

Review On Nootropic herbs (Medhyarasayans) in Ayurveda

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ABSTRACT

Rasayanatantra is one of the eight specialities of Ayurveda. It is a specialized practice in the form of rejuvenation recipes, dietary regimen, special health promoting behaviour & drug. Under Aushadharasayana (drug), a number of formulations were from herbs, animal & mineral substance. Medhy arasayana is the combination of herbs that help in rejuvenating the brain. According to Ayurveda medhyarasayana works on three aspects of our nervous system – Intelligence (dhi), Retention (dhriti) & Recall (smriti). Some of the herbs which have been identified as Medhyarasayana are Guduchi, Yashtimadhu, Shankhpushpi, Mandukparni, Aindri, Vacha, Jyotismati, Kushmanda, Jatamansi etc. As per Acharya Charaka, Medhyarasayana not only acts on rejuvenating the nervous system but also helps in prolonging life, capable of curing several diseases, improve overall immunity, digestion, luster of the skin.

Keywords– Ayurveda, Memory enhancer, MedhyaRasayana

I. INTRODUCTION

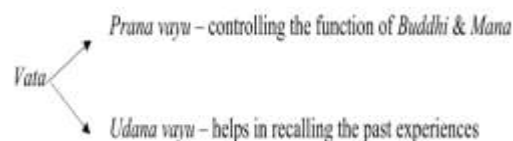
Today the percentage of world geriatric population is increasing. Most of them are over 60-65 years. Out of them high percentage is suffering from – Cognitive & memory impairment, loss of strength, insomnia, loss of perception, fear, anxiety & other senile diseases. Statistically prevalence of overall mental illness is 12.5% among children & young generation with overloading of stress, tension, anxiety, lack of sleep.^[1] It affected their mental, social functions & learning capacity. In relation to Ayurveda, these have contributed to imbalance in mental abilities of Dhi (power of learning), Dhriti (the power of retention), Smriti (the ability to recall). As solution to these problems; it has been mentioned about Rasayana therapy in Ayurveda specifically MedhyaRasayana. Further Acharya Charaka has been explained MedhyaRasayana Chatushkaya which is mentioned

about four distinctive plants that have given effects of Medhya.

Concept of Medhya

The term Medhya is derived from Sanskrit word Medha, meaning intellect or cognition. Buddhi is one of the seven well functioning mental factors. According to Arundatta, Medhya is faculty of Buddhi. Buddhi is composed by Dhi, Dhiti & Smriti. According to Shabdakalpdruma, Medhya is equivalent to Buddhi & Pragna, because Pragna & Medha are two synonyms of Buddhi.

Relation between Tridoshas & Medhya



Pitta – Promotes Medha, esp Sadhaka pitta
Kapha- responsible for best qualities of Dhriti

Relation between Dhatu & Medhya

Rasa Dhatu – Nourishes the buddhi
Rakta Dhatu - Responsible for the promotion of the Medha

Mamsa Dhatu – Indicates strong Dhriti
Shukra & ojas – Nourishment of Buddhi

Medhya Rasayana Chatushkaya

The term Medhya is defined as beneficial for medha. MedhyaRasayans are a group of medicinal plants described in Ayurveda with multi-fold benefits, specifically to improve memory & intellect by Prabhav (specific action). Medhameans intellect or retention & Rasayana means therapeutic procedure that on regular practice will boost nourishment, health, memory, intellect, immunity & hence longevity. Description of the MedhyaRasayana found in Samhitas indicates special utility of these types of Rasayanas apart from Rasayana in general. In Charak Samhita there is no direct mentioning of MedhyaRasayana as an independent type. But there is mentioning of four

drugs, they are Mandukparni(Centella asiatica Linn),Yastimadhu(Gly-cirrhizaglabra Linn.)Guduchi (Tinospora cordifolia (wild)(Miers) and Shankhpushpi(Convolvuluspleuricaulis Chois), specially mentioned with wide range of applications on different systems.^[2]The chapter named ‘Medhayushkamiya’ adhyaya is meant for description of same. Acharya Charak has explained four dravyasunder MedhyaRasayana -

- 1)Mandukparni Swarasa
- 2)Yashtimadhu Churna
- 3) Shankhpushpi Kalka
- 4) Guduchi Swarasa

Yet in practice few more handful drugs used with same aim are mentioned else where in Ayurveda classical textbooks. They are Aindri(Bacopa monniera), Jyotishmati (Celastruspanniculata),

Kushmanda (Benincasahispida), Vacha (Acorus calamus)and Jatamansi (Nardostachysjatamansi)^[3]

Medhya Rasayana : Probable mode of action^[4]

According to Acharya PV.Sharma, Medhya drugs act in accordance with Prabhav.Medha will benefit from that mostly contain Tikta rasa, Laghu, Snigdha Guna,Sheetaveerya and Madhur vipaka. Rasa, srotas and agniwill be affected by the effects of these prabhav&rasadi.

Medhyarasayana drugs are two types

1] Sheetaveerya and Madhur vipakadravya, it promotes Kapha& enhances retention/dharana karma. Eg. Yashtimadhu, Shankhpushpi.

2]Ushnaveerya & Tikta rasa dravya, it promotes Pitta& enhances Grahana /grasping, Smriti/memory. Eg. Guduchi.

MedhyaDravya Properties

| Sr No | Drug | Chemical composition | Properties | Activity |
|-------|-------------|---|---|--|
| 1 | Mandukparni | Saponin, Hydrocortylin, Glycoside, Asiaticoside, Vellerine, Pectic acid, Ascorbic acid, Centoic acid | Rasa- Tikta, Kashay, Madhur Vipaka – Madhur Veerya – Sheeta Guna – Laghu Prabhav - Medhya | 1)Antidepressant Properties ^[5] 2)Anti Alzheimer activity ^[6] 3)Cognitive function ^[7] 4)Antianxiolytic& sedative ^[8] 5)Parkinsons disease ^[9] 6] Antioxidant properties ^[10] |
| 2 | Yashtimadhu | Glycerrhizine, flavonones | Rasa – Madhur Vipaka – Madhur Veerya – Sheeta Guna – Guru, Snigdha | 1)Antidepressant activity ^[11] 2)Neuroprotective effect ^[12] 3)Anti stress & sedative ^[13] 4) Learning and Memory Enhancing Activity ^[14] |
| 3 | Guduchi | Alkaloids, diterpenoid, lactones, glycosides, steroids, phenolics, sequiterpenoid, aliphatic compound | Rasa – Tikta, Katu, Kashay Vipaka – Madhur Veerya – Ushna Guna – Laghu, Ruksha, Mrudu | 1)Antistress Activity ^[15] 2)Antidepressant activity ^[16] 3)Antipsychotic activity ^[17] 4)Neuroprotective |

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|---|--------------|--|---|---|
| | | | | activity ^[18] 5] Antioxidant activity ^[19] |
| 4 | Shankhpushpi | Microphylllic acid, shakhpushpin, steroid, kaempferol-kaempferol-3-glucoside, sitosterols | Rasa – Kashay Vipaka – Madhur Veerya – Ushna Guna – Laghu, Ruksha, Mrudu Prabhav - Medhya | 1)Antianxiolytic activity ^[20] 2)Antistress activity ^[21] 3)Learning,Memory &behaviouractivity ^[22] 4)Brain nourishment activity ^[23] |
| 5 | Aindri | Bacosides. saponin | Rasa-Tikta Vipaka –Katu Veerya –Ushna Guna –Laghu Prabhav - Medhya | 1]Tranquilizing ^[24] 2] Sedative action ^[25] 3] Cognitive Enhancer ^[26] 4]Memory Enhancer ^[27] 5] Antioxidant Activity ^[28] 6]Neuroprotective ^[29] |
| 6 | Vacha | a-asarone, elemicin, cis-isoelemicine, cis &trans isoeugenol & their methyl ethers, Camphene, acronene | Rasa – Tikta, Katu Vipaka – Katu Veerya – Ushna Guna – Laghu, Tikshna Prabhav - Medhya | 1] Anticonvulsant activity ^[30] 2]CNS depressant activity ^[31] 3]Antiepileptic activity ^[32] 4] Sedative & hypnotic activity ^[33] |
| 7 | Jyotishmati | Fatty oil with palmitric, oleric, linoleic & linolenic acid. A number of sequiterpenepolysters mainly malkangumin. | Rasa –Katu,Tikta Vipaka – Katu Veerya –Ushna Guna –Tikshna, Prabhav- Medhya | 1]Memory Enhancer ^[34] 2] Antioxidant Activity ^[35] 3] Anti – Alzheimer Activity ^[36] 4] Antidepressant Activity ^[37] |
| 8 | Kushmanda | Alkaloids, flavonoids Saponins, steroids | Rasa – Madhur Vipaka –Madhur Veerya –Sheeta Guna –Laghu, Snigdha Prabhav -Medhya | 1] Antioxidant Activity ^[38] 2]Alzheimers Disease ^[39] 3]Antianxiolytic ^[40] |
| 9 | Jatamansi | Sesquiterpenes, Coumarins, Valeranone or | Rasa –Tikta, Kashay, Madhur | 1]Antidepressant Activity ^[41] 2]Antidepressant |

| | | | | |
|--|--|-------------|--|---|
| | | Jatamansone | Vipaka – Katu Veerya –Sheeta Guna -Snigdha Prabhav – Bhutaghna | Activity ^[42] 3] Antioxidant Activity ^[43] 4] Antianxiolytic ^[44] |
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II. CONCLUSION

Ayurveda can help people cope with mental stress in a variety of ways. The Medhya Rasayana aids in improving intelligence, memory & recollection. Medhya Rasayana not only helps in rejuvenate the nervous system but it also helps to extend life & is capable of healing variety of diseases. It also helps to increase overall immunity, metabolism, skin lustre & expression (voice).

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