

A Review study on various *Ksharsutras*

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Abstract

Ksharsutra even though not described vividly by Acharya Susruta, has been described and practiced in Ayurveda for Anorectal disorders and also for those conditions which demands gradual excision after Dr PJ Deshpande. Ksharsutra is distinguished as a medicated seton. Mechanical action of the threads or Seton and the chemical action of drugs coated on the thread together do the work of cutting, curetting, draining, and cleaning thus promoting healing of the wound. Apamarga Ksharsutra is considered as the standard Ksharsutra although this Apamarga Ksharsutra has been a landmark success but it has certain drawbacks like pain, burning sensation and itching associated with it during therapy and availability of Apamarga throughout the year, which is also difficult as Apamarga is a seasonal plant. Even Snuhi ksheer, used in Apamarga Ksharsutra, also creates many problems during preparation of thread. A very little amount is collected after the incision of the stem. It coagulates if not used early. In order to overcome these disadvantages of Apamarga Ksharsutra several other Ksharsutra has been prepared by different research scholars using the drugs having binding property on thread, available in bulk, less irritant, having vranshodhaka and vranropaka properties. Thus, a study was attempted to review the published articles for the materials used in different Ksharsutra preparations. The method followed was Net and Book surfing for various materials with key words.

Keywords

Ksharsutra, Anorectal disorders, Vranshodhaka, Vranropaka



Greentree Group

Received 11/01/17 Accepted 03/03/17 Published 10/03/17

INTRODUCTION

Ksharsutra is a successful novel drug delivery system, emerging as a specialized modality of treatment in the field of surgery in Ayurved. Ksharsutra is distinguished as a medicated seton. Mechanical action of the thread or Seton and the chemical action of drugs coated on the thread together do the work of cutting, curetting, draining, and cleaning thus promoting healing of the wound. Ksharsutra even though not described vividly by Bruhatrayi but it has been described and practiced in Ayurved for Anorectal disorders and also for those conditions which demands gradual excision. Acharya Sushrut, Father of Surgery stated about Ksharsutra for the first time in his text named 'Sushrut Samhita' with its clear cut indication in Nadi Vrana, Bhagandar and Arbuda.¹ Although Bhrihatrayi the chief three texts of Ayurved mention the use of Ksharsutra but there is no description of their preparation properly. It was Chakrapani Datta in late eleventh century in his book Chakradatta, first mentioned the method of preparation with a clear cut indication of its use in Bhagandar and Arsha.² Later it was standardized in the department of Shalya Shalakyas B.H.U

Varanasi by Prof P J Deshpande his research officer Dr S. R Gupta and his Coworkers.³

Apamarga Ksharsutra is considered as the Standard Ksharsutra although this Apamarga Ksharsutra has been a landmark success but it has certain drawbacks like pain, burning sensation and itching associated to it during therapy and availability of Apamarga is also difficult throughout year as Apamarga is a seasonal plant. Even Snuhi ksheera is used in Apamarga Ksharsutra also creates many problems during preparation of thread. In order to overcome these disadvantages of Apamarga Ksharsutra several other Ksharsutra as well as Ksheersutra has been prepared by different research scholars. The present review is carried out to study these different Ksharsutra compositions.

MATERIALS AND METHODS

This study is endeavoured to check the published articles for the materials used in different Ksharsutra preparation wide in India. The method followed is Net and Book surfing for various materials with key words.

OBSERVATIONS

Upon screening various research article on different Ksharsutras following particular were perceived.

Sr no	Kshar /Ksheer sutra	Sutra	Ingredients	Method of preparation	Research Scholar
01	Udumbar		Udumbar ksheer	11 coatings of Udumbar ksheer	P J Deshpande
	Ksheersutra ⁴			were made on thread were made on thread .	M K Jalan
02	Papaya Sutra ⁵		Papaya Fruit	11 coatings of papaya fruit pulp and papain powder	S N Pathak
			Papain powder	2 coatings of papaya fruit pulp and	
			Haridra powder	Haridra powder	
03	Snuhi	Swaras	Snuhi Swaras	11 coatings of Snuhi swaras	A . K Gupta
	Ksharsutra ⁶		Apamarga Kshar	7 coatings of Snuhi swaras with	S . N Pathak
			Haridra powder	Apamarga kshar	
				3 coating of Snuhi swaras with	
				Haridra powder	
04	Yavakshar Sutra ⁷		Snuhi ksheer	11 coatings of Snuhi ksheer	S . N Pathak
			Yavakshar	7 coatings of Snuhi ksheer with	A.Vidyarthi
			Haridra powder	Yavakshar	
				3 coating of Snuhi ksheer with	
				Haridra powder	
05	Ghrutkumari		Ghrutkumari	11 coatings of Ghrutkumari pulp	K.R Sharma
	Ksharsutra ⁸		pulp	7 coatings of Ghrutkumari pulp	P.S Reddy
			Apamarga Kshar	with Apamarga Kshar	
			Haridra powder	3 coating of Ghrutkumari pulp	
				with Haridra powder	
Sr no	Kshar /Ksheer sutra	Sutra	Ingredients	Method of preparation	Research Scholar
06	Aragvadhadi		Aragvadhadi	7 coatings of Aragvadhadi fruit	P.

	Ksharsutra ⁹	fruit pulp,	pulp + Ghrut + Madhu	Hemantkumar
		Ghrut , Madhu ,	3 coatings of Aragwadhadi fruit	M.Sahu
		Haridra churna ,	pulp , Ghrut , Madhu + Haridra	
		Agaru	3 coating of Aragwadhadi fruit	
			pulp , Ghrut , Madhu + Agaru	
07	Kadali	Snuhi Ksheera,	11 coatings of Snuhi Ksheera,	Vikas Yadav
	Ksharsutra ¹⁰	Kadali Kshara	7 coatings of Snuhi Ksheer with	Prasanna Rao
		Haridra powder	KadaliKshara	Hemantkumar
			3 coatings of Snuhi ksheer with	
			Haridra	
08	Guggul	Guggul solution	11 coatings of Guggul solution,	Praveen
	Ksharsutra ¹¹	Apamarga	7 coatings of Guggul solution	Kumar
		Kshar	with Apamarga Kshara	M. Sahu
		Haridra powder	3 coatings of Guggul solution	
			with Haridra	
09	Palash ksharsutra ¹²	Snuhi Ksheer	11 coatings of Snuhi Ksheer	Gaurav Parmar
		Palash Kshar	7 coatings of Snuhi ksheer with	Meena Parmar
		Haridra powder	PalashKshara	
			3 coatings of Snuhi ksheer with	
			Haridra	
10	Gomutra	Snuhi Ksheer	11 coatings of Snuhi Ksheer	M. K Yadav
	Ksharsutra ¹³	Gomutrakshar	7 coatings of Snuhi Ksheer	A.K Bhargav
		Haridra powder	with Gomutra kshar	
			3 coating of Snuhi Ksheer	
			with Haridra powder	
Sr	Ksharsutra	/	Ingredients	Research
no	Ksheer sutra		Method of preparation	Scholar

11	Modified	Arka ksheer	11 coatings of Arka ksheer	N Gupta
	Ksharsutra ¹⁴	Papaya ksheer	7 coatings of Arka ksheer +	
		Tankan kshar	Papaya ksheer + Tankan Kshar	
		Yashtimadhu	3 coatings of Arka ksheer with	
		Churna	Papaya ksheer + Yashtimadhu	
			Powder	
12	Nimba	Snuhi ksheer	11 coatings of Snuhi Kshir	Sidhharam
	Ksharsutra ¹⁵	Nimba Kshar	7 coatings of Snuhi ksheer and	Arawatti ,
		Haridra powder	Nimba Kshar	N Rajeshwari
			3 coatings of Snuhi ksheer and	S Pragma
			Haridra powder	

DISCUSSION

After reviewing different articles and books it was found that **Udumbar ksheer sutra** is having Vranshodhak and Vranropak action , it is easy to prepare , less irritant in nature but its unit cutting time was more in comparison to Standard Ksharsutra . **Papaya Sutra** is Vranropak, Papain powder (obtained by drying unripe fruit juice) used in the thread and contains strong proteolytic enzymes which leads to debridement of necrosed tissue very early after application. The only disadvantage is that its Unit cutting time is long. To overcome the problems associated with Snuhi Ksheer collection Snuhi Swaras was used in the preparation of **Snuhi Swaras Ksharsutra** . Its tolerance is

somewhat better and scar is thin in comparison with Standard thread .Its disadvantage is that it requires more coatings to achieve adequate thickness. In **Yavakshar sutra**, Yavakshar is used in place of Apamarga Kshar which is well known for its lekhan action. It is also Shothhar and Shitviriyatmak in nature. It causes less pain as compared to Apamarga Ksharsutra. But Unit cutting time of Yavakshar sutra is more. In **Ghrutkumari Ksharsutra** pulp of Ghrutkumari was used in place of Snuhi ksheer Researches suggest that Ghrutkumari possesses local anaesthetic property. It also has Shothhar and Vranropak properties but it was observed that thread appears to be beaded because



sticking was not uniform so pain was noticed during application. **Aragwadhadi Ksharsutra**, therapy for Bhagandar has been described by many ancient authors. Sushrut Acharya has also mentioned Aragwadhadi Varti in the Bhagandar Chikitsa. Unit cutting time is less because of which total duration of treatment is reduced, burning pain and irritation during the primary application and successive change of Sutra is quite less. **Kadali Kshara Sutra** can be considered as a better alternative in place of Apamarga Kshara Sutra because it has more acceptability, less irritant, easily available, causes less burning sensation and encourage healing by new granulation tissue formation but its unit cutting time is more as compared to Apamarga Kshar Sutra. In **Guggul Ksharsutra** Guggul solution was used in place of Snuhi ksheer. Guggul has been described as Putihara Vedanasthapan, Vranshodhak and Vranropak in classic. It was observed that pain and anxiety are very less during and after application. Pus discharge and induration, were reduced in early sittings in comparison to other thread. But the only disadvantage is that due to the soapy nature of the thread, it loosens after application. In **Palash Ksharsutra**, Palash kshar is used instead of Apamarga Kshar It

is equally good as Standard Kshar Sutra. It is observed that in the treated group of Palash Ksharsutra there was a marked reduction in pain, burning sensation, inflammation and local reaction. The only drawback was that its unit cutting time was more as compare to Apamarga Ksharsutra. In **Gomutra Ksharsutra**, Gomutra kshara is used instead of Apamarga Kshar. By the use of Gomutra ksharasutra, it was observed that total duration of treatment was reduced pain, burning sensation, itching, discharge and tenderness also reduced significantly. Using **Modified Ksharsutra** in comparison to Standard Ksharsutra reduced the total duration of treatment because its Unit cutting time is less at the same time it is Vranhara Shothhar, Vranaropak and Dahashamak. But it is difficult to prepare it. In **Nimba Ksharsutra** Nimba Kshar was used instead of Apamarga Kshar. Already in Dhanvantari Nighantu it is emphasized that Nimba has a property which does help in suppuration of immature shoth and drains the suppurated Vrana which leads to cleaning of cavity subsequently subsides the pain other than this it has Kandughna, Krumighna and Dahashmak properties .

CONCLUSION

On the basis of the observations gained after accomplishment of the current work it can be determined that although Apamarga Ksharsutra has been a landmark success and is an established therapy but it has certain drawback in order to overcome that other Ksharsutra were made by the drugs available in bulk having Vranshodhaka, Vranropaka, less irritant, having less Unit cutting time and other good properties. During this study I came across 12 different Ksharsutra preparations and arrived to a conclusion that all Ksharsutra have a space for calibration in qualities. This novel drug delivery system needs standardization, modification and more researches.

Acknowledgement

To begin with I bow towards Lord Dhanwantari and all Acharyas. I am grateful to the Dr. Shyamsundar Bhutada Sir Dean faculty of MGACH and RC, PG Dean Dr KSR Prasad Sir and Dr Priti Desai madam, Academic Dean MGACH and RC for giving me such opportunity I express my humblest thanks and regards to my Teacher and Honorary Surgeon Dr. Subhashchandra Varshney Sir, and RC Dr Sir for their valuable, unparalleled help and Guidance . I am also very helpful to Dr Reena Jaiswal

madam and Dr Satyam Supare Sir Assistant Professors of Shalyatantra Department MGACH H and RC for their useful suggestions from time to time. Last but not the least I would like to thank everyone who directly or indirectly helped me in my work.

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