

Conceptual study of stanapida W.S.R. (with special reference) to breast congestion in Galactopoiesis

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Abstract

Breast feeding is highly beneficial gives sterile milk & less chance of contamination & infection. Initiated within first ½ an hr thick and yellow colored called piyusha (colostrum). Breast secretions start on 3rd or 4th day of post-partum. Some patients develop tender and heavy breasts, condition is called as breast congestion /breast engorgement.

Keywords: congestion, engorgement, galactogenesis, lactokinesis, colostrum etc.

Introduction

Breast feeding is the most enriching experience for every mother. It plants the seeds of mother child bonding. Breast feeding is vital to fulfill nutritional needs of the new born.

Usually breast secretions start on 3rd or 4th day of post-partum. Till then colostrum is present. When breast secretions start some patients develop tender and heavy breasts.

The reasons may be –

- Failure of galacto kinesis – letting down of milk due to blocked lactiferous ducts.
- Improper feeding technique.
- Baby too weak to suck.
- Cracked /sore nipples.

This condition is called as breast congestion or breast engorgement it can lead to complications like mastalgia, mastitis and breast abscess, if remained untreated.

Breast congestion which leads to further inflammation. Breast abscess is a severe condition which causes most inconvenience to the patient. It destroys breast tissue irreversibly. Prevention is the goal of Ayurveda treatment. Hence this should be tackled in breast congestion or pre-inflammatory stage.

Aim

To study the efficacy of Vishala moola lepa (application) on breast congestion in sutika avastha.

Objectives

- To study the lactation process and breast congestion according to modern sciences
- To study the efficacy of Vishala moola lepa in breast congestion in sutika avastha specially reducing pain and reducing congestion.
- To study the side effect of Vishala moola churna (if any).

Methodology

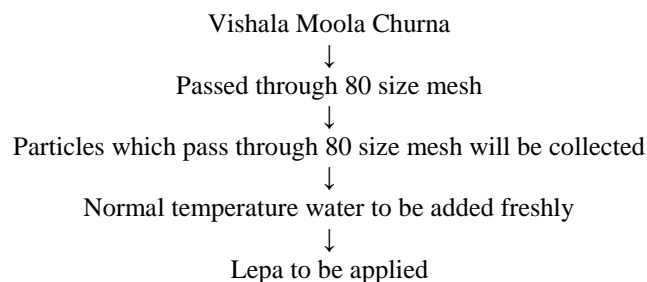
Materials

Drug	- Vishala Moola
Family	- Cucurbitaceae
Latine Name	- Citrullus colocynthis
Rasa	- Kashaya.
Veerya	- Ushna

Vipak	- Katu
Guna	- Laghu, Ruksha, Tikshna

Method of Preperation of Vishala Moola lepa

- Pre – step
 - Raw drug sampling
 - Raw drug selection.
 - Procurement of selected sample
 - Authentification of raw drugs.
- The drug will be taken and make a fine powder of it.
- The powder will be mixed with normal (temp) water at the time of application.
- Above method is considered according to lepa kalpana in sharangdhar samhita
 - Form of drug – Lepa
 - Route of administration –Local application
 - Dose – Lepa application as per requirement Lepa will be repeated 2 times consequent after 1st application.
 - Duration – Till dry. Time calculation will be done.
 - Thickness – 1/4 Angula (i.e. 2 mm approximately)
 - Standard operative procedure



Inclusion Criteria

- Puerperal patient with full term normal delivery /cs. having breast congestion and pain.
- Puerperal patient with Pre-term normal delivery /cs. having breast congestion and pain.
- Patient having fever less than 100°F with engorged breasts.

Exclusion Criteria

- Puerperal patient with still birth /IUD.
- 2nd trimester abortion.

- 3) Puerperal patient of age below 18 and above 40 years
- 4) Puerperal patient with breast abscess / mastitis.
- 5) Retracted Nipples / Cracked nipples.

Discontinuation Criteria

- 1) If patient develops any side effects like rash, itching, blisters.
- 2) If not responding to the treatment patient will be discontinued.
- 3) Patient refuses to continue the treatment.
- 4) Patient having fever more than 100° F / showing signs of acute infection.

Ayurvedic Concept

Stanampat

The breast should ideally be little and highly situated. It should be neither too high nor too free falling. They should be firm and not too loose. They should be grown fully and shouldn't be loose nor weak. The breast should possess breast nipples which should be located to upper side of breast which helps baby for easy sucking of breast milk

Stana Kriya

Milk production occurs in the females after garbhadhan (i.e. pregnancy). There is no rajastrava i.e. menstruation, hence this avaruddha raja leads to development of breasts, changes in breast and is responsible for milk production

Stanya Utpati

Ahar rasa is produced from the food which gets digested and is circulated all over the body by vyana vayu for the nourishment. Development of all the dhatus from sara bhag or Prasad part of ahar ras occurs. Raja and stanya are upadhatus of Rasdhātu. Nourishment of both is depending over Rasdhātu in fact over aharrasa.

Stanya Pravartan

Stanyapravartan is greatly influenced by touch, looking or taking baby i.e. physical and emotional attachment is important. Similar that of shukrapravartan.

Shuddhastanya

It gets easily dissolved in water it is white in colour and madhur or sweet in taste. It is not mixed with any other colour

Breast abscesses

Aetiopathogenesis

The vitiated dosas reaching the breasts of lactating or non-lactating women vitiate the soft tissues and blood and produce diseases of the breast.

Stanapida

On third or fourth day (after delivery), the breast-milk appears to the woman; (this breast-milk), agitating / stirring the constricted milk carrying channels produces stiffness of breast, thirst, tachycardia; pain in abdomen, flanks and sacral region bodyache and headache; these are said to be own (associated) features of fever developing due to appearance of breast-milk. The same, after cleansing of colostrum / breast-milk stays for a very short-while (subsides immediately).

According to Modern Sciences

Physiology of Lactation

Physiological basis of lactation is divided into four phases

- a) Preparation of breasts (Mammogenesis).
- b) Synthesis and secretion from the breast alveoli (Lactogenesis).
- c) Ejection of milk (Galactokinesis).
- d) Maintenance of lactation (Galactopoiesis).

Mammogenesis

Pregnancy is associated with a remarkable growth of both the ductal and lobuloalveolar systems. An intact nerve supply is not essential for the growth of the mammary glands during pregnancy.

Lactogenesis

Though some secretory activity is evident (colostrum) during pregnancy and accelerated following delivery, milk secretion actually starts on 3rd or 4th postpartum day. Around this time, the breasts become engorged, tense, tender and feel warm. In spite of a high prolactin level during pregnancy, milk secretion is kept in abeyance. Probably, the steroidoestrogen and progesterone circulating during pregnancy make the breast tissue unresponsive to prolactin. When the oestrogen and progesterone are withdrawn following delivery, prolactin beings its milk secretory activity in previously fully developed mammary glands. Prolactin and glucocorticoids are the important hormones in this stage. The secretory activity is enhanced directly or indirectly by also growth hormone, thyroxine and insulin. For milk secretion to occur, nursing effort is not essential.

Galactokinesis

Discharge of milk from the mammary glands depends not only on the suction exerted by the baby during suckling but also on the contractile mechanism which expresses the milk from the alveoli into the ducts. Oxytocin is the major galactokinetic hormone.

Galactopoiesis

Prolactin appears to be the single most important galactopoietic hormone. For maintenance of effective and continuous lactation, suckling is essential. It is not only essential for the removal of milk from the glands, but it also causes the release of prolactin. Secretion is a continuous process unless suppressed by congestion or emotional disturbances. Milk pressure reduces the rate of production and hence periodic breast feeding is necessary to relieve the pressure which in turn maintains the secretion.

Breast congestion

Introduction

Breast congestion is a painful congestion of the breasts with milk that can make it difficult for the baby to latch on to the mother breast properly. It is characterized by the painful swelling of the breasts associated with the sudden increase in milk volume, vascular congestion, and edema during the first two weeks after birth. The precipitating factors of breast congestion include the poor latch, unsuccessful breast feeds, decrease the duration of breast feeding, missing baby early

feeding cues, giving formula supplements to the baby, using a breast pump without a clinical indication and causing overflow. Breast congestion can hinder the development of successful breastfeeding, lead to early breast feeding cessation, and associated with serious illness as breast infection. During lactation, breast congestion can cause pain and inadequate milk emptying.

It occurs between the third to fourth day of postpartum and more than two-thirds of women develop tenderness on the fifth day of postpartum but some develop as late as nine to ten days postpartum. Several studies regarding breast congestion have reported that the incidence rate of 2%-3% for mastitis, and 25%-85% for breast congestion with plugged ducts.

Aetiology

Congestion begins with retention of milk in alveoli. The alveoli become distended and compress surrounding milk ducts. This leads to obstruction of outflow of milk. If distention is not relieved, secondary vascular and lymphatic stasis may occur and this leads to decrease in milk production and reabsorption.

Other theory of congestion is that the increase in blood and lymph circulation when milk comes causing swelling and tenderness.

Lawrence and Lawrence (2011) describe congestion as involving three parts: increased vascularity in the breast, the onset of lactogenesis II (period of increased milk production), and edema as a result of decreased lymph drainage caused by the first two elements.

Signs and symptoms

Woman with breast congestion may find that her breasts become larger and heavy, warmer and uncomfortable when milk 'comes in', usually from two to six days after the baby is born. The first signs of the condition are the swollen, firm and painful breasts. In more severe cases, the affected breast becomes very swollen, hard, shiny, and slightly lumpy when touched. In cases when the breast is greatly engorged, the nipple is likely to retract into the areola. Ordinarily, women experience loss of appetite, fatigue, weakness, and chill

Discussion

As mentioned in galactopoiesis stage there is increase in blood circulation towards both the breast there is congestion it goes on increasing. So hardness pain occurs. It is commonly observed in primigravida.

If proper advise and training is not given to patient this congestion may convert in inflammatory stage which further may develop in Mastitis.

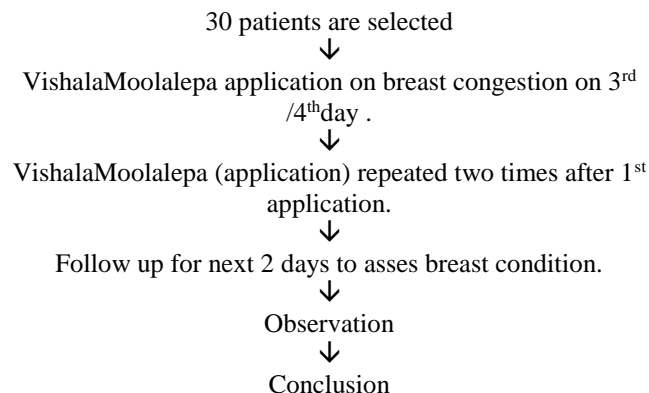
Mastitis or developing abscess is hazardous to the patient.

Abscess- Loss of breast tissue, pus formation, not possible to feed baby, Nutrition problem.

Overcome this problem there is ayurvedic protocol we suggest some herbal medication / preparation for local application on breast. So here application of vishalamoolchurna in the form of lepa was taken for study.

Expected drug of action is rasapachak, shothaghna over the breast which help reducing hardness and congestion. According to previous research studies regarding this drug i.e. Vishalamoolachurna it is anti-inflammatory in action. Its chemical composition shows Flavonoids quercetin and action of these components is significant over action oedema and

vascular congestion. So considering all these factors this drug is selected. Study is going on in the Prasutitantra Avum Streeroga Department, Bharati Vidyapeeth College of Ayurveda, Pune. Result will be submitted after completing study. Clinical study design as follow:



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