



RESEARCH ARTICLE

REVIEW ON UNANI PHARMACEUTICAL PROCESS *MOHARRAQ (SOKHTA)*

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ABSTRACT

Amal-e-Ehraq is an Unani pharmaceutical process by which drugs are burnt to the charring stage but not reduce to ash. Drugs which undergo this process are suffixed with the term "*Moharraq*" or "*Sokhta*" for example *Sartan Moharraq*, *Busud Sokhta*, *Marjan Sokhta*, *Aspand Sokhta* etc. In this process drug/s packed in *Boota* (earthen pot), this *boota* cover with another mud pot, sealed with paste of *Gile Multani* (Multan clay) & cloth (*Kaproti*). Then, *boota* keep in furnace after dry, monitor the temperature of furnace, left for 6 to 8 hours. Removed the *boota* and collect the drug. In this process all organic contents of the drug are destroyed and only inorganic contents are left. For using inorganic contents this procedure has applied on drugs. In the Unani classical literature, the use of *Sokhta* or *Moharraq* drug/s are very common in the formulations of *Majoon*, *Haboob*, *Aqras*, *Barood*, *Roghniyat*, *Sanoon*, *Sadri*, *Safoof* etc.

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INTRODUCTION

The name of Unani owes its place of origin i.e., the ancient *Unan* (Greece), where *Buqrat* (Hippocrates 460-370 BCE) laid foundation of scientific medicine over the occult practice of medicine. For which he is credited to be not only the Father of Unani medicine but Conventional system of medicine (Allopathy) too. Besides him, there were other Greek and Roman philosophers-physicians who followed his teachings to enrich this system considerably. Later, the Arab and Persian physicians developed the Unani tib to a great extent. The physician like *Mohammad Zakariya Razi* (850-925-CE) and *Ibn Sina* (980-1037 CE) gave scientific touch to it (Anonymous, 2012). The Unani physicians had their own pharmacies adjacent to their *matab* (clinic) in which they used to process or prepare medicines for their patients. The Arabs were first to establish *bimaristan* (hospital), *fann-e-Dawasazi* (pharmacy), and wrote *qarabadeen* (pharmacopoeia). From the centuries, the Unani medicinal products are being consumed as pharmaceuticals, nutraceuticals and cosmeceuticals (Idris, 2012). There are numerous modes of treatment employed in Unani system of medicine. Of these, *Ilaj-bil-ghiza* (dietotherapy), *Ilaj-bil-dawa* (pharmacotherapy), *Ilaj-bil-Tadbeer* (regimenal therapy) and *Jarahat* (surgery).

The *Ilaj-bil-ghiza* tries to treat certain ailments by administration of specific diets or by regulating the quantity and quality of food. *Ilaj-bil-dawa* deals with the use of natural drugs, mostly herbal, partially animal and mineral origin. The *Ilaj-bil-tadbeer* comprises of many therapeutic procedures, viz., *fasad*, *hijamah*, *taleeq*, *nutool*, *qai* etc. The practitioners of Unani medicine are scattered all across the country forming an integral part of the national health care delivery system (Anonymous, 2012). *Sokhta* or *Moharraq* drugs are mentioned in many Unani formulations like *Majoon*, *Haboob*, *Aqras*, *Barood*, *Roghniyat*, *Sanoon*, *Shiyaf*, *Sadri*, *Safoof* etc.

Amal-e-Ehraq: *Amal-e-Ehraq* is an Unani pharmaceutical process by which drugs are burnt to the charring stage but not reduced to ash. Drugs which undergo this process are suffixed with the term "*Moharraq*" or "*Sokhta*" for example *Sartan Moharraq*, *Busud Sokhta*, *Marjan Sokhta*, *Aspand Sokhta* etc.³. In this process all organic contents of the drug are destroyed and only inorganic contents are left. For using inorganic contents this procedure has applied on drugs.

Procedure of Moharraq: The procedure of *moharraq* is applied on the animal, metal / mineral and herbal origin drugs. Animal's drugs must be washed with saline water and all the appendages, viscera are removed before the procedure. The metal/mineral drug's drugs should be cleaned and dried, preferably converted into small fillings (burada). Plant origin drugs should be in small pieces form before the procedure. The drug kept in a disc shaped *boota* (earthen pot), cover with

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Figure. preparation of Sokhta (Moharraq)

Sokhta or moharraq drug mentioned in National Formulation of Unani Medicine

S. No	Sokhta or Moharraq drug	Formulation	References
1	Aqrab sokhta (Scorpions)	Majune Saraffiyun,	NFUM, part II, p 72,
2	Jast sokhta (Zinc)	Burrod Banafsaji	NFUM, part IV, p 79
3	Zard sokhta (Curcuma longa)	Roghan-e- Auraq Qawi	NFUM, part IV, P 111
4	Koknorsokhta (Papaver somniferum)	Roghan-e- Auraq Qawi	NFUM, part IV, P 111
5	Babchi sokhta (Psoralea corylifolia)	Roghan-e- Auraq Qawi	NFUM, part IV, P 111
6	Amla sokhta (Embelica officinalis)	Roghan-e- Auraq Qawi	NFUM, part IV, P 111
7	Azaraqi sokhta (Strychnus nux vomica)	Sanoon Mustahkam Dandan, Sanoon mugawwi dandan	PSUF, Part III, p 237, NFUM, Part VI, p109
8	PostBaiza-e-Murgh Sokhta (Gallus domesticum)	Habb-e-Sandroos	NFUM, Part II, Vol-I p 25
9	Sartan moharraq (Scylla serata)	Dawa-e-Jalinus, Habb-e-Jawahar kafoori, Qurs Habis, Qurs sartan kafoori, Habb-e-Jawahar Moalif, Mufarrah-e-shaikh-ur-raais.	NFUM, part II, p 124, NFUM, part IV, p 24PSUF, Part I, P 86, NFUM, Part VI, p19NFUM, Part III, p95
10	Nohas Sokhta	Barood-e-Ahmar, Shiyaf-e-Aqleemeya, Shiyaf-e-Aqleemeya quroohi, Shiyaf-e-loban, Shuyaf-e-Ahmer Haad	NFUM Part II, Vol I p54, NFUM, Part II Vol I p56, NFUM, Part II, Vol I p 60, NFUM, Part II, Vol I p61,57
11	Sadaf Sokhta (Pintoda margantifera)	Barood-e-Sozish-e-Cashm	NFUM, Part II, Vol I p56
12	Aqleemeya Moharaq	Shiyaf-e-aqleemeya quroohi	NFUM, Part II, Vol I p 60
13	Shakh-e-gauzban sokhta (Barago officinalis)	Shiyaf-e-aqleemeya quroohi	NFUM, Part II, Vol I p60
14	Busud-e-Ahamar sokhta (Corallium rubrum)	Qurs suzak	NFUM, Part VI, Vol I
15	Shakh marjan sokhta (Corallium rubrum)	Qurs suzak	NFUM, Part VI, p67
16	Gule kela shokhta (Musa paradisiacal)	Sadri	NFUM, Part VI, p67
17	Barge kela sokhta (Musa paradisiacal)	Sadri	NFUM, Part VI, p67
18	Maghz neeb sokhta (Azadirachta indica)	Sadri	NFUM, Part VI, p67
19	Quaran-ul-aiyyal sokhta (Cervus elephus C.equinus)	Sadri	NFUM, Part VI, p 67
20	Barge dhak sokhta (Butea monosperma)	Sadri	NFUM, Part VI, p67
21	Barge Tambol sokhta (Piper betle)	Sadri	NFUM, Part VI, p67
22	Post Anar sokhta (Punica granatum)	Sanoon mugawwi dandan	NFUM, Part VI, p109
23	Barge Gaozaban sokhta (Barago officinalis)	Zaroor kulla	NFUM, Part VI, p111
24	Post-e-heel kalan sokhta	Habb-e-leemu	NFUM, Part III, p25
25	Qirtas sokhta	Shiyaf-e-Ahleel	NFUM, Part III, p
26	Busud sokhta (Moharraq) (Corallium rubrum)	Mufarrah-e-shaikh-ur-raais	NFUM, Part III, p95
27	Ispand sokhta (Peganum hermala)	Majun ispand sokhtani	NFUM, Part IV, 20
28	Gandum sokhta (Triticum aestivum)	Safoof dama haldiwala	Bayaz kabir, Vol II, p71
29	Post-e-Illaichi kalan Sokhta (Amomum subulatum)	Habb-e-limu	NFUM, Part V, p11
30	Chhaliya sokhta	Habb-e-limu, Sanoon-e-mugawwi dandan	NFUM, Part V, p150
31	Post-e-Badam sokhta (Prunus amygdalus)	Sanoon-e-mugawwi dandan	NFUM, Part V, p150
32	Mazu sokhta (Quercus infectoria)	Zaroor qula	NFUM, Part VI, p111

another pot, sealed by *kaproti*. The *boota* was kept in furnace/*bhatti* and heated by cow dung cakes (CDC). The change in temperature of furnace regularly monitor by using pyrometer. After complete extinguishing of fire and cooling of furnace, remove the *boota* and collect the *sokhta* drug. The degree of heat depends on the drug used in the procedure.

Gil-e-Hikmat (Technique of sealing through soil and cotton)

This is also known as "*Teen ul Hikmat*". The cotton is mixed with wet soil and ground well in a mortar (*khral*), when the cotton and soil are mixed completely to each other then it is used for sealing the mouth of the requirement pot and dried it

in this way the pot would remain safe from breaking on heating (Parvez, 2012).

Kaproti (Clothing with wet soil): The cloth and wet soil are wrapped around the required pot or *atishi shishi* (fire proof bottle) and dry. In this way it would remain safe from the effect of heat and fire. Hence it did not break on heating over fire. Another benefit is that the exchange of heat become ceased through *kaproti* or clothing. Use of *gil-e-multani* in compare to any other ordinary soil is more benefitted / useful (Parvez, 2012).

Boota (Mud pot): It is small size bowel or pot of clay and having very strong properties that it does not break on heating repeatedly. It is generally used in the preparation of *Kushta* or *sokhta*.

USE OF SOKHTA DRUGS IN UNANI DOSAGE FORMS

Majun-Majun is a semisolid medicinal preparation where one or more single drugs of plant, animal or mineral origin are mixed in powder or liquid forms in the base (Qiwam) of purified honey, sugar, candy or jaggery. These include preparation like *Jawarish*, *Laoq* and *Tiryac* etc (Anonymous, 2007; Anonymous, 2008).

Haboob and Aqras-Haboob (pills) is small round and uniformity shaped medicinal preparation. While *Aqras* (tablets) are flats and circular in shape, Size and weight of haboob and Aqras vary in form one tenth of a gram to one gram. Banadiq are in bigger form of haboob and weight from 1-3g (Anonymous, 2007; Anonymous, 2008). *Barood (Kohal)-Barood (Kohal)* is the finest powder form of the medicinal preparation used externally to strengthen the eyesight and to cure other eye ailments (Anonymous, 2007; Anonymous, 2008).

Roghaniyat-Roghan (oil) is a medium which is used in different forms. It is used for making the medicine, as medicine itself, as one of the ingredients in a particular formula or as medicated oil by mixing with other drugs, of plant, animal or mineral origin. It is mostly used as a base (as in the case of ointment) and is generally obtained from plant source. Oil can be extracted from different parts of the plant, viz. *Maghaziya* (Kernels of the fruits), Roots, Leaves, Flowers, Seeds etc. *Tila* is an allied form of *Roghaniyat* and is included in this section (Anonymous, 2011). *Sanoon*-It is the fine powder which is applies on teeth to provide cleanliness and freshness^{11, 12}. *Shiyaf-Shiyaf* is the solid dosage form intended for insertion into body orifices where its melt, soften or dissolve and exert localized or systemic effects (Anonymous, 2007). *Sadri-Sadri* is a types of *Majun* which especially use for respiratory ailments (Anonymous, 2011). *Safoof*-The medicine is ground in a mortar (*kharal*) or grinder, and this ground medicine is known as powder or *safoof* may be very fine or coarse (Anonymous, 2011).

CONCLUSION

Amle Ehraq is a unani pharmaceutical technique, in this process plants, animals, and minerals drugs was converted into charring stage (coal like), and moisture content remove from the drugs, but not reduced to ash, This process undertaken to

evaporate all moisture content and to make the completely dry, as indicated in respective formula, *Majun*, *Haboob*, *Aqras*, *Barood*, *Roghniyat*, *Sanoon*, *Shiyaf Sadri*, *Safoof* etc, for treatment of diseases.

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