

A Comprehensive Review of Cupping Therapy, Hijama Through the Ages

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Abstract: Hijama, or cupping therapy, has traversed an intricate path from ancient therapeutic traditions to its modern adaptations. Its historical significance spans across multiple civilizations, being deeply rooted in Islamic prophetic medicine and other cultural practices. A plethora of techniques, such as wet, dry, and moving cupping, emphasize its adaptability to varied therapeutic needs. Scientific evaluations hint at its potential efficacy in areas like pain mitigation, blood circulation enhancement, and, though more rigorous research is advocated for universal validation. Contemporary global health trends, technological exposures, and socio-religious factors shape its present-day perception, with notable inclinations in sports medicine and endorsements by public figures. However, concerns about safety, possible side effects, and the pressing demand for standardized practitioner training underscore the need for its judicious application. As Hijama carves its niche in the modern health paradigm, it simultaneously evokes a balance of enthusiasm, skepticism, and curiosity. This narrative encapsulates the evolution of a practice deeply anchored in tradition, highlighting the importance of scientific scrutiny, cultural appreciation, and safety protocols in its holistic reception and implementation.

Keywords: Hijama, Cupping Therapy, Detoxification, Regimental Therapy

1. Introduction

Hijama, known globally as cupping therapy, is an ancient therapeutic procedure that is deeply rooted in diverse civilizations, emphasizing the body's innate healing mechanisms. Originating from the Arabic verb 'hajm', which means 'sucking' [1], this technique employs cups typically made of materials ranging from glass and bamboo in earlier times to modern-day silicone or plastic, which are positioned on specific body points and create a vacuum, elevating the skin and underlying tissues [2]. Historical records reveal the widespread practice of cupping, evident in Islamic medical traditions due to its reference in Hadith where Prophet Muhammad acknowledged the therapeutic potency of hijama [3], while its mentions in ancient Egyptian medical papyri [4] and the seminal Chinese medical text, 'Huangdi Neijing' [5], further underscore its global significance. The foundational philosophy behind hijama revolves around the idea of the body accumulating toxins and harmful substances; the suction action of hijama is believed to draw out these harmful entities, bolstering natural healing [6]. This aligns with the principles from Traditional Chinese Medicine that emphasize enhanced local blood circulation, modulation of 'Qi' flow, and stimulation of internal organs [7,8]. Furthermore, the targeting of specific points during hijama also correlates with the acupuncture points known in traditional medicine, indicating a connection to the concepts of energy channels or meridians [9]. In a contemporary medical landscape dominated by advanced treatments, the persistent belief and practice of hijama across a significant global populace highlight its enduring therapeutic appeal, especially in arenas like pain management and holistic well-being, although comprehensive scientific substantiation is still in progress [10].

2. Historical Background

Hijama, or cupping therapy, boasts an illustrious history that spans diverse civilizations, signifying its universal appeal and therapeutic credibility across epochs. Earliest references trace back to ancient Egyptian papyri, notably the Ebers Papyrus, which mentioned cupping as a remedy for various ailments around 1550 B.C. [11]. Beyond Egypt, the Chinese have a rich tapestry of cupping practices woven into their medical traditions, documented in

seminal works like the 'Huangdi Neijing' (Yellow Emperor's Classic of Internal Medicine) dated around 2nd century B.C.[12]. Furthermore, the Greeks, with writings from the influential physician Hippocrates, also advocated for cupping as a treatment modality around the 5th century B.C.[13]. Islamic medical traditions have particularly emphasized hijama's value, with multiple Hadiths (sayings of the Prophet Muhammad) endorsing its practice for its perceived health benefits, with notable mentions in Sahih al-Bukhari and Sahih Muslim collections[14,15]. In medieval Europe, cupping experienced a surge in popularity, especially during plague times, as a method believed to extract the 'bad humors'[16]. By the 18th and 19th centuries, cupping kits became ubiquitous in households and were employed as a commonplace remedy for diverse maladies[17]. However, with the advent of modern medicine in the 20th century, cupping's prominence waned in the West, although it persisted robustly in traditional medicine circuits of Asia and the Middle East[18]. Contemporary resurgence in interest, especially after visibility in sports and popular culture, has catalyzed a reevaluation of hijama in the context of both traditional practices and scientific scrutiny[19,20].

3. Techniques of Hijama

The practice of Hijama, while rooted in ancient methodologies, has evolved over time, giving birth to an array of techniques adapted to suit varied therapeutic needs. The most fundamental division is between "dry" and "wet" cupping. Dry cupping solely involves the application of suction on the skin without any incisions, creating local hyperemia, believed to promote healing by drawing toxins to the surface [21]. Wet cupping, or "Hijama bila shart", adds an additional step where prior to applying the cup, small incisions are made on the skin to let out 'bad' blood, thus combining benefits of suction and controlled bloodletting [22]. Modern adaptations have also led to the introduction of "moving cupping," where a lubricant is applied to the skin, and the cup, once suctioned, is moved to massage an area, commonly used in musculoskeletal disorders [23]. Furthermore, the materials and methods for creating suction have evolved. While fire was traditionally used to create a vacuum inside glass or bamboo cups[24], nowadays, silicone, plastic, and rubber cups with mechanical pumps are prevalent [25]. The selection of cupping points, akin to acupuncture sites, has been detailed in traditional medical texts, and while many remain consistent, novel points are introduced based on contemporary clinical findings [26]. Magnetic cupping, a newer variant, integrates the principles of magnet therapy with traditional cupping, positing that the combined effect augments therapeutic efficacy, although empirical validations are in the nascent stage [27]. The duration, frequency, and number of cups used in a session also vary, tailored to the ailment, patient constitution, and practitioner preference [28]. As Hijama garners global attention, standardization initiatives and research into the optimization of these techniques are gaining momentum, emphasizing the importance of evidence-based practice in this domain[29,30]. This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusions that can be drawn.

4. Therapeutic Benefits and Clinical Efficacy

Hijama, over its long history, has been attributed to myriad therapeutic benefits, underpinned by both traditional beliefs and emerging scientific insights. Pain management stands as a cornerstone in the application of Hijama, particularly in addressing musculoskeletal complaints like chronic neck and back pain, where cupping has been observed to improve pain thresholds and alleviate muscular tension[31,32]. In the realm of neurology, migraine and tension-type headache sufferers have reportedly found relief through wet cupping sessions, positing its role in neuro-modulatory functions[33,34]. Furthermore, cupping's potential anti-inflammatory effects have gained attention, especially in conditions like rheumatoid arthritis and acne[35]. The metabolic domain also carries promising insights; recent studies have hinted at the role of Hijama in improving markers in Type 2 diabetes patients and enhancing antioxidant profiles[36,37]. Additionally, the technique has been proposed as an adjunct in mental health, aiding in alleviating symptoms of anxiety and depression through its purported effects on circulatory and endocrine systems[38,39]. However, while anecdotal evidence and small-scale studies abound, rigorous, large-scale randomized controlled trials remain limited. The medical community underscores the imperative need for such robust research designs to delineate the true efficacy and application scope of Hijama in the contemporary healthcare landscape[40].

5. Scientific Evaluations of Hijama

The scientific community's approach to Hijama, an age-old therapeutic modality, showcases the intricacies and diverse dimensions of understanding a traditionally grounded technique. For a therapy deeply rooted in prophetic and traditional Chinese medicine, contemporary scientific investigations into Hijama have ranged from physiological, biochemical, and immunological to neuromodulatory, encompassing a plethora of medical domains[41].

Early explorations, especially through the realms of advanced imaging, revealed that Hijama significantly influences local blood circulation. Using Doppler ultrasonography, researchers found an increase in the subcutaneous blood flow rate post-cupping, with the magnitude of change dependent on the duration and method of cupping[42]. Furthermore, thermographic imaging has been instrumental in observing that the skin's peripheral surface temperature rises post-Hijama, hinting at a possible vasodilation effect and enhanced blood perfusion[43].

Biochemical evaluations opened a new avenue of understanding. A consistent line of evidence underscores the alteration in serum components post-Hijama. Notably, one study indicated an increase in antioxidant enzymes, while another identified a decrease in heavy metal concentrations in the blood post-therapy, thus hinting at Hijama's detoxifying potential[44,45]. This detoxification notion aligns well with traditional beliefs surrounding the expulsion of 'harmful' blood. Inflammatory mediators, too, were explored. Investigations into serum cytokines post-Hijama pointed towards modulations that could provide a therapeutic benefit in conditions of systemic inflammation or localized pain[46].

However, while the biochemical alterations hold promise, it is the understanding of the pain-modulatory effects of Hijama that garnered significant attention. Chronic pain conditions, ranging from tension headaches to lower back pain, have been the subject of multiple studies. Some researchers advocate that the mechanical stimulus of Hijama might influence nociceptive pathways. This influence has been postulated to be through endogenous opioid release or through disruption of myofascial trigger points, consequently aiding in pain alleviation[47]. Advanced brain imaging techniques, such as functional MRI, revealed changes in brain regions associated with pain perception post-Hijama, suggesting a potential neuromodulatory role[48].

The immune system's modulation has been another focal point. Some trials pointed towards alterations in white blood cell counts and other immune parameters post-Hijama, indicating a potential immunomodulatory effect[49]. However, the implications of such findings remain unclear, and more robust evaluations are necessitated to deduce the clinical significance. Beyond these domains, investigations also ventured into the genetic and epigenetic modulations potentially mediated by Hijama. Preliminary findings hint at changes in gene expression post-cupping, especially genes associated with inflammation and oxidative stress[50]. While this sphere of research remains in its infancy, it brings forth exciting possibilities of understanding the therapeutic mechanisms of Hijama on a molecular level.

Systematic reviews and meta-analyses, the pillars of evidence-based medicine, have been crucial in evaluating the plethora of individual studies on Hijama. These reviews provided an aggregated insight, with some highlighting potential benefits in conditions like musculoskeletal pain and hypertension, while others underline the inconsistency in methodologies and the overall low quality of evidence[51,52]. This underpins a significant concern—the heterogeneity in Hijama practice and research, which can significantly impact its scientific validity and clinical application.

Efforts are now underway to standardize Hijama practice and its scientific evaluation. Some researchers have worked on developing biomechanical models to understand the physics behind the suction generated during cupping, providing insights that might help in optimizing therapeutic outcomes[53]. Similarly, endeavors to create standardized protocols, considering cup size, suction pressure, duration, and technique, are being emphasized to ensure consistent research methodologies and improved clinical efficacy[54]. scientific evaluations have broadened our understanding of Hijama, many questions remain unanswered. The dynamic interplay between tradition and science, while enriching, also challenges researchers to find a balance. A harmonized approach, integrating traditional knowledge with rigorous scientific methodologies, is imperative to delineate the true potential, safety, and applicability of Hijama in modern medicine[55].

6. Safety and Side Effects of Hijama

The therapeutic implications of any medical modality are not solely confined to its efficacy but extend to its safety and potential side effects. Hijama, as a physical intervention, naturally raises concerns over its safety profile, and these concerns have been explored and addressed by a multitude of studies spanning various regions and populations[56].

As a primary concern, the possibility of infection stands out, considering the invasive nature of wet cupping, where incisions are made to draw out blood. Sterility and hygiene during the procedure are paramount. A notable study spanning multiple Hijama clinics revealed that when practiced under unsterilized conditions, there was a significant risk of transmitting blood-borne pathogens, including but not limited to Hepatitis B, Hepatitis C, and even HIV [57]. Hence, ensuring the use of sterilized equipment and practicing under hygienic conditions is not merely a recommendation but a necessity. Another common side effect observed post-Hijama is the formation

of ecchymosis or bruising at the site of cupping. These marks are typically painless and tend to fade over a period of days to weeks. While they might raise cosmetic concerns, they have been generally accepted as a harmless side effect, and often, as an indicator of successful 'release' in traditional circles [58]. However, in some cases, especially in individuals with certain clotting disorders or those on anticoagulants, these bruises can be more pronounced and long-lasting. This raises the necessity of thorough patient history taking before proceeding with Hijama [59]. Hematoma formation, or the accumulation of blood within tissue post-Hijama, has been documented but remains rare. This effect is mostly observed in aggressive cupping practices or in instances where the practitioner is inexperienced. These hematomas can sometimes be painful and may need medical attention if they don't resolve on their own [60].

Moreover, burns are another safety concern, especially in fire cupping, where a flame is used to create a vacuum within the cup. Instances of burns are generally attributed to inexperienced practitioners or the improper handling of equipment. This emphasizes the need for training and certification in Hijama practices to avoid such complications [61]. Sensations of dizziness or light-headedness post-cupping have been documented, especially in individuals undergoing the procedure for the first time. While these sensations tend to be transient, they raise the importance of having patients rest and recover post-procedure, especially before they take on activities like driving or operating heavy machinery [62]. Pain, albeit rare, has been noted by some patients, especially during the incision for wet cupping. The severity of this pain is subjective, ranging from a mere annoyance to quite pronounced in some cases. Appropriate technique, the use of sharp, fine blades, and ensuring a calm environment can minimize this side effect [63].

Despite the side effects noted above, a significant volume of research suggests that when performed by trained practitioners under appropriate conditions, Hijama remains relatively safe with minimal side effects. Nevertheless, rare case reports have documented more severe side effects. For instance, an instance of severe anemia post-Hijama has been reported, especially in practices where large volumes of blood were drawn [64]. Allergic reactions to the materials used in Hijama, though extremely rare, have been cited. Such instances highlight the importance of using hypoallergenic materials and ensuring that practitioners are equipped to handle allergic reactions, should they arise [65]. The more critical angle to this discourse is the potential for a placebo effect. Given the traditional and spiritual underpinnings of Hijama, the mere belief in its efficacy can lead to perceived improvements in health, which are non-specific to the cupping process itself. This notion has been explored in various studies, with some suggesting that the psychological benefits of Hijama might be as pronounced, if not more, than the physical benefits [66]. While Hijama holds therapeutic promise, it's imperative for practitioners to ensure that it does not replace conventional medical care where needed. Hijama should be seen as complementary rather than alternative in most cases, ensuring patients receive comprehensive care [67].

Hijama, like any other therapeutic modality, carries both risks and benefits. The emphasis on thorough training, sterile practice, patient education, and research-backed methodologies can enhance its safety profile and make it a valuable addition to the therapeutic armamentarium.

7. Contemporary Uses and Reception of Hijama

In today's global health landscape, the interplay between traditional and modern medicine often brings forth intriguing contrasts and complementary approaches. Hijama, an age-old therapeutic technique rooted in Islamic prophetic medicine, has witnessed a renaissance in its use and recognition within both traditional and modern medical communities. This surge in interest is not merely coincidental but finds grounding in various social, medical, and cultural vectors [68].

Firstly, there has been an evident trend worldwide to reconnect with indigenous healing methods, with people delving into their cultural and historical roots for health solutions that are perceived as more organic, holistic, and devoid of synthetic intervention [69]. This can be seen in the global movement towards herbal medicines, acupuncture, yoga, and the like. Hijama, in this light, becomes not just a method of treatment but also a reclamation of ancestral knowledge. Medical tourism has been a strong propellant for the contemporary reception of Hijama. Many countries in the Middle East and North Africa (MENA) region, where Hijama is indigenous, have seen a spike in tourists seeking this treatment as a part of their health and wellness itinerary. As these countries develop protocols and infrastructure for safe and standardized Hijama practice, the international clientele grows [70]. The internet age and the rapid dissemination of information have played pivotal roles in demystifying Hijama for the global audience. Videos of the procedure, testimonials, and endorsements by celebrities and influencers have opened it up to new demographic segments who might not have been traditionally exposed to it [71].

The realms of sports and athletics have brought to light another facet of Hijama's contemporary relevance. High-performance athletes, constantly pushing their physical boundaries, often seek recovery and therapeutic

modalities that offer prompt relief from muscular strain, injuries, and fatigue. Some renowned athletes have vouched for the benefits of Hijama in accelerating recovery, improving blood circulation, and alleviating pain, thereby endorsing its efficacy in sports medicine [72]. However, the journey of Hijama's modern-day acceptance hasn't been without skepticism and critique. The scientific community demands rigorous evidence-based validations for any therapeutic modality to be mainstreamed. While there are numerous anecdotal affirmations and historical accounts vouching for Hijama, the number of rigorous clinical trials and meta-analyses in peer-reviewed journals is relatively scanty [73]. This has made certain segments of the medical fraternity reserved in outrightly endorsing Hijama as a standard therapeutic technique.

Moreover, the versatility of Hijama has been both a boon and a bane. While its proponents cite a myriad of conditions it can address, ranging from musculoskeletal pain to migraines, detoxification, and even certain chronic ailments, skeptics argue that such a wide range of applications sounds too good to be true. They call for more targeted research to ascertain specific conditions where Hijama can be most beneficial [74]. The socio-religious undertones associated with Hijama also shape its contemporary reception. For believers, the fact that Hijama is endorsed in Islamic scriptures adds a layer of spiritual sanctity and trust to the procedure. This often leads to a conflation of faith-based healing with empirical therapeutic outcomes, making the discourse around Hijama multi-layered and nuanced [75].

Training, or the lack thereof, has been a critical point of contention. Given that Hijama involves skin incisions in its wet cupping variant, the need for trained practitioners is non-negotiable. Several instances of complications arising from untrained practitioners have been documented, emphasizing the imperative for standardized training and certification programs [76]. The contemporary landscape of Hijama is a dynamic one, shaped by global trends, medical scrutiny, cultural affiliations, and technological advancements. As it stands, while Hijama has witnessed a resurgence in its use and has found many takers in various parts of the world, the journey to its unequivocal acceptance in the mainstream medical paradigm demands more concerted research, standardized practices, and informed discourse [77].

8. Conclusion

Throughout its extensive history, Hijama or cupping therapy has transcended from its traditional roots, marked predominantly by its religious and therapeutic significance, to find a place in the contemporary world marked by increased scientific scrutiny, diverse techniques, and a varied spectrum of applications. Historical documentation and literary references across various cultures emphasize its ancient lineage. The array of techniques, including dry, wet, and moving cupping, showcases the modality's evolution to suit different therapeutic needs. Scientific evaluations have shed light on its potential benefits in pain management, blood circulation, and detoxification, although further rigorous studies are needed to validate these claims universally. Concerns about its safety, side effects, and the urgent need for standardized practitioner training have been brought to the forefront. In the modern age, its multifaceted reception is shaped by global health trends, cultural reconnections, technological advancements, and socio-religious beliefs. The emergence of Hijama in sports medicine, its increased visibility due to endorsements, and the challenges posed by skeptics demanding evidence-based validations represent the dynamic landscape of Hijama today. This journey of Hijama from ancient manuscripts to exemplifies the broader narrative of traditional therapies seeking their rightful place in the global health domain. While Hijama continues to hold therapeutic promise and cultural resonance for many, its unequivocal acceptance in mainstream medical circles necessitates continued research, dialogue, and standardization to ensure its safe and effective practice for generations to come.

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