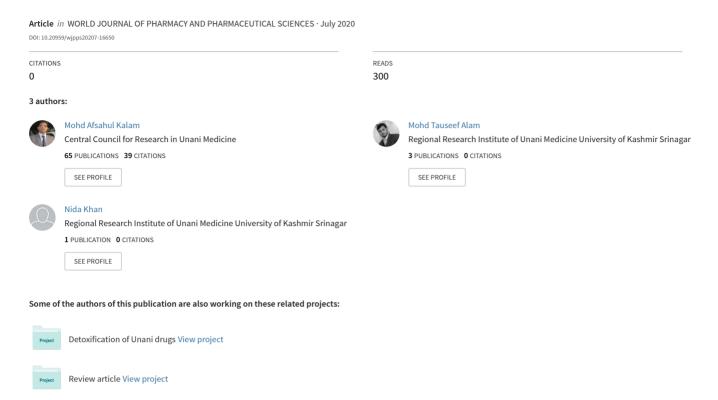
# AML-I-KAIYY (CAUTERIZATION)-AN EFFECTIVE MODE OF TREATMENT IN THE LIGHT OF UNANI MEDICINE AND TIBBE NABVI (PROPHETIC MEDICINE)



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# AML-I-KAIYY (CAUTERIZATION)-AN EFFECTIVE MODE OF TREATMENT IN THE LIGHT OF UNANI MEDICINE AND TIBBE NABVI (PROPHETIC MEDICINE)

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#### **ABSTRACT**

Kaiyy (cauterization) is an oldest but less practiced method of treatment which is used from the time immemorial in various traditional system of medicine like Greco-Arab, Chinese and especially in Unani System of Medicine. In Tibb-i-Nabvi it is mentioned as a very effective procedure and recited in Ahadeeth as one of the important treatment which has Shifa (cure) in it, but Prophet Mohammad (Peace be upon him) asked to avoid it and allowed to use this therapy in some incurable situations. But nowadays people are suffering from a lot of diseases which are incurable, and medical fraternity is searching new methods and drugs for the treatment. So

recently various methods of treatment were reintroduced which were practiced in ancient period, such as Ḥijāma (cupping), Faṣd (venesection), Kaiyy (cauterization), Irsāl-i-ʿAlaq (leeching) etc. Aml-i-Kaiyy (cauterization) was in practice in Arab during the period of Prophet Mohammad (Peace be upon him) for the treatment of various ailments like injury during war, excessive haemorrhage due to opening of blood vessel, chronic and non-healing ulcer, pleurisy and during operative procedure like amputation, giving incision etc. In Unani

Medicine this is one of the most popular method to treat various diseases such as Ṣar' (epilepsy), Judhām (leprosy), Duwār (vertigo), Khadar (numbness), Bawāsīr al-Anf (nasal polyp) etc. but now a days it is not in use, even in modern medicine this procedure is adopted and successfully used in surgeries which helps a lot to prevent death rate due to heavy bleeding. So in the view of its therapeutic benefit it is necessary to reintroduce the procedure for the treatment of such type of diseases which are difficult to treat in other therapies. So, the detail regarding its use in various disorders in the light of Unani System of Medicine and Tibb-i-Nabvi will be discussed here.

**KEYWORDS:** Kaiyy, Cauterization, Non-Healing ulcer.

#### INTRODUCTION

In Unani System of Medicine (USM) there are various modes of Regimenal Therapy (Ilaj Bi'l Tadbeer), such as Hijāma (cupping), Faşd (venesection), Dalak (massage), Qay' (emesis) etc. in which Amal-i-Kaiyy (cauterization) is one of them which is used to prevent the organ when the drug is not able to heal the wounds and there bleeding.<sup>[1]</sup> It is an oldest but less practiced method of treatment described in USM, which involves the application of hot metals, oils or corrosive drugs to burn out parts of skin or diseased tissue. [2] Amal-i-Kaiyy is used by Unani scholars for the treatment of epilepsy, headache and melancholia etc. since long period. [2] Various Unani scholars viz; Rāzi, Majūsi, Zahrāwī, Baghdadi, Jurjānī, and Masihī expressed their experiences about Amal-i-Kaiyy in their respective writings. Ibn Hubal Baghdadi has mentioned this method in the surgical procedure of removing pus from liver abscess. [3] According to Ibn Sina cauterization is very useful method of treatment because a). It prevents the spread of a destructive lesion b). It breaks the putrefactive matters imprisoned in a tissue. c). It restrains the flow of blood. [4] In Tibb-i-Nabvi it is mentioned as a very effective procedure and recited in Ahadeeth as one of the important treatment which has Shifa (cure) in it, but Prophet Mohammad (Peace be upon him) asked to avoid it and allowed to use this therapy in some incurable situations. In Modern treatment it is used during surgeries to prevent death due to heavy bleeding. In addition, it is also used for the treatment of disease like cancer, piles, excision of warts etc. [2] It, however, diminished from routine use around 1800 AD with the advent of ligatures and tourniquets to control bleeding, and the use of antiseptics in infected wounds. The practice was again revived in the late 19th century AD with the invention of electrical diathermy that produces heat in a more controllable fashion<sup>[5]</sup> and is in extensive practice to date for stopping bleeding during surgery.

#### Amal-i-kaiyy (cauterization) in Arabian medicine and tibb-i-nabvi (prophetic medicine)

Amal-i-Kaiyy was popular among the Arab physicians before arising Islam also. There was a popular quotation of Arabs that Amal-i-Kaivy is an ultimate treatment. Arab physicians treated Fredric Shah Sisley by using cauterization. Imam Bukhari narrated that the Prophet Mohammad (PBUH) said that, "there is Shifa (healing) in three things: 1. Using Honey, 2. Cupping and 3. Cauterization by fire". But Prophet Mohammad (PBUH) forbid cauterization to Ummat. [6,7] On cauterization there are many Ahadeeth have been narrated which indicate that it is permissible in some conditions, <sup>[7,8]</sup> one such hadeeth of Jabir Bin Abdullah is that, "Prophet Mohammad(Peace be upon him) once sent a physician to Hadrat Abi Bin Ka'b who cut the vein and then cauterized the wound. [7,8,9] According to another Hadeeth when Sa'dBin Mu'adh (R.A.) was injured in his medial arm vein (Rag-i-Akhal) and the blood was oozing from wound, then prophet Mohammad (PBUH) had cauterized it, as a result the wound become swollen and then again cauterized.<sup>[7,9]</sup> During the time of Prophet Muhammad (PBUH) people used cauterization for the treatment of wound to stop bleeding or to prevent various infections.<sup>[10]</sup> According to Al-Bukhari, Anas (RA) said that, once he was suffering from pleurisy then he was cauterized while the prophet Mohammad (PBUH.) was still alive<sup>[7,9]</sup> However, the Prophet Mohmmad (SAW) allowed the use of cauterization only in severe cases; he was not in favour of this procedure as a routine. [6]

#### Amal-i-kaiyy (cauterization) in Unani Tibb

In Unani Tibb cauterization is known as Amal-i-Kaiyy or Wasm (Daghna). In surgical Papyrus which is written in 1550BC, the use of fire cautery is mentioned. [11] "Kaiyy" is an Arabic word which is derived from Greek word "Kaiein" which means "to burn". [12] Amal-i-Kaiyyis a procedure in which Kavi Madda (caustic matter), electric current, fire, red hot metal rod etc. are used to burn a specific part of the body to dry the excessive fluid, remove putrefied flesh and to stop bleeding etc. Mikwat is an instrument used for Amal-i-Kaiyy (cauterization) and "Kaiyya" is the site of the body which is used for cauterization. The person who performs Amal-i-Kaiyy is called "Kawa" (cauterist). [12] Unani physicians used Amal-i-Kaiyy for various therapeutic purposes such as removing unwanted skin and other surgical procedures. Jalinus (Galen 131-201AD) recommended Amal-i-Kaiyy in the managements of warts. [11] Hippocrates (460-377 BC) in his book "Kitabul Fusul" described the uses of cauterization, [11] in various diseases such as sciatica, haemorrhoids and abscess. [11] The famous Unani Physician Abul Qasim Zohrawi (Abulcasis 936-1013 A.D.) invented tools for cauterization which help to stop bleeding from arteries. [11] Galen wrote a treatise on

"tumours against nature" in which hehas mentioned the procedure of cauterization for the treatment of cancer/tumour (breast cancer).<sup>[11]</sup>

# Aim and objective of cauterization<sup>[1,4,7,8,13]</sup>

- To prevent the spread of destructive lesion.
- To remove putrefactive matters which are firmly adhered to the tissue.
- To stop bleeding e.g. epistaxis.
- To strengthen organs which have become cold e.g. sciatica
- To remove dead and necrosed tissue if other methods are not effective.
- To treat skin diseases e.g.chronic eczema.

#### **Types of cautery**

Unani Physicians have mentioned various type of cautery which are given as below

- A. According to metal used: According to metal it can be classified as bellow<sup>[1]</sup>
- 1. Kaiyybi'l-Hadeed: Cautery by application of heated Iron.
- 2. Kaiyybi'lTila: Cautery by application of heated gold rod
- 3. Kaiyybi'lNuhas: Cautery by application of heated copper rod
- 4. Kaiyybi'lNuqra: Cautery by application of heated silver rod

The most useful cauteryis of gold rod, because it prevents the cauterized part from infection.

#### B. According to the use of herbs, minerals and animal substance for cauterization

According to the drug used, it is called Kaiyy bid-Dawa (cautery through caustic drugs/acids or alkalis): Roman physician, Aritiyus, established a mechanism of Amal-i-Kaiyy by using Zarareeh (canthrides). Hunain Ibn Ishāq, a famous Arab Physician, wrote a book on Amal-i-Kaiyy namely "Ikhtiyār-ul-Advia Al Muharriqā" containing details of drugs, beneficial for various diseases while used as cauterizing agents. [12] The treatment of nodules occurring in tertiary syphilis has been described using the corrosive ointment prepared with Khardal (Brassica nigra), Zubd-ul-bahr (cuttle fish bone), Kibrit (Sulphur), Revand (Rheum), Muqil (Commiphora mukul gum), Ushaq (Dorema ammoniacum), in Roghan-e-mom Kuhna (Wax oil). [14]

#### C. According to the method of heating the rod

Cauterization with fire: According to scholars, the procedure included to suck through the affected side with help of muhajim (cupping instrument) frequently for many days, till vesicle

appeared, then Kaiyy bil-Nar (cauterization with fire) should be done.<sup>[7,8]</sup> Now these days galvano-cautery or electro-cautery has replaced this procedure.<sup>[7,8]</sup>

#### Sites of cauterization

Sometime cautery is used in areas which are superficial and can be directly observed. Sometime cautery is applied to deeper tissues as in the nose, mouth and anus or uterus. In this case, care should be taken to avoid damaging the neighboring tissues, especially the nerves, fasciae and ligaments.<sup>[1]</sup> To cauterize in the dimension infected muscle, cautery instrument should be applied over the area which is more painful. In addition, bone behind the infected muscle is also advised to be cauterized.<sup>[7,8]</sup>

#### Uses of cauterization in unani medicine

**Sar'(epilepsy):** Hakeem Azam Khan has mentioned in Al-Ikseer that during an attack of epilepsy, heat a piece of marjān till it is red hot and cauterize on the forehead between the eyebrows. This relieves the attack and also prevents recurrences.<sup>[15]</sup>

**Laqwa** (facial palsy): For correction of facial palsy, Zahrawi has recommended cauterization at three places: one, at the root of the ear; second, a little below the temple; and third, at the junction of the lips.<sup>[16]</sup>

**Malankhuliya** (**melancholia**): Ibn Zohr (1092–1162 AD) has mentioned that, Amal-i-Kaiyy is also useful for psychoses caused by melancholia.<sup>[17]</sup>

**Bawaseer (haemorrhoids):** Buqrat (Hippocrates-4th century BC) has used Amal-i-Kaiyy to treat haemorrhoids. He advised to make the iron rod red-hot and burn the hemorrhoid until it become dried up.<sup>[18]</sup>

Razi has quoted with reference of a physician Ahran that, "burnt sesame seeds (Sesamum indicum), if applied on the pile mass, it give instant relief in the pain caused by piles.<sup>[19]</sup>

'Irq al nasā (sciatic pain): According to Zakariya Razi, if cupping is not successful in eliminating sciatic pain, then cauterization should be attempted. Do the Amal-i-Kaiyy on the area having pain, longitudinally on both the thighs. Then cauterize on the heel at the lateral surface, below the ankle and also cauterize at one point on the smallest toe. Razi says that this method cures sciatica permanently.<sup>[19]</sup>

**Gazidgi-i-Sag-i-Diwana** (rabid dog bite): Eminent Unani Physician, Rufas, discussed about the use of Amal-i-Kaiyy for the treatment of rabid dog bite.<sup>[3]</sup>

**Dubayla al-Kabid** (**liver abscess**): Ibn Hubal Baghdadi has mentioned the method of cauterization in the surgical procedure for removing the puss from the peritoneumafter the rupture of Dubayla al-Kabid (liver abscess).<sup>[3]</sup>

**Fataq (inguinal hernia):** Celsus in 1st Century AD advised the use of Amal-i-Kaiyy for the treatment of inguinal hernia. He also described the method of cauterization for treating entropion and trachiasis.<sup>[20]</sup>

**Istisqa** (**dropsy**): In a case of dropsy, Zahrawi has recommended to cauterize the upper surface of the feet in the depression between the little and fourth toes.<sup>[18]</sup>

**Amrze uzam wa mafasil (musculo-skeletal and joint disorders):** It is very useful in musculo-skeletal and joint disorders such as backache, coxalgia, tubercular joints etc. <sup>[2]</sup>

**Tumour:** Jālinūs (Galen 131–199 AD) describes in his treatise "On tumors against nature" the use of cauterization for burning the roots of a tumor, a process that may also prove to be dangerous.<sup>[21]</sup>

**Care of burn scab:** Zakaria Razi adviced to apply Zimad (local application) made up from wheat flour, water and olive oil to slough of the burn scab. [22]

Amal-i-Kaiyy (cauterization) is also beneficial in the management of carcinoma, otalgia, oral fistula, entropion, pleurisy, non-healing ulcers, gangrene and diseases of spleen etc. [2]

# $Complications ^{[10]} \\$

Apart from its benefits, this method also has various complications, either local or systemic.

#### Table showing local and systemic complications.

| S.no | Local complications      | Systemic complications     |
|------|--------------------------|----------------------------|
| 01.  | Scar formation           | Septic shock               |
| 02.  | Local wound infection    | Splenic abscess            |
| 03.  | Skin Inflammation        | Weight loss                |
| 04.  | Skin pain                | Tumor metastasis           |
| 05.  | Skin Abscess             | Tetanus                    |
| 06.  | Infected blisters        | Cavernous sinus thrombosis |
| 07.  | Gangrenous diabetic foot | Hepatic encephalopathy     |

#### **Precautions**

There are certain contraindications of Amal-i-Kaiyy (cauterization), Unani physicians have given some guidelines for the procedure of cauterization. According to Hippocrates, cauterization should not be done in extreme of cold and hot weather. The selection of metal is very important, as Jalinus advised to take gold rod for cauterization because it does not lead to blister formation and it heals wound early. Over a wide area cauterization should be applied so that the resulting scab is sufficiently thick and firm & does not easily drop on. To let the scab drop early it would lead to serious recurrence of bleeding.<sup>[13]</sup> If cauterization required to be done inside an orifice like nose, uterusetc., to protect the healthy tissues, the cautery should be placed inside a hollow tube first, while inserting it inside.<sup>[22]</sup> Cauterization should not distressed ligament and tendons.<sup>[7,8]</sup>

#### **Research studies**

**Chronic migraine**: A study was conducted entitled as "Vascular surgery for chronic migraine" to see the effects of surgical cauterization of selectedvessels in extracranial arterial chronic migraine and found excellent results in the quality of life of those patients who were otherwise severely compromised.<sup>[23]</sup>

**Dry eye with recurrent punctal plug extrusion**: A study was conducted entitled as "Surgical management of lacrimal punctal cauterization in chronic GVHD-related dry eye with recurrent punctal plug extrusion" and found that the thermal cauterization appears to be a safe and effective therapy for severe dry eye that is not associated with complications or recanalization.<sup>[24]</sup>

**Cluster headache**: A study was conducted entitled as "A New Minimally Invasive Technique for Cauterizing the Maxillary Artery and Its Application in the Treatment of Cluster Headache" and found in four out of five patients the cluster attacks ceased immediately following surgery.<sup>[25]</sup>

#### **CONCLUSION**

Amal-i-Kaiyy (cauterization) is an important method of treatment described by all Unani physicians. It is a traditional healing practice since Ancient Egyptians until now. It also practiced before and during the Islamic era, and the technique was advanced by famous scientists such as Al Razi, and Ibn Sina and further revived in the late 19th century AD with the invention of electrical diathermy that produces heat in a more controllable fashion, but

now a days this procedure is less applied in Unani Medicine. It is the best treatment to check the bleeding and other secretions and spread of lesions from one site to other. Viewing its beneficial effects in various diseases it is need of the day to revive the procedure in more scientific way for the benefit of human kind.

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