

USE OF A CLASSICAL UNANI FORMULATION IN QILLAT-E-LABAN (HYPOGALACTORRHOEA)

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ABSTRACT

Low milk production (hypogalactorrhoea) is a worldwide public problem as it results in introduction of milk substitutes to the child at early age. Qillat laban (Hypogalactorrhoea) is a problem of the lactating mothers which has been treated successfully from centuries by Unani Physicians with Muwallid-e-Laban (Lactogenic) formulations i.e. Safoof Muzaiyyed-e Laban consisting of Satawar (Asparagus racemosus Willd), Zeera Safaid (Cuminum cyminum L.), Nebat Safaid 5gm BD with local massage of Raughan Bedanjeer (Ricinus communis L.). It has been proved that Satawar have galactagogue effect in animals and human being. In a clinical trial it

was reported that the oral administration of the Asparagus racemosus root led to more than three-fold increase in the prolactin hormone level. It has been reported that Cuminum cyminum has galactapoiesis property and significant enhanced milk production effect in animals like goat. Raughan Bedanjeer (Castor Oil) has been in use for its galactagogue property in many parts of the world as local massage. These findings support the claims of Unani Physicians mentioned in classical literature about the use of the formulation in hypogalactorrhoea. In view of the above findings it may be concluded that potential claims of Unani medical literature regarding galactagogue effects of the above mentioned formulation can be selected for future research to find out more clinical data for an economic, safe and effective medication for hypogalactorrhoea.

KEYWORDS: Unani Medicine, Qillat-e-laban, Muwallid-e-laban, Satawar, Zeera Safaid.

Use of A classical Unani Formulation in Qillat-E-Laban (Hypogalactorrhoea)

Low milk production (hypogalactorrhoea) is a worldwide public problem as it results in introduction of milk substitutes to the child at early age. Its incidence has been reported from 23% to 65% in the four months after delivery. Breast milk is the optimal nutrition source for neonatal and infant wellbeing. Exclusive breastfeeding (EBF), an essential intervention to improve child survival, is the optimal way of feeding infants in the first six months of life. Breast milk is the optimal nutrition source for neonatal and infant wellbeing.^[1]

In 2012, the World Health Organization (WHO) established a global target to increase the rates of exclusive breastfeeding in the first 6 months to at least 50% by 2025.^[2]

Hypogalactorrhoea in Modern Medicine

Hypogalactorrhoea: It is defined as the production of breast milk in daily volumes that do not fully meet the nutritional needs of her infant.

Breast is the secretory gland of the female reproductive system composed of the adipose, fibrous tissue which is active during period of the Breast feeding and produces milk to feed the new born. Human breast milk is an amazing fluid which is nutritious, comforting, and helps protect newborns and infants from infection and disease. It changes throughout the day and over time according to the needs of the child, even when the child is sick. Breast milk is undoubtedly the ideal food for a human child. Only a mother can produce it for her child and its substitute cannot be made in the laboratory.^[3]

Causes of Hypogalactorrhoea

Postpartum fatigue and a lack of energy can interfere with breastfeeding, and it's one of the common causes of a low supply of breast milk.^[4]

Hypothyroidism and anaemia can also cause your body to make less breast milk. Physical, emotional, and psychological stress can reduce your supply of breast milk. If mother became pregnant again during breastfeeding, the hormones of a new pregnancy can cause a decrease in your milk supply.^[3]

Treatment

Sufficient and balanced nutritious diet is essential for mother.

Large amounts of caffeinated soda, coffee, tea, and chocolate results in low production of milk.

Smoking and alcohol consumptions negatively impacts milk production.^[3]

The most commonly prescribed galactagogue drugs or human uses are metoclopramide, domperidone, chlorpromazine, and sulpiride. The remarkable side effects these medicine in mothers are xerostomia (dry mouth syndrome or hyposalivation), gastrointestinal disorders, cardiac arrhythmia, lethargy, sedation, extrapyramidal symptoms such as hypertension, tremor, tic, facial seborrhea, and hyperhidrosis, and even sudden death. In infants that ingested milk from treated mothers symptoms include intestinal discomfort, lethargy, and sedation.^[5]

Qillat-e- Laban (Hypogalactorrhoea) in Unani Medicine

Unani Medicine is one of the oldest traditional medicines which are still in practice throughout the world. Unani Medicine is based on the Hippocratic theory of Four *Akhlat* (humours) i.e. Blood, Phlegm, Bile and black bile. Diseases are caused by natural imbalance of four humours with or without external causes. Diseases are treated with mostly herbal, mineral and animal origin drugs. There are four methods of treatment; Ilaj biltadbeer (Regimental therapy, Ilaj bighiza (Dietotherapy), Ilaj bildawa (Drug therapy), Ilaj bilyad (Surgery).^[6]

Qillat laban (Hypogalactorrhoea) is a problem of the lactating mothers which has been treated successfully from centuries by Unani Physicians.

Unani medical scholars have described many causes of *Qillat-e-Laban* (Hypogalactorrhoea) i.e. *Qillat Dam* (Anaemia), imbalance of Humours alters the temperament of the whole body including the breast, use of dry & cold temperament diet etc. resulting in low production of milk.^[7]

Qillat-e-Laban is treated with proper diet, rest to the brain and body. The single drugs for this problem are called *Muwallid-e-Laban* (Lactogenic) i.e. *Gule Mahuwa* (*Madhuca indica*), *Kalonji* (*Nigella sativa*), *Lobia* (*Vigna catiang*), *Satawar* (*Asparagus racemosus*), *Tudri Surkh* (*Methiola incana*), *Tudri Zard* (*Cheiranthus cheiri*), *Tudri Surkh* (*Mathiola incana*), *Zeera Siyah* (*Carum carvi*), *Zeera Safaid* (*Cuminum cyminum*), *Satawar* (*Asparagus racemosus*), *Shaqaq-ul-Misri* (*Pastinaca secacul*), *Asgand* (*Withania somnifera*), *Badiyan* (*Foeniculum vulgare*),

Maghze Tukhme Tarbuz (*Citrullus vulgaris*), *Maghze Tukhme Kharpaza* (*Cucumis melo*), *Maghze Tukhme Kadu* (*Cucurbita moschata*), *Maghze Pambadana* (*Gosypium herbaceum*), *Maghze Badam* (*Prunus amygdalus*), *Maghze Chilghoza* (*Pinus gerardiana*).

Besides oral drugs some drugs are applied locally on the breast as a *Dalak Muqami* (local massage) or Takmeed (Poultice) for increasing the local blood circulation to enhance the milk production. These are *Barge Bed Anjeer*-leaves of *Ricinus communis*), *Raughan Bed Anjeer*-Oil of Castor seed (*Ricinus communis*) and *Raughan Zaitoon*-Oil of *Olea europia*.^[8] (Zameema).

Compound formulation having *moharrik Bah* properties are also *Muwallid-e-Laban* (Lactogenic).

To avoid the side effects of the commonly prescribed galactagogue drugs, there is a growing demand for herbal galactagogue product to solve this problem. Out of the several compound formulation, one formulation namely *Safoof Muzaiyyed laban* composed of *Satawar* (*Asparagus racemosus* Willd), *Zeera Safaid* (*Cuminum cyminum* L.), *Nebat Safaid* 12gm each make powder and after sieving take 6gm BD with local massage of *Raughan Bedanjeer* (*Ricinus communis* L.). This formulation has been mentioned in classical book for treatment of *Qillat-e-laban*. (Kabiruddin) This formulation has been studied with recent researches carried out on its ingredients.

1. Satawar (*Asparagus racemosus* Willd) has been described having Cold, Wet temperament with *Mughallize Mani* and *Muzaiyyed laban* properties.^[9]

Chemical analysis of *Asparagus racemosus* roots reveals the presence of steroidal saponins (as Shatavarins I-IV). Shatavarin-I is the most glycosided molecule with 3 glucose and a rhamnose moieties attached to sarsasapogenin.^[10]

In a double-blind randomized clinical trial for evaluation of galactagogue activity of *Asparagus racemosus* Willd it was found that the oral administration of the research drug led to more than three-fold increase in the prolactin hormone level of the subjects in the research group as compared to the control group.^[11]

In an uncontrolled, non-blinded multicenter study on galactagogue effect of a mixture of Lactancia, Corona Remedies Pvt. Ltd containing *Asparagus racemosus* (wild asparagus,

Cuminum cyminum Glycyrrhiza glabra, Spinacia oleracea as well as amino acids, vitamins, minerals and DHA. It was found that Most of the mothers (1049) had improved lactation and increased infant weight.^[12]

2. Zeera Safaid (Cuminum cyminum) has Dry and Hot temperament having *Hazim, Kasire Riyah, Mudir baul, mudire Haiz* and also in use as *Muzaiyyad laban* (Galactagogue).^[9]

Chemical Analysis of the seeds revealed that these are an excellent source of dietary fiber. Its seeds contain certain health benefits essential oils such as cuminaldehyde (4-isopropylbenz aldehyde), pyrazines, 2-methoxy-3-secbutylpyrazine, 2-ethoxy-3-iso propylpyrazine, and 2-methoxy-3-methylpyrazine. The active principles in the cumin may improve gut motility and help in digestion.^[13]

In an animal study on herb Payapro a known galactagogue containing Cuminum cyminum, it was revealed that this herb has also reported galactapoiesis property.^[14] Cumin seed extract (1.27% of DM) significantly ($P < 0.05$) enhanced milk production by 13% in supplemented goat in comparison to control group.^[15]

The poultice of leaves of *Ricinus communis* is applied locally to enhance the milk production in India.^[16]

The oil of *Ricinus communis* is as massage locally as a galactagogue in India.^[17]

These findings support the age old claims of Unani Physicians mentioned in classical literature about the use of the formulation in hypogalactorrhoea.

In view of the above findings it may be concluded that the above mentioned formulation can be selected for future research to find out more clinical data for an economic, safe and effective medication for hypogalactorrhoea. The formula provide suitable source for the better production of milk by breast of the mother as *Asparagus* contains Vitamin B, C with minerals, such as Zinc Copper, Iron, Manganese and Cobalt. Cumin seeds contain naturally occurring substances that work as antioxidants, antibacterial carminative and is in use as galactagogue. It helps in better digestion and milk production. Local massage of *Ricinus communis* oil will boost blood supply to the Breast.

The above mentioned *Safoof Muzaiyyed laban* formulation of Unani Medicine can be used as household remedy and we can provide a safe, economic and effective medication to solve this worldwide problem by under taking large scale clinical research to provide evidence for the efficacy and safety of this time tested formulation of Unani Medicine.

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