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A Critical Analysis Of Bacteriogenic Lactational Mastitis (*Stanyadushti*) And Its Management w.s.r To *Kashyapa Samhita*

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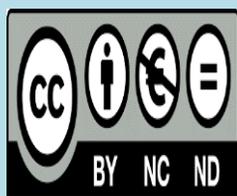
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ABSTRACT: -

Lactational mastitis is a common public health issue with global burden of 2.6 to 33% of lactating women. It may or may not be accompanied with inflammation. When it is associated with bacterial infection, it may result to breast abscess as its severe complication. It is responsible for early weaning that adversely affect the nutritional status of the child as breast milk is the sole source of nutrition for a new born child. In families with limited resources and due to stigma attached to it sometimes it may lead to severe complications leaving surgery as the only option left. Various *Acharyas* have mentioned in their texts some specific medicinal plants that act on the disorders of *stanya* and work for its detoxification. Among them *Acharya Kashyapa* had documented a chapter on *ksheerotpatti* elaborating the disorders of breast milk and its management. These plants help to subside the inflammation, reduces the associated signs and symptoms like fever, pain etc and enhance the production and quality of breast milk. The literary review is prepared in the light of classical *Ayurvedic* texts, botany books, API, medical journals and PG/ PHD thesis available. Various researches on the drugs are collected from the sources and compiled to evaluate the current status and scope of research in future.

Keywords- *Ayurveda*, Lactational Mastitis, Abscess, *Stanyashodhan*.



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INTRODUCTION

Mastitis is an inflammatory condition of breast, which may or may not be accompanied by infection^[1]. It is mostly associated with lactation hence called Lactational mastitis^[2]. It may occur at any stage of lactation but is very common in second- and third-week post-delivery. The condition involves so much discomfort that a woman discontinues to feed the child and the child might get shifted on formula feed and other conventional methods. In the world where we know the value of breastfeed this premature weaning can put the health of the mother and baby both at risk, especially for under privileged families. Breast milk is the ideal and sole source of nutrition for a newly born and that is provided by nature. Due to inflammation it also shows presence of bacteria and hence it can be a cause of disease in baby too. Ignored and untreated infective mastitis can result to breast abscess and put the health of the mother at stake.

Kashyap Samhita is the major treatise related to *Ayurvedic* paediatrics. It mainly deals with care of mother and baby and healthy upbringing of the child. The description regarding ideal breast milk, qualities of impure milk how to detoxify and enhance the breast milk is described in the book with elaborated view of sign and symptoms. As per *Kashyap Samhita* purity of breast feed is necessary for proper growth and development of the baby and hence it is purified. The consumption of impure milk becomes the cause for many diseases and all those diseases are cured

by purifying the milk only^[3].

MATERIALS AND METHODS

The present study is a review article mainly based on *Kashyap Samhita*, various research papers published, phyto-pharmacological studies of concerned plants and study material available on internet regarding the topic. Modern texts and various websites were also referred for data collection.

CAUSES- Bacteriogenic Lactational mastitis can occur due to entry of bacteria from the skin surface or baby’s mouth through cracked nipples. Clogged milk duct also contribute to inflammation. Stagnant milk in the breast gives the breeding ground to bacteria. Working women those can’t express milk frequently becomes the sufferer. Advance researches shows the presence of following bacteria –^[4]

- 1- *Coagulase negative staphylococci* (CNS)
- 2- *Viridance streptococci*
- 3- *Staphylococcus aureus* (*S. aureus*)
- 4- *Group B streptococci* (GBS)
- 5- *Enterococcus faecalis*
- 6- *Group G streptococci*
- 7- *Group A streptococci*
- 8- *Pneumococci*
- 9- *Corynebacteria*
- 10- *Enterobacteriaceae*
- 11- *Acinetobacter species*
- 12- *Pseudomonas species*
- 13- *Bacillus species*
- 14- *Propionibacterium species*

The first three were found more in women with Lactational Mastitis [5].

Sign And Symptoms- Lactational Mastitis is a painful condition and the main sign and symptoms are as [5]-

- 1- Breast erythema (redness of skin)
- 2- Increased breast tension not relived by feeding
- 3- Fever (usually high grade)
- 4- Pain or burning sensation
- 5- Lump in the tissue of breast or thickened breast tissue

Risk And Complications-

- 1- Sore or cracked nipples
- 2- Premature weaning
- 3- Poor nutrition to children
- 4- Health risk of children
- 5- Complication include breast abscess

Stanya dushti as per Kashyapa [9]

Graham dushti	Taste of breast feed
<i>Shakuni</i>	<i>Katu, tikta</i>
<i>Skand and shashti</i>	<i>Sannipata lakshana</i>
<i>Putana</i>	<i>Swadu, katu</i>
Other <i>dushti</i>	According to <i>dosha</i>

Effect of consuming different types of milk [10].

Qualities of breast feed	Effect on baby
<i>Swadu</i> (sweet taste)	<i>Bahu vida mutrata</i> (more stools and urine)
<i>Kashaya</i> (astringent taste)	<i>Mutra vida samgraha</i>
<i>Tail varna</i>	<i>Balawan</i>
<i>Ghrit varna</i>	<i>mahadhana</i>
<i>Dhoomra varna</i>	<i>yashaswi</i>
<i>Shudhha</i>	<i>Sarvaguna sampanna</i>

Acharya Kashyapa had mentioned the disease named *Stana Keelaka* that occurs due to consumption of unhygienic food and the sign and symptoms resembles bacteriogenic lactational

Ayurvedic Concept Of Stanya According To Kashyapa-

The food consumed by a pregnant woman make rasa similar to food after digestion and that rasa work in three ways [6]

1. One part gives strength to the mother
2. One part gives strength to foetus
3. Third part work for *stana pushiti*.

The effect of pure breast feed can be accessed from the baby. The baby consuming pure breast feed will be with best *Bala, Anga, Ayu*, and he will be free from diseases and growth will be normal. If both child and *dhatri* are healthy the breast feed should be considered as pure.[7]

The impure breast milk gives rise to multiple diseases to baby but if pure milk is consumed the diseases get subsided by themselves hence breastfeed should be purified [8].

mastitis.

MANAGEMENT-

- **NITYA SHODHAN [11]**- Acharya Kashyapa had mentioned that daily *Shodhan* Of *Dhatri* should

be done to maintain the quality of breast feed. *Shodhan* is performed with the help of *Kashayapan*, *Vamana*, *Virechana*, suitable food, and medicines used for aphrodisiac action.

- *AHARA* ^[12]- *Dhatri* should consume *masoor*, *Shashtik Shali*, *Moonga Dal*, *Kulath Dal*, *Shali Rice*, *ghee*, milk of cow, goat; and *audbhida lavana*. She should avoid heavy, very fatty food and meat. *Yusha* and light food.
- *VIHARA* ^[13]- *Dhatri* should avoid sleeping in day but she should take proper sleep at night. She should avoid anger, travelling, fear, sorrow etc.
- *AUSHADH* ^[14]- There are many plants mentioned in *Kashyapa Samhita* for purification and detoxification of milk.

Trifala, *Trikatu*, *Patha*, *Vacha*, *Kola*, *Jambu*, *Devadaru*, *Sarshapa*, *Ardraka*, *Patol patra*, *Pippali churna*, *Dhataki flower*, *Ela*, *Samanga*, *Marich*, *Yashtimadhu*, *Murva*, *Mustak*, *Vatsaka/kutaj*, *Sariva*, *Arishta*, *Katuka*, *Kairata*, *Guduchi*, *Madhuka*, *Draksha*, *Dashamool*, Plants mentioned as *deepaniya dravya*, *Rakshoghna gana*, *Patoladi gana* Etc.

- *SHALYA KRIYA* ^[15]- The treatment is similar to that of *vidradhi*. Incision should be made to drain out pus.

RESULTS AND DISCUSSION-

General description of a few the medicinal plants described as *stanya shodhaka* ^[16]

Name	Botanical name	Family	Rasa/Vipaka/Virya	Guna	Doshakarma
<i>Patha</i>	<i>Cissempeleos pareira</i>	<i>Menispermaceae</i>	<i>Tikta/ katu/ ushna</i>	<i>Laghu, tikshana.</i>	<i>Tridoshashamaka, mainly kaphapittahara</i>
<i>Shunthi</i>	<i>Zingiber officinale</i>	<i>Zingiberaceae</i>	<i>Katu/ madhur/ ushna</i>	<i>Laghu snigdha</i>	<i>Kaphavatashamaka</i>
<i>Guduchi</i>	<i>Tinospora cordifolia</i>	<i>Menispermaceae</i>	<i>Tikta/ madhura/ ushna</i>	<i>Guru, snigdha</i>	<i>Tridoshashamaka</i>
<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i>	<i>Fabaceae</i>	<i>Madhur/madhur/ shita</i>	<i>Guru snigdha</i>	<i>Vatapittashamaka</i>
<i>Patola</i>	<i>Trichosanthes dioica</i>	<i>Cucurbitaceae</i>	<i>Tikta katu/ katu/ushna</i>	<i>Laghu, ruksha.</i>	<i>Tridoshashamaka.</i>
<i>Arishtta</i>	<i>Azardirachta indica</i>	<i>Meliaceae</i>	<i>Tikta kashaya/ katu/ shita</i>	<i>laghu</i>	<i>Kaphapittashamaka</i>

Research related to a few *stanya shodhak* plants-

Name	Main Chemical constituents	Used part	Indications	Research
<i>Patha</i>	Hayatin hayatinin, menisminecissamine, pareirine, quercitol etc.	Roots	<i>Jwara, atisaara, shoola, kushtha, kandu, krimi, yoni roga etc</i>	Root and stem shows antibacterial activity against <i>K. pneumoniae</i> , <i>P. aeruginosa</i> , leaf extract against <i>E. coli</i> , <i>P. aeruginosa</i> . Methanolic extract show activity against <i>B. subtilis</i> , <i>E. coli</i> , <i>S. aureus</i> . Free radical scavenging activity ¹⁷ . Anti-inflammatory, analgesic, antipyretic, immunomodulatory, anti diarrhoeal, antioxidant. (kamal. Etal;2017)
<i>Shunthi</i>	α – curcumene, β – D- curcumene, α and β zingiberines, d borneal, citral, zingiberol, zingirone, geraniol	Rhizome	<i>Jwara, vrana, agnimandya, atisaara, kasa, swasa, amavata, pandu,</i>	Antiemetic, antipyretic, analgesic, antiarthritic, anti-inflammatory, anti cancer effects, anti coagulant effects, antinociceptive, antioxidant, antimicrobial, radioprotective antigenotoxic activity ²² .
<i>Guduchi</i>	Tinosporin, tinosporide, isocolumbin, tinosporidin, β -sitosterol etc	Stem, leaf, areal root.	<i>Jwara, vataraktavisarpa, daha, kandu, krimi, kushtha etc</i>	Analgesic activity(wholeplant, ethanol extract), anti-inflammatory activity (stem/ aqueous extract). ¹⁹
<i>Yashtimadhu</i>	Glycyrrhizin, glycyrrhizic acid, glycyrrhetic acid, licoricidin	Root	<i>Vrana shotha, daha, vrana, raktapitta</i>	Anti micobacterial activity (glabridin), anti-inflammatory activity (glycyrrhetic acid), immunomodulatory activity(glycyrrhenthic acid) ²⁰
<i>Patola</i>	Nicotinic acid, riboflavin, vit c. thiamine, linolenic acid, oleic acid.oleosteric acid. Cucurbita- 5,	Fruits leaf, root.	<i>Jwara kushtha , kandu amlapitta, daha</i>	Antinociceptive and anti-inflammatory activity. Chemo preventive activity, nematocidal antihelminthic activity ²¹
<i>Aristhta</i>		Root bark, stem bark gum, flower, leaves, seeds, seed oil.	<i>Jwara, kushtha, krimi, prameha, pandu, kandu etc</i>	Effective against <i>S. aureus</i> <i>E. faecalis</i> , <i>S. mutane</i> . Proven antiseptic, antiviral, antipyretic, anti-inflammatory, antiulcer and antifungal properties ¹⁸

In many plants the phyto-pharmacological studies show the therapeutic action similar to that mentioned in *Ayurvedic* texts. *Ayurvedic*

indications of most of the plants include *Jwara*, *Daha*, *Shophya*, *Kandu*, indicating its utility in inflammation. Plants like *Patha*, *Guduchi*,

Nimba, Patola, are dominant in *Tikta Rasa*. Hence they are well utilised for the indications like *Jwara* that is the main symptom of inflammation. Other than this *Tikta Rasa* also helps in *Deepana Pachana*. It helps in stabilizing *agni* and hence eradicate *Aruchi*. *Dosha shamakata* of these herbs is generally *Tridasha Shamaka*. Herbs like *Yashtimadhu* and *Guduchi* are *rasayana* and they help in *Dhatu Poshana*. *Krimihara* property of drugs is useful for getting antibacterial, antimicrobial, antiseptic and anti-inflammatory action. These studies describe the anti-inflammatory and antibacterial action of these plants and hence they are useful in bacteriogenic Lactational Mastitis. The plants are also found useful in associated conditions like pain, fever, itching, burning sensation, abscess etc. The herbal sources can be used as diet, external applications, decoctions and powder as suitable according to *dosha*. The powders can be either taken with *madhu* (*kapha* predominance) or with *ghee* (*vata* or *pitta* predominance). *Shodhan* of the wound can also be done with the help of *kashaya* made by these medicinal plants. They can be used according to *prakruti* of person, season, place, availability and mode of administration. They are cost efficient choice for people with lower income group.

CONCLUSION

Management of Bacteriogenic Lactational Mastitis can be done with the help of the ways and herbal medicines described by *Acharya Kashyapa* as most plants shows anti-inflammatory activities in phyto-pharmacological studies. The management can become cost efficient and easily available hence families with limited resources can be benefitted. More research based on *Ayurvedic* fundamentals is required for better analysis.

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REFERENCES-

1. https://www.who.int/maternal_child_adolescent/documents/fch_cah_00_13/en/
2. https://www.who.int/maternal_child_adolescent/documents/fch_cah_00_13/en/
3. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.9.
4. <https://doi.org/10.1186/1746-4358-3-6>
5. Sharma H, Kashyap Samhita, Sutra Sthana, Lehadhyaya Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.2
6. Sharma H, Kashyap Samhita, Sutra Sthana, Lehadhyaya Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.2
7. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.9.
8. Shastri J L N, Illustrated Dravyaguna Vigyana, Third Edition, Chaukhamba Orientalia, Varanasi.2008.
9. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.6.
10. Shastri J L N, Illustrated Dravyaguna Vigyana, Third Edition Chaukhamba Orientalia, Varanasi.2008.
11. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.6.
12. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series, Varanasi, 2007.pp.9.

13. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series , Varanasi, 2007.pp.8.
14. Gupta V, Pagoch S.S.: Phytological Review Of Trichosanthes Dioica (Patola); International Ayurvedic Medical Journal; Volume 2, Issue 3; May –June 2014.
15. Sharma H, Kashyap Samhita, Sutra Sthana Ch 19, Ksheerotpatti Adhyaya, Chaukhamba Sanskrit Series , Varanasi, 2007.pp.10.
16. Shastri J L N, Illustrated Dravyaguna Vigyana, Third Edition, Chaukhamba Orientalia, Varanasi.2008
17. http://ijasrm.com/wp-content/uploads/2019/04/IJASRM_V4S3_1273_35_42.pdf
18. Mistry Ks, Sanghvi Z, Parmar G, Shah S. The Antimicrobial Activity Of Azadirachta Indica, Mimosa Elengi, Tinospora Cardifolia, Ocimum Sanctum And 2% Chlorhexidine Gluconate On Common Endodontic Pathogens: An In Vitro Study. *Eur J Dent.* 2014;8(2):172-177. Doi:10.4103/1305-7456.130591
19. Biswajyoti P. Umretia B.L.,Vaishnav P.U , Kumar P.P, Shukla V.J., Ravishankar B., Antti-Inflammatory Activity Of Guduchi Ghana (Aqueous Extract Of Tinospora Cordifoliamiers) *Ayu.* 2014;35:108-110.
20. [http://dx.doi.org/10.13040/IJPSR.0975-8232.4\(7\).2470-77](http://dx.doi.org/10.13040/IJPSR.0975-8232.4(7).2470-77)
21. Gupta V, Pagoch S.S.: Phytological Review Of Trichosanthes Dioica (Patola); International Ayurvedic Medical Journal; Volume 2, Issue 3; May –June 2014.
22. Mishra R.K, Kumar A, Kumar A, Pharmacological Activity Of Zingiber Officinale; International Journal Of Pharmaceutical And Chemical Sciences, Vol1(3) Jul-Sep 2012

