

**CONCEPT OF WASHAM (TATTOOING) IN UNANI MEDICINE - A REVIEW OF
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Article Received on 06/12/2018

Article Revised on 27/12/2018

Article Accepted on 17/01/2019

ABSTRACT

The global pattern of body modification affirms a major transformation. Washam (Tattooing) is one such art of body modification that's gaining acclaim as fashion crazes currently. The American Academy of dermatology found that 24% of Americans between 18-50 years are tattooed and about 36% of Americans aged between 18-29 years have at least one tattoo. Men are more likely to acquire tattooing than women. Although Tattooing was not so much common in earlier time but it is observed that in available authentic classical literature of Unani system of medicine, the description of the tattooing and its removal is clearly mentioned. Drugs used in tattooing and in their removal with the help of natural plant products by natural healing methods are given in some books. Modern methods such as Q-switch laser used to remove tattoos may cause some side effects, having their bit of drawbacks of being painful and leave behind blistering, changes in skin pigments and texture, skin inflammation and pinpoint bleeding. This review is aimed to explore the concept of Washam (Tattooing) with its removal techniques and to broaden the acquaintance of adopting natural, effective, safe and economical methods mentioned in Unani system of medicine.

KEYWORDS: Washam, Tattooing, Unani medicine, plant products, Q-switch laser.**INTRODUCTION**

The word *tattoo* or *tattow* is a loan word from Samoan word *tatau* meaning "to strike".^[1] Tattoos are like diamonds, almost always, forever as they are consciously produced artifacts^[2] made into the dermis layer of skin which is stable unlike epidermis that sheds about every four weeks. Dermis constitutes about 95% of skin,^[3] and is mesodermal in origin having papillary dermis, reticular dermis, blood vessels, nerves, hairs, sweat and sebaceous glands, collagen fibers, reticulum fibers, elastic fibers and cells like mast cells, fibroblasts and histiocytes.^[4] The practice of tattooing is believed to be originated in ancient Egypt between 4000 and 2000 BC,^[5] Greeks written records of tattooing dates back to at least 5th century BC,^[6] then spreading to South East Asia and China. The Romans, however, used tattoos to denote slaves and criminals. In America, it gained popularity during Civil War and World War I and II. In 2010, 25 percent of Australians under the age of 30, had tattoos. India has a long ancient history of tattooing in tribal areas, used as cultural symbols as well as caste based population of India. In southern India, permanent tattoos are called *Pachakutharathu* and in other parts, this

practice has many names including *Tarazwa*, *Gondan*, *Goodna* and *Ungkala*. Soon it flourished into world depicting religious, ornamental and cultural trend. Tattooing has expanded and gained high popularity and today it is usually done for personal and decorative purpose, to represent one's individuality. Men are more inclined towards tattooing as compared to females.^[7,8]

The Unani system of medicine, an ancient traditional system that holds a distinct position in the healthcare sector because of its holistic approach with scientific outlook has records of the concept of tattooing. The description, although a short but clear regarding Washam (Tattooing) and its removal by natural methods is documented thousand year's back.^[9] The Unani system of medicine described the use of herbal medicines for removal of tattoos in a safe and natural manner compared to new conventional techniques. Removal of tattoo by single and compound Unani formulation is safe, effective as well as economical as it deals with mainly plant based natural products.

The American Academy of Dermatology classified tattoos into five types^[10]

1. Professional tattoos-It may be cultural and modern professional tattoos, using tattoo gun and performed by various pigments of different colors by professionals.
2. Traumatic tattoos-They are basically caused by trauma followed by unwanted embedding of dirt or debris beneath the skin which leaves an area of pigmentation after healing.
3. Amateur tattoos- Usually done by individuals themselves or by their friends and are made beneath the skin with a pin. As a pigment of tattooing, pen ink, charcoal or ashes are used.
4. Cosmetic tattoos- They are done to replace a nipple after breast surgery which remains in high demand,^[11] to camouflage vitiligo,^[12] or to cover an undesired tattoo.
5. Medical tattoos-They are employed to delineate permanent landmarks for radiation therapy and are placed by a physician.

As tattoos are used since long time so, the techniques of tattooing may be divided in two groups, ancient techniques and modern techniques. In ancient techniques, tattoos were created by cutting designs into the skin & rubbing the resulting wound with ink, ashes or other colouring agents. In Unani system of medicine, Washam are made by Neel, Siyahi or Abe-Gandana. Bamboo tattooing, also known as Tebori was practiced in Japan. Traditional Hawaiian hand tapped tattoos, in which tattooist chooses the design, rather than the wearer, based on genealogical information the design is symbolic of the wearer's personal responsibility and role in the community. Tools are hand carved from bone or tusk without the use of metal.^[13] Rake & striking stick technique, Metal tube (brass) tattooing techniques, New Zealand famous Maori tribe does tattooing by creating facial and body markings known as Ta Moko. Hand tapping the ink into the skin using sharpened sticks or animal bones (made like needles) clay formed disks. In modern days, tattooing is done by electric tattoo machine, which inserts ink into the skin via a single needle or a group of needles that are soldered onto a bar, which is attached to an oscillating unit.

Removal of Tattooing

Tattooing has accepted by society as a form of expression and not considered as unacceptable thing now.^[14] For most people, tattooing has become as an art, the ultimate expression of one's self but in some people tattooing is considered as a source of regret, something that has to be eliminated for a good. So, the removal of tattoo becomes necessary to get confidence and joy in these people. There are several ways to remove it and most common method is by laser therapy, popularly known as Q-Switch laser method. The mechanism on which laser works is by allowing the concentrated beam of the light produced by the laser to pass through the skin and break up the tattoo ink into tiny particles, the body

then disposes of these fragments via its immune system. However, late correction of tattooed scars can be very difficult.^[15]

Side Effects, Adverse Effects & Complications of Modern Tattoo Removal Techniques

Immediate complications include blistering, frosting, swelling, discomfort, pain, itching, crusting and pinpoint haemorrhage. Infections including bacterial/fungal, acute inflammatory allergic reaction, mostly by cinnabar, a red dye containing mercuric sulfide,^[16] and foreign body reactions resulting in dermatological emergencies may occur. Long term or delayed complications are hyper-pigmentation, hypo-pigmentation and leukotrichia. Apart from these, psychological complications may occur such as psychological distress, feeling of low self-esteem, stigmatization, anxiety and multiple visits for laser leading to dissatisfaction. As laser removal require multiple visits to clinic, patient at one moment gets fed up.

Similarly, Koebnerisation in patient with active psoriasis, lichen planus and vitiligo, reactivation of infection such as herpes simplex, herpes zoster, discoid lupus erythematosus and pyoderma gangrenosum also comes under its complications. Evidences have demonstrated that a potentially serious hazard does exist with regard to the plume of steam and smoke that is generated during certain types of laser surgical procedures.^[17]

A study on guinea pig to remove professional tattoo by intra-dermal injection of different solutions of tannic acids shown slight fibrosis with little visible pigment deeper in the dermis than in the untreated tattoo.^[18]

A case report of eight people including six men and two women shown atypical mycobacterium infection after getting tattooed,^[19] while inoculation also reported in one case after tattooing.^[20]

Removal of Washam (tattooing) by Unani system of Medicine

Usul-i-Ilāj (Principle of treatment) of Unani system of medicine indicates the treatment of local skin lesions to be corrected with local application of medicines^[21] By natural healing process, using certain Unani drugs having *Jālī* (Corrosive, an agent which cleanses the surface of the skin) and *Akkāl* (An agent, which causes ulceration of the tissues due to strong caustic and ulcerative properties) properties. Application of wine, lime, garlic (*Allium sativum*) or pigeon excrement was also reported to remove tattoo.^[22] Application of milk obtained from *Balādur/Bhulavan* (*Semicarpus anacardium*) on the tattoo too reported in literature, where abrasion is caused and treated on the principle of wound. Another method that is mentioned is Sal abrasion which is scrubbing the tattoo with an abrasive pad that has to be soaked with salt.

Natroon (*carbonate of sodium*) having *Hārr Yābis Mizāj* (hot and dry temperament) and *Jālī* (corrosive) property, warm washing with this on the desired part, then applying *Iql Batan* (*Pistachia terebinthus*), a type of gum obtained from *darakht-e-batam* with honey, having *Hārr Yābis Mizāj* (hot and dry temperament), *Jālī*

(Corrosive) and *Muhallil* (Resolvent, an agent which resolves thick and viscous humors) properties, and leave it for three days, subsequently on fourth day, remove it and scrub it with salt, then apply this Unani drug formulation as described below.

S. No.	Unani Name	Scientific name	Quantity
1	Hadtaal zard	<i>Arsenic disulphate</i>	two part
2	Hajar-e-filfil	<i>Piper nigrum</i>	one part
3	Sang-e-surma	<i>Antimony</i>	one part
4	Kundur	<i>Boswellia serrata</i> Roxb.	one part

All ingredients to be mixed with vinegar and applied on the affected part for three consecutive days.

If a small area is affected, wash with *Boora-e-Armani* (*Armenian bole*) water and apply *Gond-i-Sanobar* (gum of *Pinus gerardiana* Wall.) and leave it for ten days, then by piercing needle, apply *Boora-e-Armani* with honey.^[23] Moreover, tattoo removal requiring more efforts and which are difficult to remove can be treated with *Balādur/Bhulavan* (*Semicarpus anacardium*) having corrosive property along with honey.^[24] *Bhilawanol* milk is also applied which removes tattoo by its corrosive action. Another Unani formulation that is used in removing the tattoos is given below:

1. Choonā (*lime*),
2. Kundur (*Boswellia serrata* Roxb.),
3. Boor-e- Armani (*Armenian bole*)

Mix all three ingredients with honey and mom (wax) to form a semisolid cream and application of this repeatedly will remove the Washam.^[25]

Along with the process of removal of Tattoo, certain precautions must be taken to avoid complications; some of these are given below:

1. Avoid direct sunlight exposure.
2. Intake of plenty of fluids.
3. Have adequate sleep.
4. Quit smoking, if there, to boost immunity.
5. Maintain aseptic precautions, including instruments and other daily used things like soap etc to keep tattoo clean and infection free.^[26]
6. Some pigment used in tattoo have trace metals which may cause first or second degree burn during MRI procedure, so precautions may be taken to avoid such types of incidences.^[27,28]

DISCUSSION

This article comprehensively reviewed the literature for the concept of Washam (tattooing) in Unani system of medicine and its removal through its holistic approach. The paper emphasizes, elaborates and explores the current emerging trends available for Washam and traditional Unani concept. Keeping in view, the medicinal importance of plant products in Skin and Cosmetology, Unani medicine can serve as an alternative

treatment without any apparent side effects. As the trend of tattooing is increasing day by day, health care experts needs to be aware of its techniques, removal and complications. To overcome the complications of modern day Q-switch laser techniques such as hypo-hyperpigmentation, scars, and changes in skin structure and color degradation of pigments, Unani system of medicine may be adopted to remove tattoos by natural herbal remedies that are safe, efficacious and economical. Moreover, the art of tattooing needs proper scrutiny of tattoo parlors and professionals involved as it results in various risks of Hepatitis C virus (HCV) infection, Atypical mycobacteria infection, Syphilis, warts, Pox viral infection, Severe local infections involving gangrene, amputation and even death, have occurred following tattooing. Epidemiological studies have shown tattooing to be a risk factor for HCV infection and a dose related response was noted²⁹. Some studies suggest that tattoos received before 1995 increased risk of HCV infection, whereas those received after 2005 did not.^[30,31,32,33,34,35]

A systematic review and Meta-analysis indicate an increased risk of hepatitis C among those who have tattooed.^[36] Tattooing has been shown to be a risk factor for HIV infection, a case of HIV infection in an Australian tourist after receiving tattoos in Bali again raised the possibility of HIV transmission.^[37] Thirty percent (30%) of prisoners in Norway, 34% of Male prisoners with hepatitis B in Italy and 47% of male prisoners, 53 % of female prisoners in Canada were found to be tattooed. There is a need to prevent hepatitis C transmission from use of unsterile tattooing and piercing equipment especially in prison.^[38] In 1992, a randomly sampled survey of 450 British soldiers found that forty four percent had been tattooed.^[39] Regardless of the fact that the trend of tattooing practice is on roll in current scenario, focus should be given on enforcing proper laws and spreading awareness among individuals.

CONCLUSION

As the trend for tattoo acquisition increases, the demand for tattoo removal will similarly rise and so a natural healing approach of Unani system of medicine can be taken into account. The provided information in this review could be utilized for the discovery of natural

methods of treating Washam, given in classical literature by eminent scholars thousands years back and for which there is limited cure in conventional system of medicine.

In addition to that, scientific studies for validation of processes of removal of Tattoo mentioned in Unani literature may be done. Application of modern technology with ancient knowledge can be explored to develop a safe and effective method for removal of tattoo.

This review concludes on focusing the key issues in context of Washam, building a strong platform for utilization of plant based, research oriented and evidence based medicine that will benefit the health of individuals thereby contributing a better and healthy society for one and all.

CONFLICT OF INTEREST STATEMENT

Funding: No funding sources.

Competing interests: None declared.

Ethical approval: Not required.

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