

**TRADITIONAL REMEDY, *KUNCH PAK* - A REVIEW****AGRAWAL ARCHANA<sup>1\*</sup>, AGRAWAL MEGHA<sup>2</sup> AND RATHORE AMIT<sup>1</sup>**<sup>1</sup>Shri G.S. Institute of Technology and Science, Department of Pharmacy, 23, Park Road, Indore (M.P.) -452003, India.<sup>2</sup>Central India Institute of Pharmacy, Arendia, Dewas Bypass Road, Indore (M.P.), India.\* *Corresponding author* archana0913@yahoo.co.in**Abstract**

Mucuna has been used in India for thousands of years. In Ayurveda, Kunch is used as a single herb and also in combination with other herbs. The most common preparation used widely in north India is '*Kunch Pak*'. The clinical trial performed on 15 psychiatric patients reveals that 15g of crude seed powder of *Mucuna prurita* was as effective as 0.5g of L-dopa. No adverse effects were observed. A significant reduction in disease rating scale scores were seen at the end of 12 weeks treatment.<sup>1</sup>

**Key words** Aphrodisiac, Ayurvedic preparation, *Kunch Pak*, *Mucuna Prurita*.**Introduction**

Ayurvedic medicines are based on herbs, either single herb or in combination having one or more therapeutic principles. One of such herb used widely in India is *Mucuna Prurita*, commonly known as 'Kunch', (Leguminosae). *Mucuna Prurita* is an annual twiner, whose approximately all parts are of medicinal value. In India it is found in Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh, Jammu-Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, and West Bengal. *Mucuna Prurita* is also known as Cowhage, Kapikachhu, Atmagupta, Kaunch and Kevanch. The seeds are aphrodisiac, spermatogenetic, retentive, prescribed in impotency, spermatorrhoea and sexual debility, laxative, alexipharmic and useful

in gonorrhoea. The seed is a prophylactic against oligospermia, useful in increasing sperm count, ovulation in women, etc. It prevents male and female sterility and acts as a nervine tonic. Roots acts as an emmenagogue, its smoke accelerates delivery & lessen the pain, a strong infusion of the roots mixed with honey is used in cholera, as a remedy for delirium in fever, also roots powder is made into paste and is applied to body in dropsy. Leaves are aphrodisiac, tonic, anthelmintic, it lessens inflammation and improves blood flow, it treats ulcer, its juice given in headache. Hairs of *Mucuna* pods acts as vermifuge to expel ascarids, it is used as a local stimulant and mild vesident.<sup>2-4</sup> A decoction of the roots is used as a diuretic and cleanser of the kidneys, and is made into an ointment for elephantiasis. *Mucuna* is also used in asthma, bite (dog), bite (snake), cancer, cough, diarrhea, fracture, madness, and mumps. Another benefit

of *Mucuna* is that it can increase the production of human growth hormone, and extracts are commonly sold as body-building supplements.

In Indian Ayurvedic medicine it also has a long history of use. Seeds are high in protein, carbohydrates and minerals content. They are rich in alkaloids and are an important natural source of L-dopa. *Mucuna Prurita* has been found to contain L-DOPA, 40mg/g of the plant<sup>5</sup>. The plant/seeds contain the bioactive alkaloids mucunine, mucunadine, mucuadinine, pruriendine and nicotine, besides  $\beta$ -sitosterol, glutathione, lecithin, oils, venolic and gallic acids are also present. The seeds with seed coat showed the presence of a number of bioactive substances including tryptamine, alkylamines, steroids, flavonoids, coumarins, cardenolides, etc.<sup>4, 1, 6</sup>.

The total alkaloids from seeds of *Mucuna Prurita* comprising 5 alkaloidal bases, which are found to bring about a note-worthy increase in the population of spermatozoa and in the weights of body testes, seminal vesicles and prostate of the treated rats. The exhibited activity was found to stimulate testosterone-enanthate induced androgenic activity observed in another set of treated individuals<sup>7</sup>. Also the drug possesses CNS stimulant effect at low doses and CNS depressant effect at high doses<sup>8</sup>. Some tests reveals that mucuna seed diet produced a hypoglycemic effect in normal rats, however, such a diet had an insignificant effect on alloxan-treated rats<sup>5</sup>.

In a clinical trial study, performed on 15 psychiatric patients, *Mucuna Prurita* (15 g of crude seed powder) was found as effectively as 0.5 g of L-dopa. No side effects were observed in the patients<sup>9</sup>. Sixty patients with Parkinson's disease were treated with *Mucuna Prurita* in an open study for 12 weeks. Statistically significant reductions in Unified Parkinson's disease rating scale scores were seen from baseline to the end of 12 week treatment<sup>1</sup>.

In a double blind clinical and pharmacological study, the clinical effects and levodopa (L-dopa) pharmacokinetics with two different doses of mucuna preparations were compared with the standard L-dopa/carbidopa (LD/CD). Eight Parkinson's disease patients were challenged with single doses of 200/50 mg LD/CD, and 15 and 30 g of mucuna preparation in randomized order at weekly intervals. L-dopa pharmacokinetics was determined, and Unified Parkinson's Disease Rating Scale and tapping speed were obtained at baseline and repeatedly during the 4 h following drug ingestion. On comparing with standard LD/CD, the 30 g mucuna preparation led to a considerably faster onset of effect (34.6 v 68.5 min;  $p = 0.021$ ), reflected in shorter latencies to peak L-dopa plasma concentrations. Peak L-dopa plasma concentrations were 110% higher and the area under the plasma concentration v time curve (area under curve) was 165.3% larger than the combination. This study suggests that this natural source of L-dopa might possess advantages over conventional L-dopa preparations in the long term management of Parkinson's disease<sup>10</sup>.

*Mucuna prurita* has mild adverse effects and is mainly gastro-intestinal in nature. No adverse effects were seen in clinical laboratory reports.<sup>4, 5</sup>

*Mucuna* has been used in India for thousands of years. In Ayurveda, Kunch is used as a single herb and also in combination with other herbs. The most common preparation used widely in north India is '*Kunch Pak*'. In recent times, it has gained immense popularity because of its tonic and nutrient properties. The ingredients used to prepare *Kunch Pak* are listed in Table 1<sup>11-26</sup>.

### Preparation of *Kunch Pak*

In the absence of standard operating procedure (SOP) in ancient times, the method of preparation of *Kunch Pak* varies from

manufacturer to manufacturer and place to place. Standard method of preparation of *Kunch Pak* is described as follows:

First take the seeds of *Kunch* and soak them in warm water for 12 hrs. Then remove the seed coat with the help of a cotton cloth and dry the seeds in sunlight. After drying the seeds powder the seeds and store it in a tight container. In some formulation this seed powder is directly used.

Mix 1280gms of seed powder with 16 times of cow's milk and boil it, till it reduces to 2/5<sup>th</sup> of the original. Add two times ghee and cook it at moderate temperature. Take four times sugar and make its syrup. Now add the syrup to the initial mixture. Now add all these ingredients 20-20 gm. in powder form- *Vanshlochan, Safed musali, Tejpatra, Dalchini, Safed Jira, Elaichi, Lavang, Jivanti, Nagkesar, Jatiphala, Pippali, Black pepper, Karanja ki giri, Priyangu, Gajpipal, Bilwa, Ajowan, sunthi, Akarkara, Samudhri shosha*. On cooling of above mixture add 640gms of *honey and kesar*. Decorate it with *silver foil*.<sup>14, 16</sup>

*Kunch Pak* is to be consumed in a quantity that does not influence the hunger and appetite for food. Generally *Kunch Pak* is taken with milk. About 20-40 gm is taken daily.<sup>14, 16</sup>

### Uses

*Kunch Pak* is an Ayurvedic preparation, used from ancient time for its Aphrodisiac activity. It is prescribed in impotency, spermatorrhoea and

sexual debility. It is effective in and enhances libido and fertility in both the sexes<sup>4</sup>. *Kunch, Vanshlochan, Safed musali, Kesar and Jivanti* is Aphrodisiac in nature<sup>4, 14, 27, 15</sup>. According to Ayurveda, *Kunch Pak* provides strength to female and makes her enable for pregnancy. It acts as tonic for pregnant woman. It is also helpful in correcting menstrual cycle<sup>16</sup>.

*Kunch Pak* is used as a nervine tonic. *Kunch* contains L-dopa which helps in treatment of Parkinson's disease<sup>5</sup>. *Akarkara, Safed musali, Chandj, Elaichi, Honey, Jivanti, Nagkesar, Kunch, Priyangu, Samudhri shosha* and *Gajpipal* acts as tonic<sup>17, 27</sup>. It also helps in improving mental ability<sup>5</sup>.

*Ghee & Cow's milk* acts as Nutrient. *Tejpatra, Dalchini, Safed Jira, Elaichi and Ginger* improves appetite<sup>14, 27</sup>.

### Conclusion

*Mucuna Prurita* is an annual twiner whose all parts are of medicinal value. *Mucuna* has been used for the following properties or conditions: Aphrodisiac, asthma, bite(dog), bite(snake), cancer, cholera, cough, diarrhea, dropsy, dysuria, fracture, madness, mumps, pleuritis, ringworms, rubefacient, sore, syphilis, vermifuge, resolvent, aphrodisiac, ascaricide, nervine, tumor(abdomen). *Kunch* contains L-dopa which helps in treatment of Parkinson's disease.

**Table 1 - Ingredients of Kunch Pak**

Plant Name	Common Name	Uses
<i>Anacyclus pyrethrum</i> Linn.	<i>Akarkara</i>	Nervine tonic, powerful irritant, sialogogue
<i>Animal fat</i>	<i>Ghee</i>	Nutrient.
<i>Argyreia speciosa</i> (L.F.)	<i>Samudhri shosha</i>	Tonic, used in synovitis &

sweet		syphilis.
<i>Bambusa arundinacea</i> Willd.	<i>Vanshlochan</i>	Stimulant, Astringent and Aphrodisiac.
<i>Chlorophytum borivillianum</i>	<i>Safed musali</i>	Tonic for general debility and aphrodisiac.
<i>Cinnamomum tamala</i> Nees & Ebrm.	<i>Tamalpatra, Tejpatra, Patra</i>	Helps in general debility, anorexia and indigestion, uterine stimulant.
<i>Cinnamomum zeylanicum</i> Breyn.	<i>Dalchini</i>	Anemia, general debility, abdominal distension & anorexia.
-	<i>Cow's milk</i>	Nutrient.
-	<i>Chandi, silver foil</i>	General debility and improves overall physical fitness.
<i>Crocus sativus</i> Linn.	<i>Kesar, saffron</i>	Antispasmodic, emmenagogue and stimulant.
<i>Cuminum cyminum</i> Linn.	<i>Safed Jira</i>	Dyspepsia, loss of appetite, Acute diarrhoea, worm infection.
<i>Elettaria cardamomum</i> Maton	<i>Elaichi, Cardamum</i>	General tonic, useful in anorexia and flatulence.
<i>Eugenia caryophyllus</i> Linn.	<i>Lavang, Clove</i>	Antiseptic, aromatic, carminative, stimulant & flavoring agent.
<i>Honey</i>	<i>Obtain from honey bees</i>	Mild laxative, bactericidal, sedative, antiseptic, useful for cold, cough, fever, sore eyes, throat, tongue, duodenal ulcers & liver diseases.
<i>Leptadenia reticulata</i> Wight & Arn.	<i>Jivanti</i>	Cooling, eye tonic, nutrient and aphrodisiac.
<i>Mesua ferrea</i> Linn.	<i>Nagkesar</i>	Nutrient, cardio tonic, brain tonic, carminative and appetizer.
<i>Mucuna Prurita</i> Hook.	<i>Kunch</i>	Aphrodisiac; spermatogenetic; retentive; prescribed in impotency, spermatorrhoea and sexual debility; tonic, laxative, alexipharmic and useful in Gonorrhoea.
<i>Myristica fragrans</i> Houtt.	<i>Nutmeg, Jatiphala</i>	Acute diarrhoea, malabsorption, vomiting, emesis, ozaena, sinusitis, asphyxiation, dysphoea.
<i>Piper longum</i> Linn.	<i>Pippali</i>	General debility, dyspepsia, flatulence, respiratory tract infection.
<i>Piper nigrum</i> Linn.	<i>Black pepper</i>	Stimulant, stomachic and carminative.
<i>Pongamia glabra</i> Vent.	<i>Karanja ki giri</i>	Rheumatism.
<i>Prunus mahalab</i> Linn.	<i>Priyangu</i>	Tonic, stomachic, diuretic, used in

<i>Scindapsus Officinalis</i> Schott (Roxb.)	<i>Gajpipal, Badipipal</i>	scorpion sting. Carminative, stimulant, tonic and anthelmintic.
<i>Semicarpus Anacardium</i> Linn.	<i>Bilwa</i>	Anti-inflammatory.
<i>Sucrose</i>	<i>Sugar</i>	Sweetening agent.
<i>Tradyspermum ammi</i> Sprague	<i>Ajowan</i>	Tympanitis, flatulence, constipation, disease of abdomen, chronic obstructive jaundice, worm infection.
<i>Zingiber Officinale Roscae</i>	<i>Ginger, sunthi</i>	Rheumatism, dyspepsia, loss of appetite, tympanitis, dyspnoea and carminative.

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