



## Review Article

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### BRIMHANA DRUGS USED IN KARSHYA ROGA: A BRIEF REVIEW

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#### ABSTRACT

In Ayurveda ahara is considered as the first pillar among three (Ahara, Nidra, Abramhacharya). In charak samhita vyadhis are of two types according to ahara, aptarapanjanya and Santarapanjanya. Karshya is an aptarapanjanya vyadhi. Importance of ahara is well described in Samhitas. Two main factors Alpashana, Vishamashana results in the development of Karshya. Ahara is most important predisposing factor to manifestation of this disease. Many drugs Vidarikanda, Ashwagandha, Bala are broadly described in detail in the management of Karshya in all textbooks of Ayurveda. Many pharmacotherapies Brimhana, Rasayana have been described in the classics for the patients of Karshya. Main aim to treat Karshya is to achieve proportionate body. All brimhaniya aushadhi (medicine) have properties like Guru, Snigdha guna, Madhura rasa, Madhuar Vipak, and Sheet virya which pacifies vata, pitta and rakta dosha and help in re-gaining the diminished strength, height and body weight. Karshya is responsible for many other health related problems. So a great consideration must be required to overcome this global health related problem. This review paper is a brief description of the medicinal properties and therapeutic effects of brimhaniya drugs useful in Karshya.

**Keywords:** Karshya, Malnutrition, Jivneeya, Brimhana Aushadhi.

#### INTRODUCTION

Malnutrition is estimated to be contributing to more than one third of all child deaths, although it is rarely listed as the direct cause. In present days with advancement of specific appliances children are becoming lazier, taking fast food, cold drinks alcohol and fatty diets. This type of diet is not complete nutritious diet due to lack of protein, minerals, vitamins, so children becomes malnourished. Karshya is a condition which involves insufficient supply of nutrients in any stage of life. Ayurveda believes that many health problems, disease can be prevented through nutritious diet.

Growing children are most vulnerable to its consequences; the nutritional requirements of growing children are more since this energy requirement is high due to the fast tissue growth in early age. Food is one the three sub-pillars of life as per Ayurveda, the Aahar ras is converted into rasadi sapt dhatus through process of Agni and these dhatus makes the building blocks of growing body. There are many nutritional requirements described in ancient text including supplement related to carbohydrates and proteins, the supply of these nutrients when becomes less than their requirements then malnutrition (Karshya) occurs<sup>1</sup>.

Ayurveda believes; prevention is better than cure, by enhancing immunity, maintain the health of individuals<sup>2</sup>.

Recently WHO paid great attention towards the problems since malnutrition may have some severe symptoms like Mental, physical weakness, Weight loss, Retardation of tissue growth & Fatigue.

Childhood Karshya is a vata pradhana vyadhi so it is managed with brimhana, laghu, ushan and vatahara aushadhi (medicinal herbs).

There are many drugs available in Ayurvedic Text books for Childhood Karshya. This article is a brief review of brimhana

aushadhis mentioned in different samhitas and research related to them.

#### Vidarikanda (*Pueraria tuberosa*)

Vidarikanda having a property of madhura rasa Shita Veerya, Guru, and Snigdha Guna and it pacify Vata, Pitta and Rakta dosha and madhura vipaka which has vatashamak effect helps in triglyceride synthesis, which is deha vridhikarbhava. On other hand, guru, snigdha sheeth in body and mrudu guna are directly responsible for brimhana effect in body. Rasayan property improves general health and immunity. Jeevaniya property maintains equilibrium of dosha, dhatu and malas. Flavone present in Vidarikand is free radical scavenger and polyphenol modulate hepatic cholesterol metabolism and reduce inflammation in GIT<sup>3</sup>.

Vidarikand used as, Brimhaniya, Balya, Rasayana, Jivaniya, Vrishya, Shukrala Vatahara drugs and its formulations are used In Jwar, Raktapitta, Rajyakshma, Kasa, Kshatksina, Vatarakta, Klavya and other many more diseases<sup>4</sup>.

**Immunomodulatory and Antioxidative:** A study conducted on healthy mice. A phagocytic activity and immunoglobulin A and IgG level increased significantly. Pueraria tuberosa showed significantly higher reduced glutathione level and significantly lowered thiobarbituric acid reactive substances levels in liver and red blood cells<sup>5</sup>.

The tubers of *P. tuberosa* are described as sweet, refrigerant, emollient, laxative, aphrodisiac, galactagogue, diuretic, cardiotonic, expectorant, and used for the treatment of various ailment<sup>6</sup>. Tubers are rich in isoflavanoids such as puerarin, daidzein, genistein and genistin<sup>7</sup>. Its Brihan effect is seen in Karshya vyadhi<sup>8</sup>.

### Ashwagandha (*Withania somnifera*)

Ashwagandha has madhura, kashaya, tikta rasa, madhura vipaka, kaphvatashamaka, brimhana, balya, rasayana property<sup>9</sup>. Due to madhura rasa and madhura vipaka it is useful in improving the muscular strength of lower limbs and helping recover weakness as well as Karshya in childrens. Many formulations that are made from Ashwagandha improve the musculoskeletal problems, also acts as a tonic that boosts energy and improves longevity and overall health.

The growth enhancing effect seen in research trial, the study was conducted in two groups; Child was included in trial in between age group 8-12 yrs, for 60 days.

Group 1: Ashwagandha 2 g/day with 100 cc milk – slight increase in Hb, PCV, MCV, MCH serum iron, body weight and total protein.

Group 2: Ashwagandha and punarnava in equal amount 2 gm/day – showed significant increase in the level of Hb, PCV, MCV, MCH, serum iron, marked improvement in body weight and total protein. The study showed that Ashwagandha is useful as a growth promoter and hematinics in growing children<sup>10</sup>.

### Lotus (*Nelumbo nucifera*)

Lotus is an aquatic plant belonging to family Nelumbonaceae, plant derived food products are a rich source of diversified metabolites, have protective potential and health-promoting benefits and also having antioxidative mechanisms to a reduced risk of cancer incidence and cardiovascular disease<sup>11</sup>.

It is medicinally versatile and used in folk medicine. Seeds are rich in protein as well as minerals. Rhizomes consist of 1.7 % protein, 0.1 % fat, 9.7 % carbohydrates, seeds possess saponins, carbohydrates, high amount of protein, 348.45 cal/100, sodium 1%, potassium 28.5%, calcium 22.1%, magnesium 9.2% and in less amount copper, zinc also present. Thus it is used in case of Karshya and seeds can be used as main constituents to supply deficient nutrient especially protein<sup>12</sup>.

### Bala (*Sida cordifolia*)

There are five kind of bala mentioned in our text books as Bala, Nagbala, Mahabala, Atibala, Rajabala. Bala is placed under Brimhana, Balya, Prajasthapana, Madhur Skandh and vata samshana gana. The root of Bala contains cellulose 84.32 %, fat and wax 1.16%. It poses ojovardhak, vrishya, rasayan, balakrita and hence it can be used in karshya and daurbalya<sup>13, 14</sup>.

### Kharjur (*Phoenix dactylifera*)

According to ayurvedic texts kharjur is madhur, sheeth, brimhana, balya and mamsvardhak. Kharjur contains easily digestible sugar [70%], mainly glucose, fructose and sucrose, protein, dietary fiber, fat present in fewer amounts. It also contains vitamins like riboflavin, thiamine, biotin, folic acids, and ascorbic acid that all are the essential for the growth of the body<sup>15</sup>. The pulp of pind kharjur is rich in iron, calcium, cobalt, magnesium, potassium, sodium, copper, sulphur and zinc<sup>16</sup>. Fruit having madhur rasa, madhur vipak, used in thirst, tuberculosis, abdominal complaints and Vata Vikar. Leaves are aphrodisiac and good for liver<sup>17</sup>.

**Gastrointestinal protective activity:** It useful against peptic ulcers, protect gastric mucosa from harmful effects of the gastric acids<sup>18</sup>.

### Madhook (*Madhuca longifolia*)

*Madhuca longifolia* commonly known as mahua, other species is known as *Madhuca latifolia*. Their fruit, bark, leaves and seeds have uses in Indian system of medicine. *Madhuca* having oil bearing seeds & flowers, which are used for alcohol production, there seeds are good source of edible fats<sup>19</sup>.

Its seeds kernels are rich source of saponins<sup>20</sup>. It is rich source of sugar and protein, the flowers also are rich source of minerals like Ca, P, Fe, and K. calcium is essential component of teeth and bone development.<sup>21</sup>

### CONCLUSION

Detailed description of Karshya related to childhood is found in different Ayurvedic texts. Vyadhi sambhavaja phakka described by Acharya Kashyapa is similar to Karshya. The nutritional and energy requirement of a growing child is higher due to the fast tissue growth in early age. Researches have proved that the herbs which are described in ancient texts are rich in carbohydrates and proteins which are beneficial for malnourished children. As Karshya is the major problem in developing countries like India, these drugs (brimhana aushdhies) can be given as a supplement along with the balanced diet in the management of Karshya (malnutrition).

### REFERENCES

1. Lokesh et al, Recent Approaches of Ayurveda for Karshya: A Review, IAIM vol. 2, issue 1, Jan 2015. ISSN No. 2394-0026(P), 2394 0034(O)
2. Sharma P.V, Sutra Sthan 30/26, Charak Samhita [text with English translation Chaukhambha Orientalia Varanasi.
3. Bhagat Vitthal Vijay et.al, To Study The Brimhan Siddhant On The Basis Of Efficacy Of Vidarikand On Karshya Vyadhi, International Ayurvedic Medical Journal ISSN : 23205091
4. Government of India, Ministry of Health and family welfare, The Ayurvedic Pharmacopeia of India, Department of AYUSH; 2008. part 1, Volume II, 1<sup>st</sup> Edition, p. 173.
5. Sawale Digamber Pravin, Immunomodulatory and Antioxidative Potential of Herb (*Pueraria tuberosa*) In Mice Using Milk as The Carrier. International Journal of Dairy Technology View Issue TOC Volume 66, Issue 2 May 2013 Pages 202 -206,
6. Vaidyaratnam P.S. Indian Medicinal Plants – A compendium of 500 species, Vol. 4, Orient longman publishing, Kottakkal: 391-395 (1997)
7. Rastogi, R.P. and Mehrotra, B.N.: Compendium of Indian Medicinal Plants. Publication and Information Directorate, New Delhi (1985-89).
8. Bhagat Vitthal Vijay, Kotangale T. Yogesh and Rampurkar M.V, To Study the Brimhan Siddhant on the Basis of Efficacy of Vidarikand on Karshya Vyadhi, International Ayurvedic Medical Journal Volume 3; Issue 5; May 2015
9. Panday G, Dravyaguna vidnyana, Varanasi 2<sup>nd</sup> ED, Varanasi: Chaukhmba prakashana; 2007 Volume-1 p. 243.
10. B. Radhika, B Andallu Ibidem- [51], Indian Journal Exp Biol 2000, 38: p. 607 -609
11. M. Schreiner, I. Mewis, S. Huyskens-Keil, Jansen M. A. K., Zrenner R., Winkler J. B., et al. (2012). UV-B-Induced Secondary Plant Metabolites- Potential Benefits for Plant and Human Health. Crit. Rev. Plant Sci. 31 229-240. 10.1080/07352689.2012.664979
12. Shridhar K.R, Bhat Rajiv. Lotus – A Potential Nutraceutical Source, Journal of Agricultural Technology, 2007, 3 :144 – 155.
13. Wealth of India, Volume -10, p.360

14. Willium Dymock.C.J.H. Warden, David Hooper. Pharmacographia Indica. London % Kegan Paul, Trench, Trubner & Co, p. 206-207.
15. Al Farsi MA, Lee CY. Nutritional and functional properties of dates: a review critical Reviews.FoodSciNutr2008;48877-887.  
<http://dx.doi.org/10.1080/10408390701724264>PMid: 18949
16. Ali Mohamed AY, Khamis AS, Mineral ion content of the seeds of six cultivars of Bahraini date palm (*Phoenix dactylifera*). J Agric Food Chem 2004; 52:6522-6525.
17. <http://dx.doi.org/10.1021/jf030518x>PMid:154790
18. Kartikar KR, Basu BD, Editors. Indian Medicinal Plants. 2<sup>nd</sup> ed. Dehradun: International Book Publication; 1999. p. 2561-6263 1
19. AL Qarawi AA, Abdel-Rahman H, Ali BH, Mucosa HM, EL-Mougy SA. The ameliorative effect of dates (*Phoenix dactylifera*) on ethanol- Induced Gastric Ulcer in Rats. J Ethanopharmacol 2005; 98:313-317.
20. <http://dx.doi.org/10.1016/J.Jep.2005.01.023>PMid:15814265
21. Ramadan MF, Sharanabasappa G, Paramjyothi S, Seshagiri M, Joerg-Thomas Moersal (2006): Profile and levels of fatty acids and bioactive constituents in Mahua butter from fruit – Seeds of Buttercup Tree (*Madhuca longifolia*). Eur food Res Technol 222: 710-718. (cross ref), (web of science)
22. Heywood BJ, Kon GAR [1940]: Saponins. Part IX. The Occurance and Constitution of Basic Acid. J Chem Soc 713-720
23. Gopalan C, Rama Sastri BV and Balasubramanyam SC: Nutrition Values of Indian Foods, National Institute Of Nutrition, ICMR, Hyderabad, India, 2004.

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