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Vajikarana Activity of Gandhaka and its Kalpa: A Review

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ABSTRACT

In *rasashastra*, *gandhaka* holds an important place, even though it is one of the *uparasa*. It is used in *samskara* of *parada*, other metals and minerals. One can find many *guna karma* of *gandhaka* in classics. There is mentioning of *vajikarana* property of *gandhaka* like *veerya vrudhikara*, *vrushya* etc. *Gandhaka* is used as a single drug and also used in many dosage forms like *gandhaka kalpa*, *gandhaka rasayana*, *gandhaka druti*, *gandhaka yoga* and *gandhaka amayika prayoga*. *Vajikarana* property of *gandhaka* along with different *anupana* are mentioned in our classics. In this work 11 *rasashastra* books are reviewed. In modern biochemistry also there is a reference of spermatogenic activity of sulphur containing amino acid methionine.

KEYWORDS

Rasashastra, *Sulphur*, *Gandhaka yoga-kalpa*, *Vajikarana*, *Spermatogenic activity*



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INTRODUCTION

In *rasashastra*, *gandhaka* is 1st among the *uparasa*. It is considered as the menstrual blood of goddess Parvathi¹. It is extensively used in the *parada samskara* and formulations. There are references of *vajikarana guna* of *gandhaka* and its formulations available in *rasashastra* books like *veerya vruddhikara*, *vrushya*, *veeryakrith* etc. property of *gandhaka*.

According to *Shabdha kalpa druma vaaji* means *ashwasamana vega* and *vajikarana* means the one which does *ashwasamana*². *Vajikarana* not only deals with improvement of sexual performance, also guides about the *lakshanas* of *stree*, marriage law, the art of 64 *vajeekarana kala*, when and how to indulge in sexual act etc. It also deals with method and time of procuring child of desired sex³. Researches are conducted on sulphur also proved the spermatogenetic activity⁴.

MATERIALS & METHODS

An extensive review has done on *vajikarana guna* of *gandhaka* used as a single drug and in formulations. *Gandhaka* is used after *shodhana* by *shodhana dravya* like *ksheera* and *ghrita*⁵, *sarshapa taila* or *kusumba taila*⁶, *bhringaraja swarasa*⁷, *churnodaka* and *lavana dravaka*⁸ etc. *Gandhaka* have *madhura rasa*, *rasayana karma*⁹. *Shodhana dravya* like *ksheera*, also have *madhura rasa*, *sheeta-snigdha guna*, *vrushya-vajikarana-rasayana karma*¹⁰. *Bhringaraja* have *balya*, *rasayana karma*¹¹. All these have influence on properties of *shukra*¹².

According to modern science, sulphur containing amino acid i.e. methionine is one of the causative factor for the synthesis of polyamines such as spermidine, spermine, and also polyamines, which are essential for cell growth and proliferation¹³.

Table 1 Details of *Gandhaka* and Its *Kalpa*

Sl No.	<i>Gandhaka Kalpa/ Yoga</i>	Ingredients	<i>Bhavana Dravya</i>	<i>Matra</i>	<i>Anupana</i>	<i>Prayoga kala</i>	<i>Karma</i>
1	<i>Gandhaka taila or druti</i> ¹⁴	<i>Shuddha gandhaka</i> 250gm + <i>trikatu churna</i> 15gm + <i>tila taila</i> 100gm and <i>veshta</i>		3 bindu	<i>Nagavalli patra+rasa</i> 1 valla and <i>godugdha</i>		<i>Kamasya deepti</i>
2	<i>Dwitiya Gandhaka kalpa</i> ¹⁵	<i>Shuddha Gandhaka</i>		1 <i>Nishka</i>	<i>Ksheera</i>	1 month	<i>Shourya-veerya pravruddhaya</i>
3	<i>Panchama Gandhaka kalpa</i>	<i>Shuddha gandhaka</i> + <i>Pippali</i>			<i>taila</i>		<i>Veeryadhika</i>



		<i>churna- both equal parts</i>			
4	<i>Panchama Gandhaka kalpa¹⁶</i>	<i>Shuddha gandhaka + pathya churna- both equal parts</i>		<i>Taila</i>	<i>Veeryadhika</i>
5	<i>Sapthama Gandhaka kalpa¹⁷</i>	<i>Shuddha Gandhaka</i>	<i>Ksheera - 3 times bhavana; Chaturjat aka + guduchi + pathya + Aksha + Dhaatri + Shunti – each drug kashaya, Bhringar aja swarasa – 8 times bhavana with each dravya</i>	<i>1 tola</i>	<i>Veerya vruddhi, Veerya pushti</i>
6	<i>Ashtama gandhaka kalpa¹⁸</i>	<i>Shuddha gandhaka + Eranda taila + Triphala + Guggulu + Parada : All equal parts – Prepare vati</i>	<i>6 masha to 1 tola</i>	<i>6 month</i>	<i>Shukradi vruddhikara</i>
7		<i>Jyotishka taila + vacha churna + navaneetha – all equal parts and Nashta gandha shuddha gandhaka – equal to above 3 drugs¹⁹</i>		<i>1 month</i>	<i>Veerya vruddhi</i>
8		<i>Urdwa paatita shuddha gandhaka (1 kola) + sita (9 kola)²⁰</i>	<i>1 ratti</i>	<i>Sheetala jala</i>	<i>Cures Shukra dosha, jalavat pradrava shukra, shukra nashta gandha</i>
9		<i>Shuddha gandhaka + shalmali</i>		<i>Ksheera</i>	<i>1 month Veeryam vivardhayeth</i>



		<i>laghu moola churna</i> ²¹					
10	<i>Dwitiya gandhaka kalpa</i> ²²	<i>Shuddha gandhaka +Amalaki churna both equal parts</i>	<i>Amalaki swarasa +Shalmal i swarasa 7 times bhavana with each one</i>	1 <i>masha</i>	<i>Sharkara + madhu + ksheera</i>	30 months	Increases <i>kaamashakti</i>
11	<i>Tritiya gandhaka kalpa</i> ²³	<i>Shuddha gandhaka ½ masha</i>		½ <i>masha</i>	<i>Ksheera</i>	1 month	<i>Veerya vruddhi</i>
12	<i>Ashtama gandhaka kalpa</i> ²⁴	<i>Shuddha gandhaka</i>	<i>Bhringar aja swarasa-3 bhavana</i>	1 <i>masha</i>	<i>Haritaki churna, Ghrita, Madhu</i>	2 months	Old one able to indulge in coitus like a young
13	<i>Unavinshah Gandhaka kalpa</i> ²⁵	<i>Shuddha gandhaka</i>		1 nishka	<i>Ghrita or ksheera</i>	1 month	<i>veerya pravruddhi</i>
14	<i>Dwavimshah gandhaka kalpa</i> ²⁶	1 tola <i>Shuddha gandhaka + 1 tola puraana guda</i>		1 tola		6 months and BD	<i>Kaama rupi</i>
15	<i>Gandhaka druti (Trutiya) (Maharaja vitika)</i> ²⁷	<i>Shuddha gandhaka, palasha beeja, aja dugdha,</i>		3 ratti	<i>Thambool a patra and 3 ratti parada or rasa sindhura and ksheera</i>		<i>Shandatwahara</i>
16	<i>Gandhaka druti (chaturtha) (Raaja vitika)</i> ²⁸	4 tola <i>gandhaka, 16 tola ghrita and hasta matra ambara</i>	<i>Shyama dhatura, surasa, kasamarda, punarnava, durva dwe, pippali, eranda, vasaka, somaraji, chakramarda, tilaparni, divakara swarasa – 3 times bhavana with each swarasa</i>	4 ratti	<i>Thambool a patra and 3 ratti parada or rasa sindhura and ksheera</i>		<i>Shandhatwa hara, vrushya</i>



17	<i>Chaturtha Gandhaka rasayana</i> ²⁹	100 pala <i>gandhaka</i> and <i>Pippali</i> , <i>pippali moola</i> , <i>lavanga</i> , <i>naagakesara</i> , <i>triphala</i> , <i>padmaka beeja</i> – all drugs equal to <i>gandhaka</i>	<i>aja ksheera</i> , <i>ikshudan da rasa</i> , <i>amrutha</i> , <i>madhu gokshura</i> , <i>varaahika nda</i> , <i>madhuka</i> , <i>kushta</i> , <i>bhringara ja</i> , <i>tulasi</i> – 10 days <i>bhavana</i> with each <i>swarasa</i>	1 <i>masha</i>	<i>Sharkara</i> and <i>madhu</i> followed by <i>ksheera</i>	<i>Shandatwanashana</i> , <i>veerya stambana</i> , <i>vrushya</i> , <i>shukra meha dosha hara</i>
18	<i>Panchama gandhaka rasayana</i> ³⁰	6 pala <i>Shuddha gandhaka</i> ; <i>triphala</i> , <i>chitraka</i> , <i>vidanga tandula</i> , <i>trikatu</i> , <i>trisugandha</i> , <i>kana moola</i> , <i>jeeraka</i> , <i>rakta chitraka</i> – 1 pala each drug		1 or 2 or 3 <i>nishka</i> acc to <i>agni bala</i>	<i>Madhu</i> or <i>navaneeta</i> or <i>pakwa kadali phala</i> and <i>sharkara</i>	<i>Shukra stambana</i>
19	<i>Gandhaka loham</i> ³¹	<i>Shuddha gandhaka</i> (½ tola to 1 tola), <i>loha bhasma</i> (3 ratti to 6 ratti)			<i>Triphala kashaya</i>	1 year <i>Veerya vruddhi</i>

DISCUSSION

Vajikarana property of *gandhaka* is mentioned in all the 11 *rasashastra* books as *veerya vruddhi*, *veeryakrith* and *vrushya* which indicate *vajikarana* property are reviewed (Table-1). *Gandhaka* is used as single drug and also used in formulations which are indicated in *vajikarana*. *Gandhaka* is used in different dosage forms

i.e. tablet – *gandhaka rasayana*, *taila* – *gandhaka taila*, *druti* – *gandhaka druti*. There are 9 *gandhaka kalpa*, 2 *gandhaka rasayana*, 2 *gandhaka druti*, 2 *gandhaka yoga*, 3 *gandhaka amayika prayoga* mentioned (Table-1).

Gandhaka have *madhura rasa*, *rasayana karma*⁹. *Shodhana dravya* like *ksheera* have *madhura rasa*, *sheeta-snigdha guna*, *vrushya-vajikarana-rasayana karma*¹⁰ and



bhringaraja have *balya, rasayana karma*¹¹. Different *anupana* used like *ghrita* have *madhura rasa, madhura vipaka, sheeta veerya, vrushya karma*³²; *madhu* have *madhura rasa, sheeta guna and vajikarana karma*³³. *Sharkara* have *madhura rasa, sheeta-snigdha guna, vrushya karma*³⁴ and *taila* have *madhura rasa, madhura vipaka, vrushya karma*³⁵. All these properties increases the *madhura rasa, snigdha guna* of *shukra*. All these *guna karma* of *dravya* also contribute to the *vajikarana karma* of *gandhaka*. Some drugs may act on the basis of *guna samanya*, some on *karma samanya*. The functions of polyamines like synthesis of DNA, RNA and proteins³⁶ and cell growth, cell proliferation³⁷ can be understood as one of the *vajikarana karma* of *gandhaka*.

CONCLUSION

In *rasashastra* texts, properties of *gandhaka* and its *yoga* is mentioned as *veeryavruddhi, veeryakrith, vrushya* etc. *Samanya guna* and *karma* of *gandhaka*, drugs used in *yoga, shodhana dravya* and *anupana dravya* will also have effect on *vajikarana* property of *gandhaka*. Through modern biochemistry, it can be understood through the metabolism of sulphur containing A.A. methionine and

recent experimental studies also proved spermatogenic activity of *gandhaka*.



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