



Received on 01 February 2024; received in revised form, 24 March 2024; accepted, 27 March 2024; published 31 March 2024

ANTI-PARALYTIC MEDICINAL PLANTS

Priyanka S. Ahire^{*}, Ketaki D. Gangavane and Rajesh A. Ahirrao

Department of Pharmaceutics, P. G. College of Pharmaceutical Sciences and Research, Chaupale, Nandurbar, Dr. Babasaheb Ambedkar Technological University, Lonere-Raigad - 425411, Maharashtra, India.

Keywords:

Antiparalytic plants, Nervous system, Paralysis, Therapy, Herbal plant life

Correspondence to Author:

Ms. Priyanka S. Ahire

Assistant Professor,
Department of Pharmaceutics,
P. G. College of Pharmaceutical Sciences
and Research, Chaupale, Nandurbar, Dr.
Babasaheb Ambedkar Technological
University, Lonere-Raigad - 425411,
Maharashtra, India.

E-mail: psahire7777@gmail.com

ABSTRACT: Paralysis is the temporary or permanent absence of voluntary muscle movement. Gadget problems can be crippling. Because changes in fear and muscles are affected. Partial, partial, or complete paralysis may occur in humans. Almost all causes of paralysis are spinal cord injury (SCI), head trauma, peripheral neuropathy, stroke, and multiple sclerosis. Bell's palsy reasons transient facial paralysis. Not on the whole, muscle tissue themselves are the purpose, as this may also be because of a hassle around someplace alongside the chain of nerve cells that journey from the frame part in your brain and back once more. on this evaluate, gain an understanding greater about the forms of paralysis, their reasons, symptoms, complications, diagnosis and the maximum essential 37 medicinal plant for his or her software and therapy of illness associated with paralysis. Out of the 37 plant life documented, 11 flowers were pronounced for their capability to remedy paralysis. Even though, the facts on the recorded plants have been in particular discovered to be deficient, requiring right authentication with appreciate to their specificity, dosage, contraindication and so on. A many species belonging exceptional families used to treat paralysis. all the herbal plant life discussed on this evaluation deal with on paralysis.

INTRODUCTION: Stroke is a disease that occurs as a result of damage to the nerves that control the muscles and the spinal cord, the most common causes of paralysis are paralysis, head injuries, spinal fractures, neck injuries and some sclerosis. The many causes of paralysis include dementia including amyotrophic lateral sclerosis, autoimmune diseases including Guillain-Barré syndrome, Bell's palsy, which affects the facial muscles, and polio.

Definition: "Immobility is complete or partial loss of feature mainly whilst regarding the movement or sensation in part of the frame."

There are many scientific terms used to describe different types of stroke. For example, monoplegia, in which one side of the leg is paralyzed, hemiplegia, in which an arm and leg on one side of the body are paralyzed, and paraplegia, in which both arms and legs are paralyzed. Sometimes the abdomen and some lower extremities are paralyzed; this is a condition called quadriplegia, in which both arms and legs are paralyzed (also known as quadriplegia). Paralysis left untreated for a long time leads to "death" of the affected area, weakening the body and tissues. Stroke can also lead to a number of other symptoms, including



urinary incontinence (inability to control urination) and bowel incontinence (passing stool from the back). It may also have an impact on the sexual functions of men and women. The goal of treatment for stroke patients is usually to help the person live as closely as possible by addressing stroke-related problems as well as pain. Under too much pressure (alone), treats bladder and bowel problems, spasticity and paralysis. Mobility aids, including wheelchairs and braces, can help people with paralysis¹. The treatment plan and management of the condition will depend on the cause of the stroke and the symptoms. Advanced technology and healthcare can help you maintain your independence and be productive².

HISTORY: Sleep paralysis was first described in 1664 by a Dutch doctor in his medical records, where sleep paralysis was referred to as "nightmare" or "bad dream".

Paralysis: Also called: Hemiplegia, Palsy, Paraplegia, Quadriplegia Paralysis is the absence of muscles in that part of the body. This happens when there is a problem with the communication between your brain and your muscles. Paralysis may be complete or partial. It can occur on one or both sides of the body. It can occur in a single area or over a wide area. Paralysis of half the body, including the legs, is called paraplegia. Death of arms and legs is quadriplegia.

Most cases of paralysis are caused by stroke or accidents (such as a spinal cord injury or broken neck). Other causes of paralysis include:

1. Neurological diseases, including amyotrophic lateral sclerosis.
2. Autoimmune diseases, including Guillain-Barré syndrome.
3. Bell's palsy, which affects the facial muscles.
4. Polio was formerly used for paralysis, but polio does not occur in the United States³.

Paralysis: And muscle control does not return.

1. Temporary paralysis: Simultaneous recovery of part or all of the muscles. Stroke can affect any part of the body.
2. Partial (Paralysis): You can control some muscles, but not all.

3. Complete: You can't do anything for the muscles.

The Peripheral anxious regulate severa functions, inclusive of:

- ❖ Automatic features, inclusive of breathing & digestion.
- ❖ Voluntary muscle movements, inclusive of walking & chewing.
- ❖ Sensory features, along with ache, temperature, and strain detection.

Paralysis also can be damaged down into kinds based at the website of injury in the frightened gadget:

- Flaccid: Your muscular tissues get flabby and shrink.
- Spasm: Twitches and spasms (spasms) as a result of contraction of the muscles.

Muscle Paralysis Occurs:

Partial Paralysis: Affects a small part of the body; usually the face (Paralysis), palms, toes or voice.

General Paralysis: Affects the entire body, including paralysis or paralysis of both legs on one side of the body. Bell's palsy it involves weakness or temporary paralysis of the facial nerve on one side of the face. Neurosarcoidosis is a type of sarcoidosis. It causes inflammation in the mind, spinal wire or nerves which reasons paralysis. Weak spot inside the muscles on one facet of the face is a symptom of facial paralysis. Stroke if someone suspects that a person is having a stroke, they should accomplish that FAST check.

Types of Paralysis:

- ✓ Facial paralysis: loss of strength and mobility of facial muscles.
- ✓ Monoplegia: which affects only one arm or leg.
- ✓ Hemiplegia: which affects one arm and one leg on the same side of your body.
- ✓ Paraplegia: which affects both of your legs.
- ✓ Quadriplegia or Tetraplegia: which affects both of your arms and both of your legs.

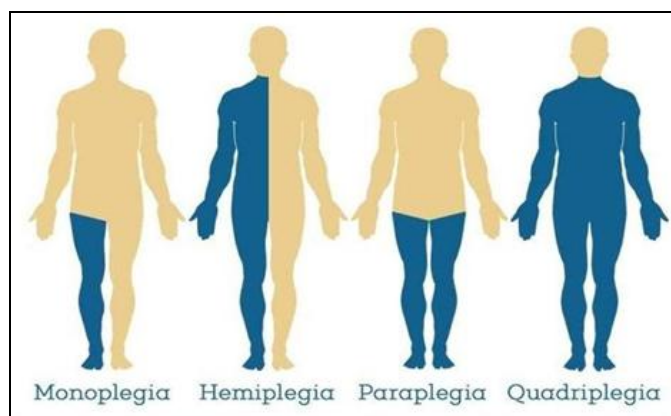


FIG. 1: TYPES OF PARALYSIS

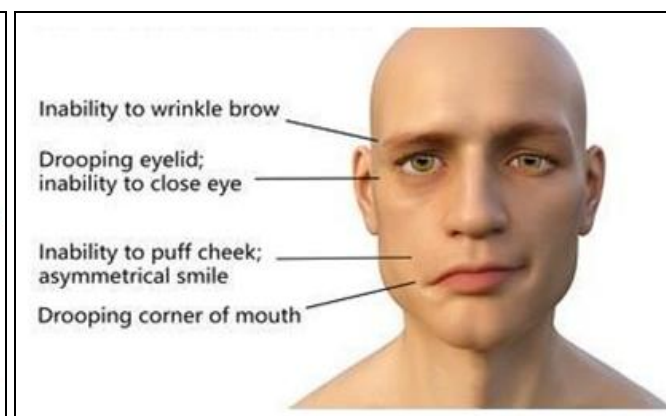


FIG. 2: FACIAL NERVE PARALYSIS

Common Causes of Stroke:

1. Spinal Cord Injury [SCI]
2. Head trauma
3. Peripheral neuropathy
4. Stroke
5. ALS [Lou Gehrig's disease]
6. Ntau Sclerosis
7. Quran-Barre Syndrome
8. Cerebral Palsy
9. Toxins/Poisons
10. Brain or spinal cord injury
11. Genetic disorders, including spinal cord atrophy and hypokalemic or hyperkalemic partial paralysis.

Stroke Symptoms:

1. Numbness or pain in the affected muscles
2. Muscle weakness
3. Confusion
4. Stiffness
5. Involuntary spasms or twitches
6. Muscle cramps
7. Visible signs of muscle loss (muscle atrophy)
8. Difficulty in talking or understanding
9. Difficulty in walking
10. Feeling Dizzy
11. Loss of balance and co-ordination
12. A severe headache

Ayurvedic Drug Plant used in Treatment of Paralysis:

Shatavari: Also known as satavar, *Asparagus racemosus* Willd.

Synonyms: *Asparagus racemosus* Willd

Biological Source: Shatavari usually consists of dried roots and leaves of the native asparagus plant (*Asparagus racemosus*).

Chemical Constituents: Shatavari contains four steroidal saponins, commonly known as Shatavarin I-IV, with a total content of 0.2%; However, Shatavarin I is the main glycoside available.

Uses: The root is often used as a galactagogue to stimulate milk production.



FIG. 3: SHATAVARI

Red Silk Cotton: is commonly known as cotton tree.

Synonym: Bombaxceiba

Biological Source: This Asian tropical tree has a straight, long trunk and leaves that fall in winter.

Chemical Constituents: The bark contains lupeol, saponins, tannins, gums and lactones isolated from the roots.

Uses: Pimples, Wound, Diarrhoea, Constipation, Piles.



FIG. 4: RED SILK COTTON

Urtica dioica: Commonly known as nettle, burnt nettle, stinging nettle or nettle leaves, or stinging nettle or stinging nettle

Synonyms: Stinging Nettle

Biological Source: *Urtica dioica* Nettle (*Urtica urticae*) is a perennial plant belonging to the Urticaceae family and *Urtica* genus.

Chemical Constituent: Flavonoids, tannins, volatile compounds, thiab fatty acids, polysaccharides, isolectins, sterols, terpenes, proteins, vitamins, thiab minerals.

Uses: It treats diseases of the kidney, urinary tract, gastrointestinal system, motor system, skin and heart system.



FIG. 5: URTICA DIOICA

Brahmi: known as common *Bacopa monnieri*

Synonyms: *Bacopa monnieri*, Hayata & Matsum. *Bramia monnieri* (L.) Pennell. Brahmi, Indian pennywort.

Biological Source: *Bacopa monnieri* (L.) Pennell

Family: Plantaginaceae

Chemical Constituent: These herbs contain triterpene saponins, indocinoside, branoside, bramicide, asiaticoside, sankunside and isoucouside. Related triterpene acids obtained from the hydrolysis of glycosides are indoleic acid, brahmic acid, asiatic acid, glycinic acid and isosankenic acid. Besides the last two acids, these acids are also found in plants from isopyrimic acid and betulinic acid. The presence of myo-inositol, oligosaccharides, cellulose, kaempferol, quercetin and stigmaterol has also been reported. It is also reported to contain centrocillulose, kaempferol, quercetin and stigmaterol.

Uses: The plant is used as a support in the treatment of skin, nerves and blood vessels and improves memory. It also strengthens our immune system. Asiaticoside supports the - system, where new blood cells are formed and old blood cells are destroyed, fats are stored, iron is metabolized, and protection against infection and inflammation occurs or begins.

The first type of activity of *Centella asiatica* appears to be at various connective tissue levels as part of the healing process. *Centella asiatica* also promotes keratosis, which is the process of creating more skin in an area, thus preventing inflammation and diseases such as ulcers. Madecassoside also supports the synthesis of lipids and proteins essential for healthy skin. Finally, *Centella asiatica* strengthens muscles by repairing the tissue surrounding the muscles and reducing capillary fragility.



FIG. 6: BRAHMI

Ashwagandha: Known as common winter cherry.

Synonyms: *Physalis somnifera* L., *Withania kansuensis* Kuang & A.M. Head, *Withania microphysalis* Suess, Hint ginseng.

Biological Source: *Withania somnifera* L.

Family: Solanaceae.

Chemical Constituent: The plant contains alkaloids, the main product of which is aniline, as well as hypnotine, pseudourea, tropine and pseudotropine, isoperidine, fenfen, anahigrine and steroid lactones. The leaves often contain steroid lactones known as anolides.

TABLE 1: TYPES OF CONSTITUENTS

Type of constituents	Chemical constituents
Alkaloids	Withanine
Glycoside	Sitoinosides VII, VIII
Steroidal lactones	Withanolides
Alcohol	Somnitol, somnirol

Uses: The entire plant, including its roots, bark, leaves, fruits and seeds, is used to treat paralysis, stomach ache and leprosy. Ashwagandha is one of the most commonly used sedatives in India and has a wide demand in India. Its status in China is similar to ginseng. It mainly affects the production process and nervous system and has a rejuvenating effect on the body. It is also used in the treatment of neurasthenia, fatigue, insomnia, wasting disease, slow growth of children, impotence, infertility; multiple sclerosis etc. When used externally, it can be used as a poultice to treat redness, swelling and other painful areas. *Withania somnifera* is considered an adaptogen and is therefore used for many diseases. Induction of polyploid Hori culture



FIG. 7: ASHWAGANDHA

CONCLUSION: From the above people it was conclude that Ayurvedic Plant have less side effect

as compared to that of Allopathic medicines. It's our sincere effects that peoples should know about this plant.

ACKNOWLEDGEMENT: Nil

CONFLICT OF INTEREST: Nil

REFERENCES:

- <http://www.nhs.uk/conditions/paralysis/pages/causes.aspx> Accessed December 24, 2021
- <http://www.nlm.nih.gov/medlineplus/paralysis.html> Accessed December 24, 2021
- Debra Sullivan, Ph.D., MSN, R.N., CNE, COI-written on paralysis by Jamie Eskeon 2020.
- Danielle Moores, medically reviewed by university of Illinois, on facial paralysis on 2018.
- Nancy Hammond by medically reviewed, M.D., written on 5 causes official paralysis by Amanda Barrell on 2020.
- <https://www.webmd.com/brain/paralysis-types> Accessed December 15, 2021
- <https://my.clevelandclinic.org/health/diseases/15345-paralysis> Accessed December 2021
- Wongsatit, Promjits and Ampol B: Medicinal plants used in the Kutchum District, Yasothon Province, Thailand. *Thai J Phytopharm* 2002; 9: 22-49.
- Saido, Khalil K and Fulder SH: Ethnopharmacological survey of medicinal herbs in Israel, the Golan Heights and the west bank region. *J Ethnopharmacol* 2002; 83: 251-265.
- Mahbubur AHMR westbankregion Amisha D: Ethnobotanical study at village pondit Para under Palash sub-district of Narsingdi district in Bangladesh. *Int J Adv Res* 2015; 3: 1037-1052.
- Enamul Mks, Afserms and Sudhangshuss: Medicinal plants used by folk and tribal medicinal practitioners in the two villages of Khakiachora and Khasia Palliin Sylhet district of Bangladesh. *Advannatur Appl Sci* 2010; 5: 9-19.
- Badhan B, Yeasir MA, Shahadat MH, Sakib-uz-zaman M, zubaida K and Mohammed R: Ethnomedicinal Practices of a village folk medicinal practitioner in Faridpur District, Bangladesh. *Amer-Eur J sustain Agri* 2014; 8: 20-27.
- Allah BG, Altaf AD, Sabir H, Muhammad IA, Muhammad AD Indigenous uses of medicinal plants in rural areas of Dera ghazikhan, Punjab, Pakistan. *ARP NJ Agricul Biol Sci* 2012; 7: 750-762.
- Getaneh GM: Ethnobotanical survey of medicinal plants used in treating human and live stock health problems in manduraworeda of Benishangul Gumuz, Ethiopia *Adv Med Plant Res* 2016; 4: 11-26.
- Aref AR: Ethno-botanic treatment for paralysis (Fali) in the Middle East *Chin Med* 2012; 3: 157-166.
- Mariade FA, Kiriaki NS, Ionaldo JLDB, Patricia FF and, Jose MBF: Survey of Medicinal plants used in the region Northeast of Brazil, *Braz J Pharmacog* 2008; 18: 472-508.
- <http://www.herbslist.net/tag/paralysis> Accessed December 20, 2021
- <http://home-cure.net/ayurvedic-cure-paralysis/etc> Accessed December 20, 2021
- Bhowmik Debjit, Sampath KPK, Shwetanshu, Shrawan P, Amits and Dutta D: Traditional Indian herbs Punarnava and its medicinal importance. *J Pharmacogphytochem.* 2012; 1: 52-57

20. Narendra S, Mohit B, Prashanti de J, Marilena G: An overview on Ashwagandha: A Rasayana (rejuvenator) of ayurveda. Afr J Tradit Complement Altern Med 2011; 8: 208-213.
21. <http://treatment.hpathy.com/homeo-medicine/homeopathyparalysis/> Accessed December 20, 2021
22. <http://homeopathyplus.com/gelsemium-gels/> Accessed December 20, 2021
23. Anonymous National formulary of Unani medicine, part-1 (English Edition) 1st ed. New Delhi: Govt. of India, Ministry of health and Family welfare; 2006; 122.
24. <http://homeopathyclinic.co.in/10-best-homeopathic-medicinesbellspalsy/> Accessed December 21, 2021
25. Bandaranayake WM: Traditional and Medicinal uses of Mangroves. Mangroves Saltmarshes 1998; 2: 133-148.
26. Kamal JS and Anil KT: Medicinal Plants of the Shimla hills, Himachal Pradesh: a survey. Int J Herbmed 2014; 2: 118-127.
27. Kaliyamoorthy J: Ethno Medicinal Value of Plants in Thanjavur District, Tamil Nadu, India. ILNS 2014; 29: 33-42
28. Padal SB, Chandrasekhar P and Vijakumar Y: Traditional uses of Plants by the tribal communities of Salugupanchayati of Paderu Mandalam, Visakhapatnam district, Andhra Pradesh, India. IJCE 2013; 3: 98-103.
29. Parvaiz AI and Ajay KB: Traditional herbal based disease treatment in some rural areas of Bandipora district of Jammu and Kashmir, India. Asian J Pharm Clin Res 2013; 6: 162-171
30. <https://www.pharmacy180.com/article/text-biological-source>.

How to cite this article:

Ahire PS, Gangavane KD and Ahirrao RA: Anti-paralytic medicinal plants. Int J Pharmacognosy 2024; 11(3): 84-89. doi link: [http://dx.doi.org/10.13040/IJPSR.0975-8232.IJP.11\(3\).84-89](http://dx.doi.org/10.13040/IJPSR.0975-8232.IJP.11(3).84-89).

This Journal licensed under a Creative Commons Attribution-Non-commercial-Share Alike 3.0 Unported License.

This article can be downloaded to **Android OS** based mobile. Scan QR Code using Code/Bar Scanner from your mobile. (Scanners are available on Google Playstore)