentration of 8000 ppm. The alcoholic extract of *Convolvulus pluricaulis* contained strong antifungal activity.

Anticonvulsant effect

The water-soluble part of the alcoholic extract suppresses spontaneous motor activity and the fight reaction, but does not affect the flight reaction; Electrically Induced Seizures The extract counteracted epileptic seizures and tremor-induced tremors. It was observed that animals treated with methanolic extracts of stem callus, leaf callus and whole plants (200 mg/kg orally) showed remarkable protection against tonic seizures induced by transcorneal electric shock, which is also similar to the effects of the standard drug phenytoin resembled. It has also been shown to have powerful antispasmodic effects.

Antiulcer and antitachycardic effects

The antiulcer effect of this plant was found to be due to mucosal growth. Defensive factors such as glycoprotein, mucosal cell lifespan and mucin secretion, not offensive factors such as acid pepsin.

Cardiovascular activity

Total The water-soluble portion of the plant caused severe and long-lasting hypotension in dogs and inhibited cardiac muscle function in frogs. Ethanolic whole plant extract. It has a negative inotropic effect on the heart muscle of amphibians and mammals. It also had a spasmolytic effect on smooth muscle.

Hypolipidemic

Whole plant ethanolic extract when administered to cholesterol-fed gerbils. Significant reduction in serum cholesterol, LDL cholesterol, triglycerides and phospholipids after 90 days.

Effect on the reproductive system and immunomodulation

The entire sap of the plant prevents excessive menstruation. The fine paste obtained by grinding the plant is suitable for treating abscesses.

Traditional Uses of *Clematis Pluricaulis* in India

The herbs have been used in India for centuries to treat many diseases such as anxiety and insomnia, as well as to promote longevity and prevent disease by strengthening and immunity. It improves strength, digestive ability, complexion and voice and cures intestinal worms, painful urination, animal poisoning, shortness of breath, cough, diabetes and uterine diseases. It is useful for epilepsy, insomnia, heart disease and hematemesis. The leaves and flowers have antihypertensive properties and are used to treat anxiety neuroses.

The tribes of Chhindwara, Madhya Pradesh, India describe it as an anthelmintic, good for dysentery and an herb that cures skin diseases and lowers high blood pressure. In Gonda Uttar Pradesh, India, the leaves are recommended for mental disorders and depression.

The herb is non-toxic and its use does not cause any side effects. On the other hand, it has a stimulating effect on health and weight gain. According to the Ayurvedic concept, Rasayana therapy works on the body and mind at the same time and brings mental and physical improvement. This therapy prevents the effects of aging, develops intelligence and increases the body's resistance to disease.

It is one of the most important medicines of Medhya Rasayana in Ayurveda. Its use improves the balance and disorders of the Kaphavata-Pitta dosha, in addition, the herb has an astringent and bitter effect. Herbalists believe that Shankhpushpi calms the nerves by regulating the production of stress hormones, cortisol and adrenaline in the body.

According to Ayurveda

Medhya, the effect of Shankhpushpi increases intellectual abilities.

Swarakarini – strengthens the voice

Grahbhootadidoshaghni – has a beneficial effect on supernatural diseases

Rasayani – revitalizes the body

Kantida – improves the aura of the body and gives it a healthy appearance.

MajjadhatuRasayana – revitalizes the nervous system.

Unmadaghna – Helps treat madness and emotional instability.

Vrishya- is an aphrodisiac.

Pachanbala – improves the strength of the digestive system.

Chicana – is a laxative.

Nidrajnana – helps you fall asleep

Różne réceptury Shankpushpi in Charak Samhita geschrieben.

PrathamBrahmarasayana, Dwitiya
Brahmarasayana, IndraRasayana,
MedhyaRasayana, Brahmi Ghrit, Brahmi Ghrit +
Shankpushpi, AgstyaHaritaki.

Różne-Empfang Shankpushpi opseken w AstangHridya.

AgstyaHaritaki, TalvavagunthanVidhi, AstangGhrit,
Brahmi Ghrit, Brahma Rasayana,
MedhVridhikarRasayana, BrahtiaadiRasayanaYog.

Various Formulations of Shankpushpi described in Sharangdhar Samhita

BrahmiaadiSwarasa, Agstyaharitkyavaleh,
Bindughrita.

MEDIZINISCHE FORMULIERUNG VON SHANKHPUSHPI :-

• Abana (The Himalaya Drug and Co, independent)

Der Sirop und die Comprêmes Comprennée 19 Arten: C. asiatica, C. pluricaulis, C. paniculatus, Balsamoderon mukul, Ocimumsanctum, Nardostachys jatamansi, Pfeffer longum, Carumcopticum, Zingiber officinalis, Cyperusb Rotundus, A. calamus, E.porzeczki, Syzygium Spiceum, Santalum albus, Elettaria cardamomum, Fenouil vulgare, Rosa damascena, Zimt-Cassia von Crocus sativus.



• Tejras (Sandu Brothers, India)

The syrup consists of 12 types: asiatica, C. pluricaulis, C. paniculatus, Eclipta alba, Cynodondactylon, A. racemosus, Withania somnifera, Nardostachys jatamansi, A. calamus, Zingiber Officinalis and Vetiveria zizanoides.



Shankhapushpi (BAIDYANATH Pharmacy, India)

Le Sirop contains 6 species: C. pluricaulis, C. asiatica, Nardostachys jatamansi, Nepeia hindostana, Nepeia elliptica und Onosma brateatum.



Medical Importance of Convolvulus pluricaulis :

1. Convolvulus pluricaulis is the best solution for high blood pressure

The herb Convolvulus pluricaulis is one of the most important ingredients in the treatment of many syndromes and disorders including hypotension, hypertension, anxiety disorders, etc. Convolvulus pluricaulis herbs help , reduce stress and anxiety by regulating the production of stress hormones in the body such as cortisol and adrenaline. Convolvulus pluricaulis acts as a rejuvenating, calming and stimulating therapy.

2 . Convolvulus Multicaulis for Hypertension and Hypertension Ulcers

The plant Convolvulus pluricaulis is very effective in treating various ulcers that arise in the body due to mucous secretions and glycolic proteins. It also strengthens nerve tissue, improves the quality of bone marrow and enlarges nerve tissue. Thanks to the protective factors of the mucous membrane such as the secretion of mucins and glycoproteins, Convolvulus pluricaulis also has antiulcerative properties. Studies have shown that bindweed is the best treatment for hypothyroidism.

3.Convolvulus pluricaulis cholesterol reduction

Convolvulus pluricaulis herbal extract helps reduce blood cholesterol levels, including triglycerides and phospholipids', and helps eliminate certain types of fatty acids that are harmful to the body.

4.Convolvulus pluricaulis improves memory

Convolvulus pluricaulis is one of the best and most important natural medicines for improving memory , thanks to its chemical composition that contains Nutrients such as Scopolin β-sitosterol, Convolvulin, Subhirsin, Convolvine, Phyllabin, Convoline and Confoline includes . Convolvulus pluricaulis is primarily used as a brain tonic and stimulant Taking Convolvulus pluricaulis Daily prevents memory loss.



5.Convolvulus pluricaulis for neurodegenerative disease

Due to its memory-enhancing properties, the Convolvulus pluricaulis plant is suitable for treating neurodegenerative diseases. Like Alzheimer' s disease. It has antiulcer properties and is helpfulness in alleviating the symptoms of hyperthyroidism, Dementia and reduces theactiveness of a liver enzyme.

II. Conclusion

Convolvulus pluricaulis, also known as Shankpushpi in the Indian subcontinent In Ayurveda it is considered Madhya rasayana. It is a well-known medicinal plant that is believed to promote some aspects related to improving intellect and memory. Apart from this, there are also many other pharmacological aspects of this particular herb which are considered very useful in Ayurveda for its neuroprotective effects, immunomodulation, cardiovascular activity, antiulcerative and antiscatonic effects, anticonvulsant effects, etc. Active ingredients in the form of proteins, amino acids and alkaloids: convulin, convolamine, confolin, filabin, conlidin, as well as aliphatic hydrocarbons and sterols and some other biochemical substances. There is still a lack of clinical data supporting its effectiveness and clinical trials are needed to support its traditional use. In the future, standardization and stabilization studies could be carried out for the leaf extract of Convolvulus pluricaulis, which could help demonstrate that it is a promising source in pharmaceutical, medicinal and neutralization environments.

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