

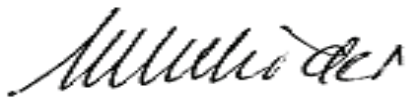
## BOARD NOTICE 127 OF 2020

**ALLIED HEALTH PROFESSIONS COUNCIL OF  
SOUTH AFRICA****SAFETY GUIDELINES: UNANI-TIBB: CUPPING  
THERAPY****OCTOBER 2020**

The Allied Health Professions Council of South Africa (AHPCSA) is a statutory health body established in terms of the Allied Health Professions Act, 63 of 1982 ("the Act") in order to control all allied health professions, which includes Aromatherapy, Ayurveda, Chinese Medicine and Acupuncture, Chiropractic, Homeopathy, Naturopathy, Osteopathy, Phytotherapy, Reflexology, Therapeutic Aromatherapy, Therapeutic Massage Therapy, Therapeutic Reflexology and Unani-Tibb.

The AHPCSA, after due consideration and in consultation with the Professional Board: Ayurveda, Chinese Medicine and Acupuncture and Unani-Tibb (PBACMU) and taking into account sections 1(2)(a), 3, 4, 10C, and 10D of the Allied Health Professions Act, Act No 63 of 1982 (“the Act”) resolved that the following SAFETY GUIDELINES: UNANI-TIBB: CUPPING THERAPY shall be applicable to all practitioners registered in the profession of Unani-Tibb.

Should the AHPCSA become aware of any practitioner or therapist who does not comply with the guidelines and/or practice outside his/her scope of practice, such person shall make him/her guilty of unprofessional conduct and face disciplinary action in terms of sections 23 to 30 of the Act.



**DR LOUIS MULLINDER**

**REGISTRAR: ALLIED HEALTH PROFESSIONS COUNCIL OF SOUTH AFRICA**

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## **SAFETY GUIDELINES: UNANI-TIBB: CUPPING THERAPY**

### **1. INTRODUCTION AND OVERVIEW OF THE MAIN THERAPY USED WITHIN UNANI-TIBB - CUPPING THERAPY**

#### **1.1 INTRODUCTION**

Cupping Therapy is the main therapy used within Unani-Tibb and is recognised by both National and International healthcare authorities (AHPCSA, AYUSH and WHO). Cupping consists of several forms which include Dry and Wet Cupping.

Most patients seen by an Unani-Tibb practitioner will receive Cupping Therapy (either Dry or Wet depending on the condition and circumstances surrounding the case) as a part of the treatment. In some cases, Cupping might be employed as a stand-alone treatment, once again, dependent on the nature of the case. In order to ensure efficient treatment, both Dry and Wet Cupping, specific equipment and protocol are required.

#### **1.2 DEFINITIONS**

**“DRY CUPPING”** is the practice of applying a partial vacuum by means of heat (Fire Cupping) or suction (vacuum gun) in one or several bell-shaped vessels (suction cups) to specific locations on the skin. This results in the uplifting of tissues beneath the cup (skin doming) (Sayed, et al., 2014);

**“WET CUPPING”** is a minor surgical excretory procedure, where negative pressure (suction force) applied to the skin surface using cups creates skin doming (gradually increasing in size due to viscoelastic nature of the skin) inside which local pressure correspondingly decreases (Boyle’s law) around capillaries. This causes increased capillary filtration, local collection of filtered fluids. This is followed by light scarification of the skin beneath the cup by means of a surgical blade no deeper than 0.1 mm into the epidermis so that the filtered fluid (composed of tissue fluid, fragments of damaged RBC, causative pathogenic substances, metabolic by products, blood from ruptured capillaries) moves into the cup. This process is preceded and completed by disinfecting the skin involved (Sayed, et al., 2014);

**“CONTRAINDICATIONS”** being those conditions if present, in which Cupping therapy should not be done; and

“**PRECAUTIONS**” being those conditions in which Cupping therapy is not prohibited but caution should be observed, especially in terms of how much blood is removed when Wet Cupping is administered.

### 1.3 CUPPING APPARATUS/EQUIPMENT (Latib, 2013)

#### 1.3.1 ELECTROMAGNETIC CUPPING

This method involves using an electric Cupping machine to produce the suction force under the cups. The cup is attached to the machine through an umbilical suction cord. Suction strength and duration can be adjusted and controlled electronically by the practitioner. It is an expensive and bulky method and impractical as far as mobility is concerned. It is not a common practice among Unani-Tibb Practitioners.

#### 1.3.2 PORTABLE CUPS

##### PISTOL HANDLE VALVE CUPS



**FIGURE 1:** This type of cup is usually made of toughened glass or clear hard plastic material and has a valve attached to its top. The practitioner places the cup on the desired position and inserts the pump into the valve, and then proceeds to pump air out of the cup creating a suction. The strength of suction can be adjusted from the valve which is positioned at the top of the cup. This is the method of choice used by Unani-Tibb practitioners and the referred Cupping apparatus used in this document unless otherwise stated.

##### SCREW-TOP CUPS



**FIGURE 2:** This method uses an adjustable screw-threaded handle located on top of the cup and attached to a piston-like suction pump inside the cup. The level of suction required is obtained by turning the handle anticlockwise and allowing the piston ring inside the cup to touch the patient's skin. The handle is then turned clockwise in order to pull the piston upwards, thereby creating a negative pressure inside the cup. Proper sterilization of the cups tends to be a problem.

### BAMBOO CUPS



**FIGURE 3:** These are cups made out of bamboo. They are extremely light to carry and durable. To create a negative pressure inside the cup, Fire was ignited to expel the air. These cups can be infused in an herbal decoction before use. One disadvantage is that the edges of the bamboo cups are very sharp and under strong suction force can dig into the skin. It is not preferred for Wet Cupping as you cannot see inside the cup and adequate sterilization cannot be achieved.

### GLASS CUPS



**FIGURE 4:** Glass cups use the same Fire mechanism as bamboo cups to achieve its suction. The edges of glass cups are thicker and smoother than bamboo cups and sterilization is easily achieved with an autoclave.

### RUBBER/SILICONE CUPS



**FIGURES 5 AND 6:** These cups are made completely of a rubber (Fig. 5) or silicone (Fig. 6) material. The cups are corrugated in shape and when the air is pushed out a rather strong suction is obtained. The natural rubber material is quite expensive and cannot be boiled or sterilized in strong cleaning solutions. The silicone cups are

*more durable and can handle much higher temperatures for sterilizing purposes. These cups are well tolerated by children.*

#### 1.4 PRELIMINARY CONSIDERATIONS

The location to be treated is important in deciding the position of the patient. If the Cupping is to be performed on the back, the most comfortable position will be prone on a bed or flat surface area; if on the stomach, a supine position is preferred. For the face, knees, neck and shoulders, a sitting position in a chair may be chosen. For the elderly, severe asthmatics or patients who have recently suffered from any heart conditions, an upright sitting position should always be preferred (Sayed, et al., 2014).

- A. In obese persons and in those suffering from thickened blood (polycythemia), a hot bath 1 to 2 hours before Cupping is recommended. This helps to stimulate blood flow to the skin, so makes Cupping that much more effective.
- B. As Cupping is performed on the naked skin, the treatment room should be comfortably warm.
- C. Make sure the patient is relaxed and not suffering from any degree of anxiety.
- D. Explain the entire procedure to the patient, demonstrate if necessary (mock Cupping on the practitioner's arm).
- E. In order to achieve better contact between the cup and the skin, liberally apply a suitable massage oil to the Cupping intended area.
- F. The selected areas of skin may be shaved, so that a good seal between the cup and skin can be achieved.
- G. Patients about to undergo Cupping (especially the Wet version) should be advised to take a nutritional drink before the Cupping.
- H. Pressure applied to cups will vary according to patients. For medium to large frame patients, and in patients where the Cupping sites are endowed with excess fatty tissue, the pressure can be increased. This ensures that the area beneath the glass will respond at a faster rate than on patients who are leaner, and with less fatty tissue.
- I. Cupping can also be carried out in parallel to massage. Choose the best position suitable for the patient as sudden movements are not recommended.

## 1.5 CUPPING PROCEDURE

- A. A 5-minute light massage with suitable lubrication (e.g. special blend dependent on the temperament of the patient) is performed on the area selected for treatment. Begin with painful areas and avoid using more than 3 points at once. This is followed by Dry Cupping performed with appropriate suction intensity suited for the body type and therapeutic outcome.
- B. Primary sucking. The cup is placed on the selected site. The cup clings to the skin and is left for a period of 3 to 10 minutes to improve blood circulation. Erythema soon becomes evident. The cups are removed which completes the action of Dry Cupping.
- C. For Wet Cupping, ensure that the Cupping sites are sterilised with antiseptic solution.
- D. The next step in Wet Cupping (after Dry Cupping) is skin scarification. Superficial incisions are made on the skin through the epidermal layer on the areas where the cups were applied using a sterile surgical blade. Incision direction is dependent on the structure of the skin and the muscles. It should be made with lines of tension as this is better for healing and avoids scar formation. Depth of scarification: There are no blood vessels in the epidermis. Blood vessel and nervous system supply is in the dermis. Therefore, scarification does not reach the dermis. It should not penetrate into collagen layer as this will result in keloid formation. Scarification is 0.1 mm in depth, 1mm in length (10-30 parallel incisions) or 1-3 cm in length (3-7 parallel incisions) per cup.
- E. Blood/tissue fluid extraction: The cup is placed back on the skin (containing cotton balls to absorb tissue/blood fluid), using the same manner described above (suction action is applied to the previously scarified skin), until it is filled with collected fluids (filtered capillary fluids containing different causative pathological substances + collected interstitial fluids containing different causative pathological substances + blood from ruptured capillaries). During Wet Cupping 5 -100 ml of blood/tissue fluid is extracted in total. The bleeding generally subsides spontaneously.
- F. Removal. The cup is carefully removed by releasing the vacuum valve leading to the loss of suction. The absorbed cotton wool is disposed of as biomedical waste, the cup could be reapplied onto the skin up to 3 times or until haemostasis occurs. The cups as well as any other soiled materials are disposed of in the Biomedical Waste bin and the blades used are disposed of in the yellow sharps biomedical waste.

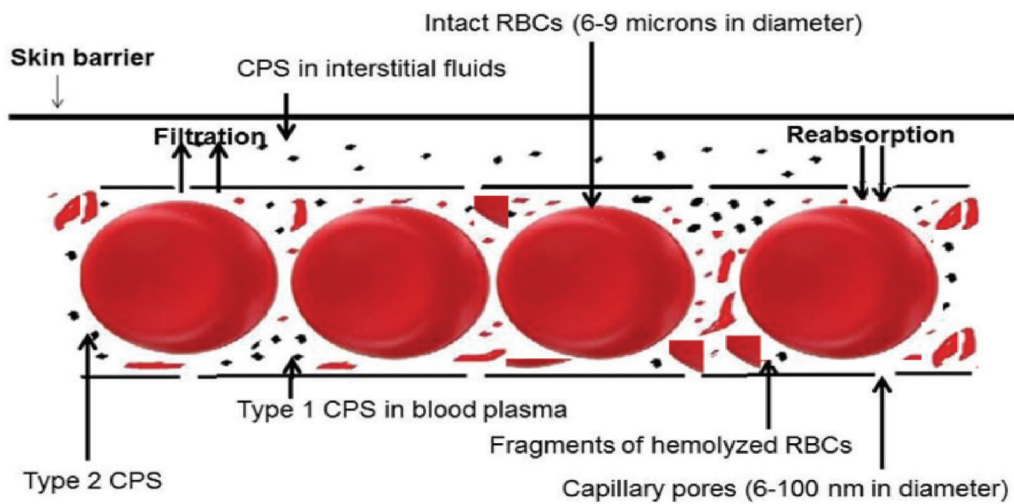


- G. Sterilisation by antiseptic liquid and application of a dressing to the cupped areas ends this procedure. Honey is preferred for its antiseptic and healing properties.
- H. The process after scarification lasts for 15 - 20 minutes
- I. The patient should remain in their position after Wet Cupping for 5-10min before standing up. The patient is advised to stand up gradually.
- J. If any dizziness occurs the patient should remain supine with legs raised comfortably until he/she feel stable enough to stand up. An electrolyte drink can be offered to the patient.
- K. Light meals can be eaten but avoid any heavy meal for 2hrs after the procedure.
- L. Fluid intake is important to stay hydrated and electrolyte drink can help to counter lethargy, if experienced.

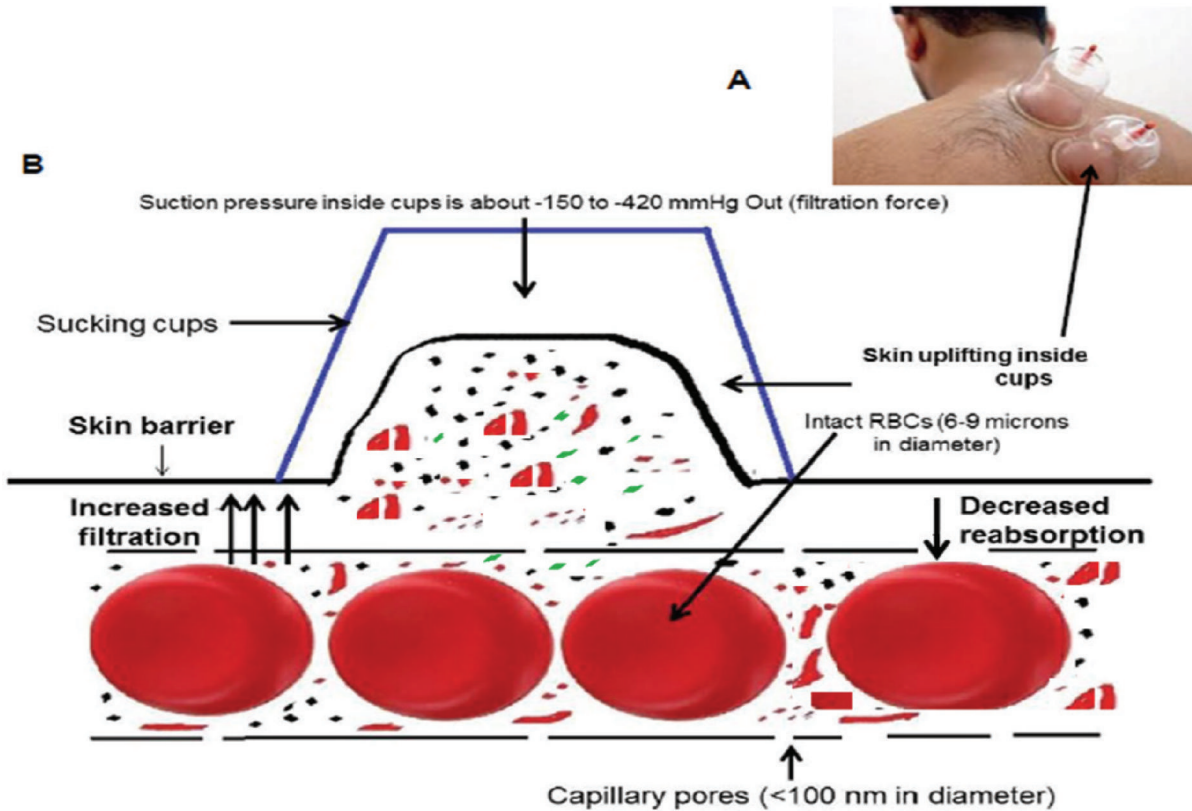
## 1.6 MECHANISM OF ACTION



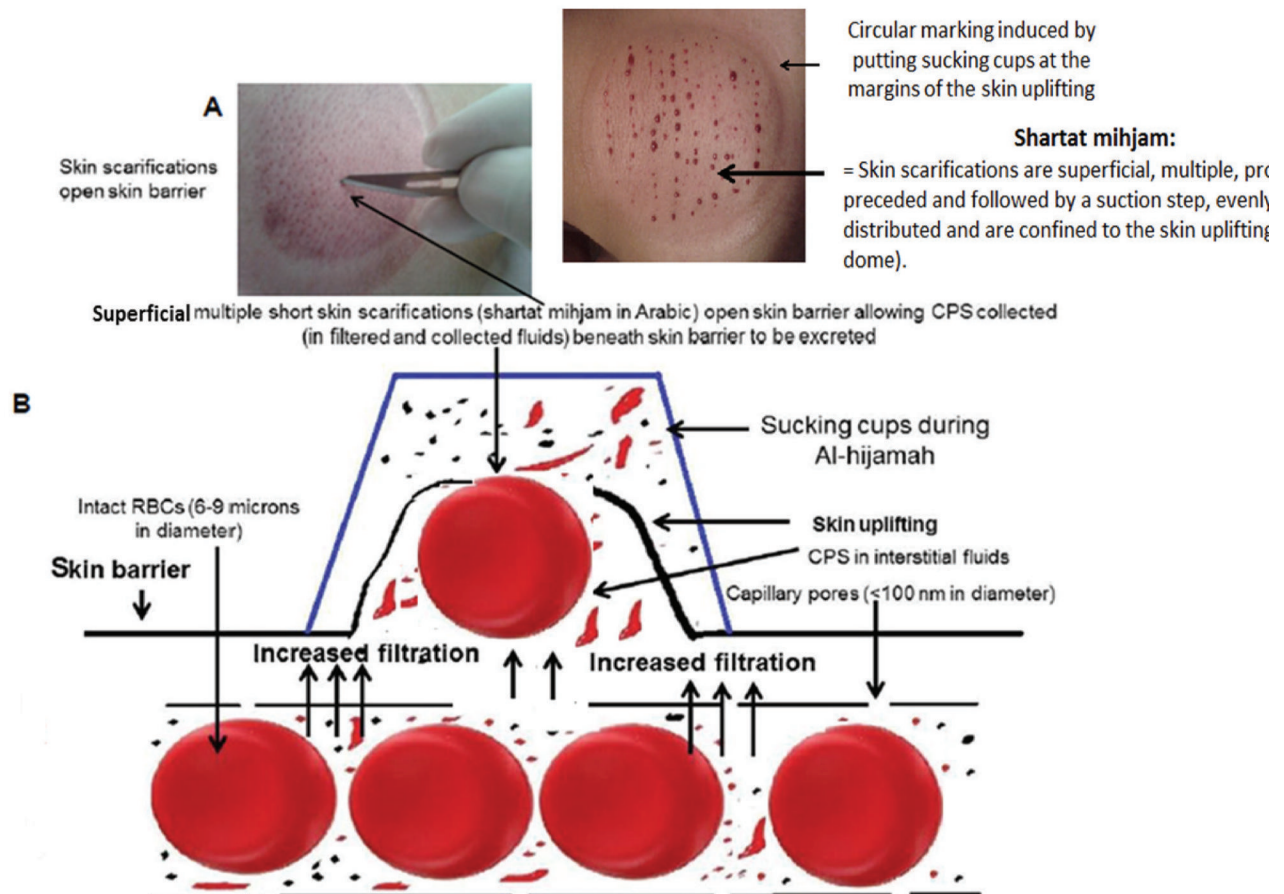
**FIGURES 7A, B, C:** Disposable sterile equipment for performing Cupping. Disposable variable-sized plastic cups and a manual hand-help pump creates 'skin doming' (uplifting) effect.



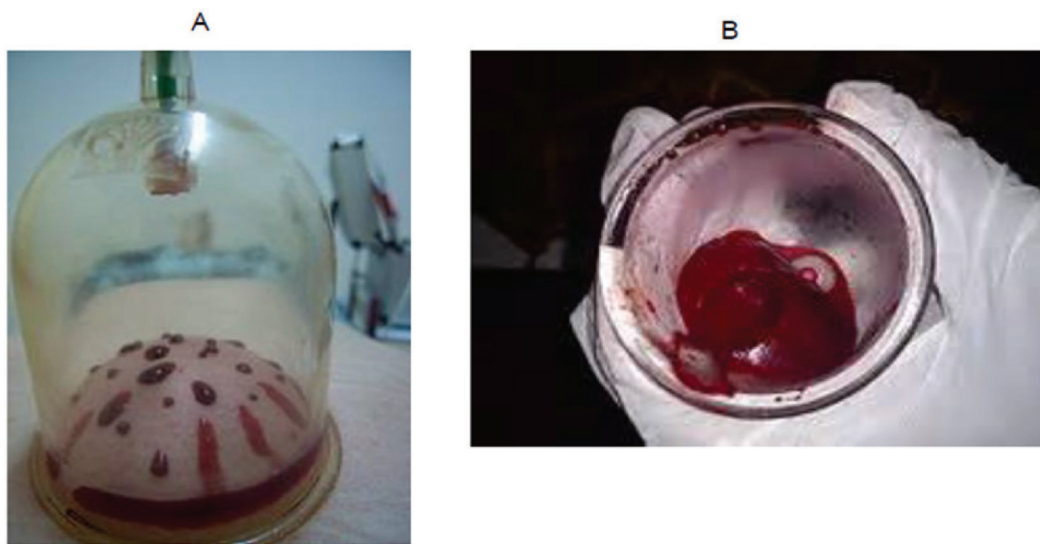
**FIGURE 8:** Disease conditions are mostly characterized by abnormal blood chemistry. Different causative pathological substances (disease-causing substances and disease-related substances) are present in the blood and interstitial fluids and cannot be excreted by physiological mechanisms e.g. excess serum iron and ferritin in thalassemia, uric acid in gout, inflammatory by products in chronic inflammatory conditions etc. (Sayed, et al., 2014).



**FIGURE 9:** First technical step of Cupping is the first suction step. **A.** External negative pressure inside suction cups sucks skin into cups leading to formation of skin uplifting (skin dome). **B.** Inside skin uplifting, filtration of skin capillaries (pressure-dependent and size-dependent filtration and excretion) takes place. Collected fluids (filtered capillary fluids containing different causative pathological substances + collected interstitial fluids containing different causative pathological substances) start to accumulate inside the skin uplifting (skin dome) and approach the most superficial epidermal layer of the skin but cannot get out due to the presence of skin barrier. Small particles (causative pathogenic substances measured in nm) can be filtered through capillary pores and fenestrae while large particles (intact blood cells measured in microns) cannot pass through (Sayed, et al., 2014).



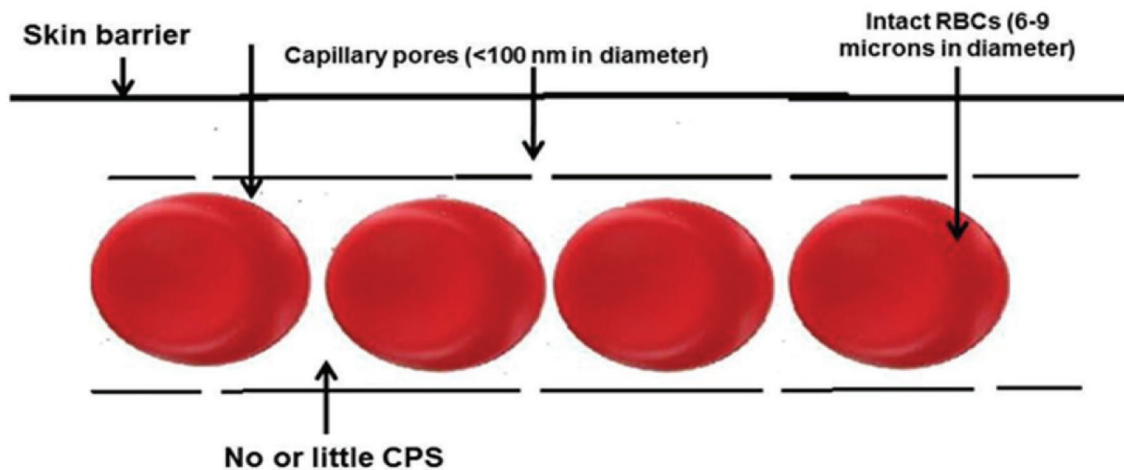
**FIGURE 10:** Second technical step in Wet Cupping is skin scarification while third technical step is second suction. **A.** Skin scarifications are small short superficial skin incisions (1-2 mm in length and 0.1 mm in depth). **B.** Skin scarifications open skin barrier for the excretion of collected fluids inside the skin uplifting (skin dome). Skin scarifications help transmission of second suction pressure to the inside of the skin uplifting (skin dome) to excrete collected fluids. Skin scarifications help transmission of second suction pressure to the inside of the skin uplifting around skin capillaries for more percutaneous capillary blood filtration. Skin scarifications cause a minor bleeding and loss of blood cells through the induced superficial skin incisions (scarifications) (Sayed, et al., 2014).



**FIGURE 11:** Excretory function of Wet Cupping. **A.** excretion of a bloody fluid mixture through the skin scarification sites inside the sucking cups. **B.** The excreted bloody fluid through skin scarification sites coagulates rapidly inside the cups (Sayed, et al., 2014).



*FIGURE 12: Post-Cupping sign: a transient skin uplifting surrounded by a circular depression occurs after Cupping therapy and disappears without any sequelae within few days. Post-Cupping sign is to be differentiated from other skin signs e.g. in purpura (Sayed, et al., 2014).*



*FIGURE 13: Restoration of homeostasis after complete or partial significant excretion of disease-causing substances. New interstitial fluid is formed by filtration at the arterial ends of capillaries and is reabsorbed at the venous capillary end (Sayed, et al., 2014).*

## **2. SAFE WORKING PRACTICE/PROCEDURE**

### **2.1. SAFETY ASPECTS OF CUPPING (Latib, 2013)**

- A. The procedure must be fully explained to the patient, and informed consent obtained
- B. A full medical history and physical examination should be completed prior to Cupping to ensure that there are no contraindications for the procedure. It is important to note blood pressure, pulse, the patient's current medication (blood thinners such as Warfarin etc), or the presence of any blood disorders and other contraindications. For Wet Cupping patients enquire on history of blood donation and rule out blood phobia.
- C. The practitioner must wear disposable latex gloves whilst performing all types of Cupping. For Wet Cupping, the practitioner should wear plastic disposable apron and a disposable mask.

- D. All contaminated materials must be correctly disposed of (medical waste and sharps bins)
- E. Disposable Cupping sets are preferred for Dry Cupping, re-usable cups can be used (glass or plastic) if properly sterilised by sterilising agents or autoclave.
- F. Disposable Cupping sets are preferred for Wet Cupping, although glass cups can be used on condition that glass cups can be autoclaved.
- G. Sterile surgical blades used for Wet Cupping must be for single use and disposable
- H. Any incisions must be superficial, involving the epidermis only.
- I. The patient should be monitored for signs of pain or discomfort and the procedure stopped if discomfort is experienced.

## 2.2. SPECIAL PRECAUTIONS AND CONTRAINDICATIONS

Although the Cupping procedure is usually trouble and consequence free, adverse reactions can result from the patient's psychological response. For example, the sight of blood and the patient's apprehension can precipitate an undesired reaction. The practitioner must also check that the patient is fit for the Cupping procedure and must know how to adapt the procedure based on the constitution of the patient and their current health state. This should be ruled out by a thorough patient medical history.

Should any of the following symptoms appear while the Cupping procedure is being performed – paleness, nausea, dizziness, vomiting, and perspiration – the procedure should be discontinued and the patient encouraged having a rest, lying down, and taking a drink of natural or glucosed water.

Cupping should be practiced with caution in children, seriously ill patients, those with abnormally low blood pressure, and the elderly/frail (Sayed, et al., 2014). In these cases, Cupping can be done with discretion, and under special and defined circumstances (Nimrouzi, et al., 2014).

- A. Dry Cupping is not recommended for children below the age of 2 years.
- B. Wet Cupping should be avoided in children below the age of 6 years.
- C. Wet Cupping should not be carried out in patients above 60 years of age, although Dry Cupping can be used in the elderly.
- D. Precautions should be observed for menstruating women.

- E. Special precaution should be observed in pregnant women, especially Wet Cupping as it can result in miscarriages.
- F. Cupping should not be applied to the abdominal and sacral regions of the pregnant women.
- G. It is not advisable to apply Cupping to the patient with skin ulcers, oedema, or on an area overlying large blood vessels or even varicose veins.
- H. In addition, patients with high fever or who suffer from convulsions should not be cupped.
- I. Patients on medication, allopathic or herbal, which has anticoagulant or antiplatelet effects exhibit excessive blood loss after minor cuts, and is contraindicated in Wet Cupping.
- J. Wet Cupping should never be applied to the female breast, unless absolutely necessary.
- K. Care should be taken with Wet Cupping of anaemic patients, or those susceptible to spontaneous bleeding.
- L. Haemophiliacs tend to bleed for a much longer time, even a minor incision performed by a Wet Cupping incision can result in blood lost lasting days or weeks.
- M. Cupping should not be done on patients who are visibly fatigued (physically or mentally), very hungry/thirsty, distraught, or who have overindulged in alcohol.
- N. Due consideration is needed for immunocompromised patients.
- O. Wet Cupping should be avoided or precaution taken in patients who have wound healing disorders such as individuals who have a history of developing keloids and hypertrophic scarring, and metabolic disorders such as uncontrolled diabetes.

**2.3. HAZARDS THAT MAY CAUSE HARM TO THE PRACTITIONER** (Sohn, et al., 2008; Yun, et al., 2011; Kim, et al., 2012)

**2.3.1 DRY CUPPING**

- A. Risk of contracting contagious disease from patients which could be transferred via droplet infection, airborne or direct contact with bodily fluids e.g. Hepatitis, varicella, herpes, TB, fungal skin conditions.

- B. Repetitive pumping with the vacuum pump long term can result in inflammatory conditions of the wrist joint, forearm muscles and hands as well as nerve entrapment e.g. Carpal tunnel syndrome.
- C. Long standing and bending/leaning position may result in lower back pain and strain.

### **2.3.2 WET CUPPING**

- A. Same as those for Dry Cupping.
- B. Using sharp blades puts the practitioner at risk of injury by accidental lacerations that may also result in transfer of bodily fluids from patient to practitioner. This puts the practitioner at risk for disease transferred by blood e.g. HIV, Hepatitis etc.

### **2.3.3 FIRE CUPPING**

- A. Risk for burn injuries or asphyxiation.
- B. Alcohol/ smoke inhalation may cause headaches, nausea, dizziness or asphyxiation.

## **2.4 COMMON SIGNS AND SYMPTOMS OF A MUSCULOSKELETAL INJURY IF THE HAZARDS OF THE JOB TASK COULD LEAD TO THIS TYPE OF INJURY (Sohn, et al., 2008; Yun, et al., 2011; Kim, et al., 2012)**

- A. For Dry, Wet and Fire Cupping (any apparatus which uses Fire as a means of producing a suction): inflammation of the wrists, hands and forearm or lower back due to standing or bending could present with pain in the affected area, swelling, muscular hypertrophy, stiffness or limited range of motion, erythema or redness.
- B. If there is nerve entrapment the practitioner may also note neurological symptoms of numbness and tingling in the hands and fingers, decreased muscle strength and grip, loss of muscle tone and muscular atrophy.

## **2.5 EQUIPMENT / DEVICES, PERSONAL PROTECTIVE EQUIPMENT (PPE), OR OTHER SAFETY CONSIDERATIONS NECESSARY TO PERFORM THE TASK SAFELY (Latib, 2013).**

### **2.5.1 ALL CUPPING**



- A. Protective clothing: white coat or doctor scrubs uniform. Long pants or skirt.
- B. Disposable gloves.
- C. Vacuum pump.
- D. Closed shoes.
- E. Protective mask if contagious disease transferred by airborne or droplet infection is suspected.

#### **2.5.2 WET CUPPING, ADDITIONALLY**

- A. Protective clear safety glasses.
- B. Scalpel blade and holder.
- C. Plastic disposable apron.
- D. Protective shoe covering.
- E. Protective mask.
- F. Stainless steel basin, linen savers, cotton wool and paper towels to collect extracted blood/tissue fluid products.
- G. Disinfectant solution.
- H. Biomedical waste disposal bin.
- I. Sharps disposable bin.

#### **2.5.3 FIRE CUPPING, ADDITIONAL**

- A. caution should be taken not to drop the cups as they can break.
- B. Container with a lid should be used for storing of alcohol.
- C. Container of water to be kept close by to relinquish the fire.
- D. Fire retardant clothing or uniform.
- E. Fire extinguisher to be kept in the room.
- F. The use of cotton sheets and clothing or uniform and avoiding the use of synthetic materials which are highly flammable on and around the practitioner.
- G. Avoid highly flammable solutions in close proximity to fire.
- H. Safe and separate storage of ethanol and gas lighters or matches.

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#### INTERNET SOURCES

fig. 2

<https://www.amazon.co.uk/Chinese-Professional-Cupping-Aolvo-Enlargement/dp/B078N2PNJW>

fig 3

<https://www.amazon.com/Traditional-Bamboo-Chinese-Cupping-Therapy/dp/B00C2VRXR8>

fig 4

<https://www.bannertherapy.com/product/glass-Fire-Cupping-cups/>

fig 5

<https://www.amazon.com/Bestrice-Rubber-Chinese-Cupping-Therapy/dp/B00G348V1C>

fig 6

<https://www.importitall.co.za/Silicone-CuppingJungleArrow-Set-of-4-Cupping-Therapy-for-Cellulite-Body-and-Face-NeckBack-Massage-Suction-Cup--ap-B074CHYQDF.html>