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CONCEPT OF OLIGOGALACTIA AND ITS MANAGEMENT IN UNANI SYSTEM OF MEDICINE – A REVIEW

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ABSTRACT

Breast-feeding may be considered an ancient yet modern phenomenon. Despite trends toward bottle feeding in the 1950s and 1960s, the value of breast feeding is being rediscovered, because it is nutritionally ideal and now fashionable to connect pregnancy and the puerperium with being as "natural" as possible. Nursing normally begins shortly after delivery. This enhances the mother-infant relationship in terms of bonding, and it also stimulates mature milk production. The duration of the nursing period is widely variable, even within cultures. The prevalence of oligogalactia is 45% to 53.6% in India and is increasing nowadays. The pathogenesis of this disease remain still unclear. As for unani system of medicine is concerned Ibne Sina has described that qilatul laban developed either because of Sue Mizaj(ill temperament) or dominance of heat in the breast.

KEYWORDS: Oligogalactia, Brest feeding, Mizaj, Akhlat.

INTRODUCTION

Pistan (Breast) are one of the Azae Murrakabah (compound organs) composed of Azae Basitah (Simple organs) like arteries, veins, nerves and white glandular tissue, which possesses the temperament similar to that of milk in pistan. According to Ali Bin Abbass Majoosi the recoiling fashion and the arrangement of these structures in pistan (breast) is specially designed for the synthesis of breast milk. According to Ibne Sina during pregnancy the breast gets enlarged and the superficial veins become yellowish or greenish. When the fetus initiates moving, the initiation of production of milk takes place.

***Temperament of milk*:** Hot and wet(Har wa Ratab)[1]

Brest feeding and its significance

Brest feeding is started within one hour to the new born and continues upto two years or as often as the baby wants.[21][22] WHO recommended Breast feeding exclusively for six months.[22][28] The duration of feeding is usually ten to fifteen minutes of each breast[23], while as the older children feed with more gap of time.[24] Breast feeding is always beneficial for both mother and the new born in way of controlling different diseases pertaining to the babies growing period and mothers forth coming stages of life especially pre and postmeropaural stage[21][22][25] viz diabetes mellitus, obesity, dyslipidemia, post menopausal syndrome, respiratory diseases, food allergies, celiac disease, leukemia, uterine ailments,proper shrinkage of urethras and less bleeding after delivery, postpartum depression, breast cancer, cardiovascular disease, rheumatoid arthritis etc.[22][26] An estimate of 820000 children under the age of five could be prevented globally by increasing breastfeeding.[26]

Milk production its importance and influence of harmones

From the twenty-fourth week of pregnancy (the second and third trimesters), a woman's body produces hormones that stimulate the growth of the breast's milk duct system. Progesterone influences the growth in size of alveoli and lobes; high levels of progesterone, estrogen, prolactin and other hormones inhibit lactation before birth; hormone levels drop after birth, triggering milk production.[29] After birth, the hormone oxytocin contracts the smooth muscle layer of cells surrounding the alveoli to squeeze milk into the duct system. Oxytocin is also necessary for the milk ejection reflex, or let-down to occur. Let-down occurs in response to the baby's suckling, though it also may be a conditioned response, e.g. to the cry of the baby. Lactation can also be induced by a combination of physical and psychological stimulation, by drugs or by a combination of these methods.[30, 31]

Brest milk as balanced diet and gastrointestinal tract regulator

Breast milk has an optimal balance of fat, sugar, water, and protein that is needed for a baby's growth and development.[32] Breastfeeding triggers biochemical reactions which allows for the enzymes, hormones, growth factors and immunologic substances to effectively defend against infectious diseases for the infant. The breastmilk also has long-chain polyunsaturated fatty acids which help with normal retinal and neural development.[33] Because breastfeeding requires an average of 500 calories a day, it helps the mother lose weight after giving birth.[34] The composition of breast milk changes depending on how long the baby nurses at each session, as well as on the child's age.[35] The first type, produced during the first days after childbirth, is called *colostrum*. Colostrum is easy to digest although it is more concentrated than mature milk. It has a laxative effect that helps the infant to pass early stools, aiding in the excretion of excess bilirubin, which helps to prevent jaundice. It also helps to seal the infants gastrointestional tract from foreign substances, which may sensitize the baby to foods that the mother has eaten.

Baby mother contact stimulating milk production

According to some authorities, increasing evidence suggests that early skin-to-skin contact (also called kangaroo care) between mother and baby stimulates breastfeeding behavior in the baby.[36]

Brest feeding a life cover against the disease

Breast milk contains several anti-infective factors such as bile salt stimulated lipase (protecting against amoebic infections) and lactoferrin (which binds to iron and inhibits the growth of intestinal bacteria).[39][40]

Infants who are exclusively breastfed for the first six months are less likely to die of gastrointestinal infections than infants who switched from exclusive to partial breastfeeding at three to four months.[41] During breastfeeding, approximately 0.25–0.5 grams per day of secretory IgA antibodies pass to the baby via milk.[42][43] This is one of the important features of colostrum.[44] The main target for these antibodies are probably microorganisms in the baby's intestine. The rest of the body displays some uptake of IgA,[45] but this amount is relatively small.[46] Maternal vaccinations while breastfeeding is safe for almost all vaccines. Additionally, the mother's immunity obtained by vaccination against tetanus, diphtheria, whooping cough and influenza can protect the baby from these diseases, and breastfeeding can reduce fever rate after infant immunization. Babies who are not breastfed are almost six

times more likely to die by the age of one month than those who receive at least some breastmilk.[47] Infants exclusively breastfed have less chance of developing diabetes mellitus type 1 than those with a shorter duration of breastfeeding.[38] Breastfed infants appear to have a lower likelihood of developing diabetes mellitus type 2 later in life.[37][38][48] Breastfeeding is also associated with a lower risk of type 2 diabetes among mothers who practice it.[49] Brestfeeding may reduce the risk of necrotizing enterocolitis.[38]

Path physiology of Qillatul laban

The concept of breast milk formation was first described by Ibne Sina is that the secondary faculties simply serve the nutritive one of the breast and are of four

1. Quwat Jazba(attractive)
2. Quwat Maseka(retentive)
3. Quwat Hazma(digestive)
4. Quwat Dafea(expulsive)

The Quwat Jazba (attractive) one of the breast was created to attract what is beneficial from the blood. The Quwat Maseka(retentive) of breast was created to retain these nutrient as long as Quwat Mughaiyara act up on it and derives nutrition from it. The digestive faculity (Quwat Hazema) is the faculty which absorbs the material drawn by attractive faculty and retains and transforms it in to a consistency ready for the action of alterative faculty and also change it in to a temperament capable of becoming an actual nutriment i.e. breast milk. The secretion of discharge of the breast milk takes place with the help of one of the action of the expulsive faculty. After the delivery of the baby there is ejection of the milk as the result of the sucking stimuli.[2]

According to Abu Sahl Masihi all fluid of the body are divided into three categories based on their location these are Rutubat al Uraq, Rutubat al Tajaweef and Rutubat al Ustaqussiyah. So he classified breast milk under Rutubat al Tajaweef. According to Ibne Sina there are two kinds of fluid in the body Rutubat Ula (primary fluids) and Rutubat Saniya (Secondary fluid) and Rutubat Saniya are of two kinds, Fudhul and Ghayr Fudhal. Rutubat Ghayr Fudhul are those which are converted from primary condition to secondary and have diffused in to the organ, but they have not become the part of azae Mufradah (tissue cells) practically. So breast milk is one of the Rutubat Saniya Ghayr Fudhul.[3] Human milk is the best particularly when freshed and sucked directly from the breast. Finest milk is that which is very white and

uniform in consistency(when finges are dipped in this milk) it stay on the nails and doesnot readily flow.[4,5]

Qillatul laban (Oligogalactia) is mentioned briefly by Ibne Sina in the canon of medicine under the chapter upbringing of children in which he mentioned that when milk is scanty, the cause should be find out, this may be either abnormal temperament, it would be known from signs and symptoms. When milk is scanty due to excessive heat in the breast, it would be known from their feel. if there is sign of cold temperament, obstruction or inadequate absorption, diet should consist of light and slight hot things. Gentle cupping is done under the breasts. He mentioned in his book that the intial milk is viscous and not watery .The volume of breast milk is different according to age, diet, temperament and digestive faculty of women.[6] Ibne Sina again quoted that the breast feeding should be given only two or three times a day and large feeds avoid during first few days.

According to Kabeerudin Md. When mother can not secret adequate milk one should try to increase the production of milk.[7] Acoording to Gulam Jeelani sometime milk production in breastfed mother become so insufficient that baby can not get full of stomach, so one should advice nutritive food for improvement in milk production.[8]

According to Firozuddin M, milk become deficient in mothers breast and due to insufficient supply baby is not sufficiently nourished to thrive properly.[9]

Causes(Asbab). **[10,11,12]**

Lack of blood: As milk is derived from blood so if there is lack or deficiency of blood in body. it results in deficient milk secretion. Deficiency of blood may be due to.

a. Hemorrhage:- the hemorrhage may be due to menorrhagia or blood letting oducti.
b. Sue-Mizaj(Abnormal temperament):- Due to abnormal temperament production of milk decreases.
c. Malnourishment:- this may be due to lack of supply of nutritive food or the use of food stuff which produce milk in lesser amount.
d. Somatic cause:- These include fever and anger prevent tibiet from producing blood
e. Kasrate Khoon(due to excessive blood).
f. Sue-Mizaj maddi:- Balgam, Safra and Sauda may get mixed in blood resulting in temperamental derangement which lead to insufficient milk production.

Potent Glactogogue Herbs

***Asparagus racemosus* Willd (*Satawar*)** The researchers in their double-blind randomized clinical trial evaluated Asparagus *racemosus* galactogogue effect in 60 lactating mothers by measurement of changes in their prolactin hormone level (Gupta and Shaw, 2011). They found that the oral administration of the research drug led to more than threefold increase in the prolactin hormone level of the subjects than the control group.[18] The extract of Shatavari has been shown to increase both the weight of mammary lobulo-alveolar tissue and the milk yield in animal experiments. This effect was credited to the action of released corticosteroids or an increase in prolactin. Shatavarins I-V, the steroidal saponins, may be responsible for the hormonal like effect of Shatavari and explain its traditional use as a reproductive tonic (Gaitonde and Jetmalani, 1969; Pandey et al., 2005).[19] The presence of steroidal saponins and sapogenins constituents has been shown to directly contribute in the lactogenic effect of *Asparagus racemosus* (Goyal et al., 2003; Joshi, 1988).[17]

***Trigonella foenum graecum* (*Hulba*)**

Fenugreek is a natural product that is a member of the pea family. It has been used for a variety of indications, including treatment of cough, bronchitis, sore throats, and menstrual pain.

Fenugreek is used in India and in some Middle Eastern countries as a spice and a medicine. It is believed to have a number of therapeutic uses, including anti-inflammatory, reconstituent and galactagogic effect (Zuppa et al., 2010).[16]

***Gossypium herbaceum* (*Habbul Qutan*)**

kernel of *Gossypium herbaceum*is efficacious, safe and cost effective in augmenting lactation (Manjula et al., 2013).[20]

Clinical Picture

Dominance of humour can be diagenosed byexamining the pulse and urine.if there is no dominance of humour, history of not taking the proper diet or taking cold or dry diet or excessive blood loss or psychological and emotional stress may be present (kabiruddin, 2003, khan, 2011.[15] As mentioned by the kabiruddin (2003) and khan (2011) that malnutrition, anaemia, excessive blood loss because of postpartum haemorrage, psychological and emotional stress affects the general health of mother.

Symptoms of predominance Akhlat

Balgham:- due to predominance of Balgham in the blood ,milk becomes more white and sour in taste.

Safra:- due to predominance of safra in the blood ,milk becomes yellowish, the consistency decreases and contains Hiddat and Hararat.

Sauda:- due to predominance of sauda in the blood, molk becomes more viscid and turbid and less in quantity.

Usoole Ilaj (Line of treatment)

- For the production of milk there should be normal blood supply to the breast. Quwate Jazeba and Quwate Hazma of the breast should be normal. Disturbance in these things results in Qillatul laban.
- If the cause is lying under Quwate(weakness of absorptive power) then use tonics.
- Maintain equilibrium in mizaj (temperament) of patient.
- In case the cause is lack of blood then advice the good diet, which help in blood production.
- If the cause is excessive elimination of body fluids (kasrate istafragh), prevent it.
- Evacuate the dominant humor.
- Advice light, easily digestible and nutritive food.
- Most of unani scholar mention that the drugs which are Mualid e Mani, also possess mualid sheer property.[13,14]
- When the milk is scanty, carrot and carrot seeds are beneficial. If the cause is malnutrition, nurse should be given a soup made of oats, husked barely of some other suitable cereal. Breast of sheep or goat taken raw with the milk insitu are also useful. This may be due to the similarity of some specific lactogenic property in the breast.

COCLUSION

Mother's milk is very important for child. Child-survivaldata recommendsthe promotion of exclusive breastfeeding in the first 6 months as the single most effectiveintervention to reduce mortality by 13%–15% below 5 yearsof age. Mothers often feel that they have insufficient milk, and face numerous physical, emotional, and logisticalobstacles to breast-feeding Qilatul laban is a vital problem with increasing prevalence from 23-63% in western countries and 45-53% in india.it is a great irony that such an important problem that is directly associated with the health of mother and child is largely neglected. Consequently, no

specific effective and safe treatment has been proposed so for in the Allopathic System of medicine. On the other hand Unani system of medicine claims to possess a large number of drugs which are ascribed to be galactogogue and useful in the management of Qilatul laban

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