

History of *Amal-i-Kaiyy* (Cauterization) and its indications according to the shapes of instruments: A review

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Abstract

In Unani system of Medicine, *Amal-i-Kaiyy* is the practice of burning the flesh for therapeutic purposes; to stop bleeding or other fluids, to remove unwanted skin or to create an entry point into the skin. *Amal-i-Kaiyy* (Cauterization) is an ancient medical practice and one of the modalities included in *Ilāj bit Tadbīr*. It is the application of corrosive drug or hot metal over the affected site for the therapeutic purposes. The use of *Amal-i-Kaiyy* is found in Surgical Papyrus which is supposed to be written in 1550 BC. *Amal-i-Kaiyy* was also in use in *Tibb-i-Hindī*. *Sushrat* (800 BC) used this therapy for cauterizing the veins and tendons for various body ailments. It appears in the writings of *Buqrat* (Hippocrates) around the 4th century BC, in the form to treat haemorrhoids. He also advised that make the iron rod red-hot and burn the haemorrhoid while it became dried up, and so as that no part may be left behind. *Buqrat* also suggested the use of *Amal-i-Kaiyy* for opening the abscesses, done "either by incision or actual *Amal-i-Kaiyy*, to open fluid build-up under the skin called dropsies and in treating sciatica where bone has come out of its socket. The enlarged lymph nodes in plague were also treated by *Amal-i-Kaiyy*.

Keywords: *amal-i-kaiyy*, *mikwāt*, cauterization, *mikwāt-i-zaituniah*

Introduction

In Unani system of Medicine, *Amal-i-Kaiyy* is the practice of burning the flesh for therapeutic purposes. It is often used to stop bleeding or other fluids, to remove unwanted skin or to create an entry point into the skin^[1] Although, *Amal-i-Kaiyy* was a procedure in practice during the golden age of unani medicine, it had been declining in popularity of unani medicine for almost a century. *Amal-i-Kaiyy* was usually used by surgeons and almost all the surgeon were indulged in using this therapy. Later, surgeons replaced *Amal-i-Kaiyy* with less drastic method such as medicine and ligatures.

Amal-i-Kaiyy (Cauterization) is an ancient medical practice and one of the modalities included in *Ilāj bit Tadbīr*. It is the application of corrosive drug or hot metal over the affected site for the therapeutic purposes.

Historical Background

The use of *Amal-i-Kaiyy* is found in Surgical Papyrus which is supposed to be written in 1550 BC. *Amal-i-Kaiyy* was also in use in *Tibb-i-Hindī*. *Sushrat* (800 BC) used this therapy for cauterizing the veins and tendons for various body ailments. *Amal-i-Kaiyy* was also accepted and practiced in Chinese Medicine. *Screbonius Largus*, Physician of Roman Emperor, *Claudius*, strongly advocated this therapy. *Aflatūn Saghūr*, who was famous by the name of *Saqbali*, wrote a book about *Amal-i-Kaiyy*.² *Amal-i-Kaiyy*, as a therapeutic modality, dates back to shortly after the discovery of fire. It appears in the writings of *Buqrat* (Hippocrates) around the 4th century BC. He used *Amal-e-Kai* to treat haemorrhoids. He advised that make the iron rod red-hot and burn the haemorrhoid until it become dried up. *Buqrat* also suggested the use of *Amal-i-Kaiyy* for opening the abscesses, done "either by incision or actual *Amal-i-Kaiyy*, to open fluid build-up under the skin called dropsies and in treating sciatica where bone has come out of its socket^[3, 4, 5].

After *Buqrāt*, other classical authors incorporated his ideas into their work and expanded greatly upon them. The most significant example of this with regard to *Amal-i-Kaiyy* is from the writing of Aulus Cornelius Celsus. He significantly advised the use of *Amal-i-Kaiyy* in eliminating gangrene, noting that "the place should be burnt by *Amal-i-Kaiyy* until no more *Khilt* (humour) escapes from it". He also added the use of *Amal-i-Kaiyy* to the treatment of fistulas, removal of improperly grown eyelashes, fixing drooping eyes, preventing discharge from eye, blood and pus exuding ulcers and even featuring a cauterizing knife in abscess treatment^[6, 7].

Eminent Unani Physician, *Rufas*, discussed about the use of *Amal-i-Kaiyy* for the treatment of mad dog bite. *Hakim Salsūs* (1st Century AD) advised the use of *Amal-i-Kaiyy* for the treatment of inguinal hernia. He said that the inguinal canal should be cauterised after retraction of intestine. He also added the use of *Amal-i-Kaiyy* for *Shatra-e-Dakhilya* (Entropion) and *Sha' aratul Ain* (Trichiasis). In his era, *Amal-i-Kaiyy* has also been used not only to stop bleeding but also for counter irritation and to remove the putrefied flesh. Roman physician, *Aritiyoos*, established a mechanism of *Amal-i-Kaiyy* by using *Zarareeh*. *Jalinoos* (131-201 AD) suggested *Amal-i-Kaiyy* in the management of warts^[2].

Amal-i-Kaiyy was popular among the Arab physicians before arising Islam also. There was a popular quotation of Arabs that *Amal-i-Kaiyy* is an ultimate treatment. Arab physicians treated Fredric Shah Sislee by using *Amal-i-Kaiyy*. *Hunain Ibne Ishāq*, 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.

Ibne Sina discussed in detail about the benefits, types, procedure and other instruction of *Amal-i-Kaiyy* in his treatise "*Al-Qānoon fit Tibb*". Other unani eminent physicians such as

Rāzi, Majūsī, Zahrāwī, Jurjānī and Masīhī also expressed their experiences about *Amal-i-Kaiyy* in their respective writings [2].

Definition

Kaiyy is an Arabic word meaning to cauterize. It is extracted from unani word *Kaiein* meaning to burn. *Amal-i-Kaiyy* is a procedure in which *Kāvvi Mādda* (Caustic

Matter), red hot metal rod, electric current, fire etc are used to burn a specific part of the body in order to dry the excessive fluid, to stop bleeding, to remove the putrefied flesh etc. The instruments used for *Amal-i-Kaiyy* are called *Mikwāt* (Cautery) and the place of the body which is used for cauterization is called *Kaiyya*. The performer of *Amal-i-Kaiyy* is mentioned as *Kawwa* (Cauterist).

Table 1: Shapes of Mikwāt and indications [2, 8, 9].

| S. No. | Shape of Instrument | Indications |
|--------|--|--|
| 1. | <i>Mikwāt-i-Zaituniah</i> (Olive Shaped Cautery) | <i>Nisyān-i-Balghami</i> , <i>Sara'</i> (Epilepsy), <i>Waja-ul-Warik</i> (Coaxalgia), <i>Niqras</i> (Gout), <i>Irq-un-Nasa</i> (Sciatica), <i>Tapp-i-Larzah</i> , <i>Qata'-i-Shiryān</i> |
| 2. | <i>Mikwāt-i-Mismāriyah</i> (Claviform Shaped Cautery) | <i>Shaqīqa-i-Ghair Muzminah</i> (Acute Migraine), <i>Amraḍ-i-Anaf</i> (Nasal diseases), <i>Waja-ul-Asnān</i> (Toothache), <i>Amraḍ-i-Riyah</i> (Diseases of Lungs), <i>Su'al</i> (Cough), <i>Zīq-un-Nafs</i> (Bronchial Asthma), <i>Bahtuṣ Ṣūt</i> (Hoarseness of Voice), <i>Amraḍ-i-Maida</i> (Diseases of Stomach), <i>Khala'-ul-Eẓm</i> (Dislocation of Joint), <i>Istisqā</i> (Ascitis), <i>Nawaṣīr-i-Miq'ad</i> (Anal Fissure), <i>Amraḍ-i-Kulliyah wa Masānah wa Raḥam</i> (Diseases of Kidney, Urinarydr and Uterus), <i>Waja-uz-Zahr</i> (Lumbago), <i>Fataq</i> (Hernia), <i>Aklah</i> (Boil) |
| 3. | <i>Mikwāt-i-Sikkīnyah</i> (Knife Shaped Cautery) | <i>Shaqīqa-i-Muzmi</i> (Chronic Migraine), <i>Laqwah</i> (Facial Paralysis), <i>Shiqāq-i-Shiffah Irq-un-Nasa</i> , (Sciatica) |
| 4. | <i>Mikwāt-i-Hilāliya</i> (Crescent Shaped Cautery) | <i>Istikha-ul-Jufn</i> (Ptosis), Entropion with trichiasis |
| 5. | <i>Mikwāt-i-Mujawwafah</i> (Hollow Cautery) | <i>Nasūr-i-Koyah-i-Chashm</i> , <i>Khanāzīr</i> (Scrofulous Tumours), <i>Thalīl-i-Ma'kūсах wa Ghair Ma'kūсах</i> |
| 6. | <i>Mikwāt-i-Zāt-ul-Safūdīn</i> (Cautery of Two Prongs) | <i>Takhla'-ul-Eḍid</i> (Dislocation of Shoulder), <i>Amraḍ-i-Ṭihāl</i> (Diseases of Spleen) |
| 7. | <i>Mikwāt-i-Zāt-us-thalathah safāfīd</i> (Cautery of Three Prongs) | <i>Amraḍ-i-Ṭihāl</i> (Diseases of Spleen) |
| 8. | <i>Mikwāt-i-Musammatah</i> (Solid Cautery) | <i>Amraḍ-i-Mafāṣil</i> (Diseases of Joints) |
| 9. | <i>Mikwāt-i-Minshāriyah</i> (Saw Shaped Cautery) | <i>Takhla'-ul-Eḍid</i> (Dislocation of Shoulder) |
| 10. | <i>Mikwāt-i-Qadhiyyah</i> (Bowel Shaped Cautery) | <i>Waja-ul-Warik</i> (Coaxalgia), <i>Irq-un-Nasa</i> (Sciatica) |
| 11. | <i>Mikwāt-i-Mailiyah</i> (Probe Shaped Cautery) | It is used after the operation of haemorrhoid around the anus for the prevention from fistula formation. |
| 12. | <i>Mikwāt-i-Muthallatha</i> (Triangular Cautery) | <i>Fataq</i> (Hernia) |
| 13. | <i>Mikwāt-i-Nuqṭiyah</i> (Punctate Cautery) | <i>Waja-ul-Udhn</i> (Ear Ache), <i>Waja-uz-Zahr</i> (Low back Pain), <i>Niqras</i> (Gout), <i>Spran Ibtidā-i-Hadba</i> (Beginning of Scoliosis) |
| 14. | <i>Mikwāt-i-Dāriyah</i> (Ring Shaped Cautery) | <i>Amraḍ-i-Maida</i> (Diseases of Stomach), <i>Sarṭān</i> (Cancer) |
| 15. | <i>Mikwāt-i-Adasiyah</i> (Lenticular Cautery) | <i>Bisūr wa Qūrūh</i> , <i>Fataq</i> (Hernia), <i>Iltisāq-ul-Lisān</i> |

Conclusion

It would not be exaggeration if I say that in spite of possessing some harmful effects, *Amal-i-Kaiyy* is best treatment to check the *Akhlāt-i-Fasida* and *Mavād-i-Raddiya*, to arrest the *Jiryān-ud-Dam* (Haemorrhage), to dissolve the stagnant fluid and to eradicate the toxic material. This review is an attempt to enlighten the extensive use and potential effects of *Amal-i-Kaiyy*. The extensive use of this regimen opens the eyes of researchers to conduct some evidence based clinical trials on scientific parameters to establish its efficacy as well as to validate the promises of this noble therapy mentioned by ancient unani physicians.

References

- Robinson, Victor, Ph.C, M.D. (editor). Actual Cautery. The Modern Home Physician, A new encyclopedia of medical knowledge. WM.H. Wise & Company (New York, 1939, 16.
- Farooqui AN. *Amal-i-Kaiyy*. Sherwani Publication New Delhi. 2008, 12-20.
- Hippocrates, Hippocratic Writings, Translated and Edited by Francis Adams P, 151.
- Hiappocrates, Lucas Verhoofd. The Aphorism of Hippocrates P, 151.
- Hippocrates, Aphorism, 131, 139
- A.Cornelius Celsus. De Medicina. Vol-II. Loeb Classical Library Edition P. 113:104-5.
- A.Cornelius Celsus. De Medicina. Loeb Classical Library Edition. 7:339-345.
- Ibn-ul-Quf Maseehi, Kitab-ul-Umda fil Jarahat, Vol-II, Central Council for Research in Unani Medicine, New Delhi, P No. 169-183.
- Zahrawi AQ. 'Jarahiyat-e-Zahrawia, Kitab Al-tasreef, CCRUM, New Delhi, 2012; 4, 5, 7-18, 20-30.