Research Article

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Journal of Hospital & Medical Management
ISSN 2471-9781

2016
Vol. 2 No. 1: 8

DOI: 10.4172/2471-9781.100013

Comparison Biochemistries of Obtained Blood Products between The Hijama and Phlebotomy Techniques of Traditional Islamic Remedy; Healthy Young Adults at Fasting State

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Citation: Again K, Montazer R, Namavary D. Comparison Biochemistries of Obtained Blood Products between The Hijama and Phlebotomy Techniques of Traditional Islamic Remedy; Healthy Young Adults at Fasting State. J Hosp Med Manage. 2016, 2:1.

Abstract

Background: The Hijama is the name of the traditional Islamic healing technique. It utilized over 1400 (Hejira A.H.) years. The method consists of cupping and scarification of the specific skin area of the body. It applied as a remedy for bloody and liverish disease. The both Hijama and phlebotomy techniques are ancient methods of removing blood from the body to attain remedy. The aim of the study was to compare biochemistries of blood products between the Hijama and the phlebotomy techniques among healthy young adults at fasting state.

Material and methods: Thirty one healthy young adult consecutively enrolled according to the self-reported health questionnaire. The Hijama method practiced via instruction of Islam. Blood products of Hijama and phlebotomy removed and measured matching to design protocol.

Results: The significant differences observed between triglyceride, cholesterol, uric acid, and urea concentrations in serum of Hijama with phlebotomy techniques ($P<0.05$).

Conclusion: Meaningfully differences detected between the content of blood product in Hijama and phlebotomy techniques. It may be due to the effects of the Hijama practice. Further investigations are required in order to clear underlying mechanism of the Hijama in the future years.

Keywords: Hijama; Bloodletting; Wet cupping; Phlebotomy; Blood Biochemistry

Received: August 05, 2016; **Accepted:** August 25, 2016; **Published:** August 29, 2016

Introduction

The objective of bloodletting (therapeutic bleeding) is a removing amount of blood volume from an open vein or artery(vascular access [1]) of the patients [2]. Bloodletting is the heritage of prehistoric methods of remedy and its history dates back more than two millennia [3]. The human seems to be a family with remedial properties of bloodletting in the ancient world [4]. Blood is a universal truth and bloodletting has been accepted as a concept of healing among different cultures such as; Chinese, Hindu, Arabs, and Greek medicine, [5]. It is believed that bloodletting effects on all ailments in human such as; cure number of illness,symptoms [6] and having roles in the prevention of diseases [7,8]. Let us imagine that bloodletting has been progressively modified through various applying methods and improving instruments among different cultures along the time such as; venesection (Fasd فصد=), wet cupping [9], leech therapy [10] and phlebotomy techniques [11]. The Hijama is the name of the practice in Traditional Islamic Healing Technique (TIHT). The name of Al- Hijama (الحجامة) is an Arabic and originated from the Hajm root (حجم). It means sucking [12]. The literature review indicated that Hijama is exchanged with wet cupping [13], -blood-letting cupping [14] and subset of the prophetic medicine (treatment based on the instruction of faith Mohammad PBUH) [15]. Hijama differs from wet cupping. Cupping therapy is the oldest method, and wet- cupping is one of the classes of cupping in Chinese Traditional Medicine. The previous method was recorded as a treatment tool in 200 years ago [16]. The Hijama technique included two components; cupping and scarification. It is applied to the limited sites of the body surface areas and performed at specific days of the lunar cycle and lunar months [17].

The Hijama is popular among Iranian public and well- known as the Hijamat. It has been performed most commonly in the spring season and annually. They have believed that it is Sunna (means what Prophet Mohammad's peace be upon him liked to do). Aside, it is effective in general health.

The Hijama method is rooted in the divine inspiration [18-20]. It is a method of healing and constructed in orders of Islam. Hijama confirmed evidence of the commentaries on the Quran. It recorded under the first sign from chapter 17th; children of Israel. It has been recommended by Islam as one of the gifts of God" Hadith: Lo, Mohammad (PBUH), to practice Hijama and order to perform your nation [21-23]. The Prophet Mohammed (PBUH) himself was cupping the Hijama and then Muslims do well to follow him. Nowaday, Hijama was applied as therapy, adjuvant treatment [24], and enhanced natural immunity [25]. The Avicenna is the father of modern medicine (980 - 1037), brought into effective action Hijama as an Interventional therapy [26]. The aim of the study was to compare biochemistries of blood products between the Hijama and the phlebotomy techniques among healthy young adults at fasting state.

Material and Method

The study was a cross-sectional. It conducted at the Shahid Beheshti University of Medical Sciences (SBUMS), Loqman Hakim general teaching hospital, Traditional Islamic Medical Center, Tehran-Iran. The focus population sequentially enrolled among participations from the healthy young population from Hijama clinic. The self-reported health questionnaire was administrated among healthy young adults aged between 20 to 30 years. Highlight Topic of the questionnaire consists of information of Multi-Attribute Health Status Classification System [27]. In additional, history of common diseases evaluated through diagnosed by physicians and the subjects' awareness.

The excluded criteria consisted of cardiovascular diseases, renal disorders, diabetes mellitus or miscellaneous endocrinopathy, current infection in preceding two months ago, tuberculosis, dyslipidemia, and usage medications.

The one physician checked up participants and performed a physical examination, chest x-ray, complete blood count, fasting blood sugar, liver function test, kidney function test and profile of dyslipidemia. The eight participations refused the study. Generally, thirty-one subjects followed the criteria of the study.

The study carried out in specific days of the lunar month based upon the Islamic recommendation (Hadith). The Hijama practice applied on 14th and 15th days of the lunar month of jamady al-thany in the morning. All subjects were overnight fasting. The participations seated on a chair. The vacuum glass cup fitted to the surface of the back between scapula areas, over T3-T4 thoracic vertebrae. The skin cleaned with the alcohol solution prior procedure. The cupping puts on tighter on cleaning area. The suction connected to the cup quickly. It maintained until the skin pulled up within the cup. Applied pressure monitored with the height of skin dome elevation one centimeter into the cup or the time of suctioning less than two minutes. Subsequently, the suction stopped and cup gently removed. The cleaned skin sacrificed seven parallel longitude lines with the sterile blade along the vertebral column, 3-4 centimeters. Once again, cupping administrated. The blood oozed due to suction pressure with duration less than 3 minutes. Blood product removed and collected for laboratory examinations.

The phlebotomy performed at the same time without using rubber bound. Both samples were transferred to the unique laboratory. The blood biochemistry measured with an autoanalyzer (Technicon RA 1000).

All subjects entered the study fully aware of research methods with a personal agreement.

The cutoff point values in our study were as follows. Triglyceride 200-400 mg/dl, cholesterol 200-240 mg/dl, urea 17-43 mg/dl, creatinine 0.7-s1.4 mg/dl, glucose 70-115 mg/dl, sodium 135-145 mEq/dl and potassium 3.5-4.5 mEq/dl arranged at standard ranges. Uric acid sets at two averages; male sex 3.6-8.4 and female 2.3 -6.1 mg/dl. Application kits included Padtan Elm, Iran Co Ltd. Data analyzed by SPSS programming version 20. The normality was carried out with Kolmogorov-Smirnov P=0.2. The mean of variables compared with paired-sample T test. The significant level was set through of the study P<0.05.

Results

Thirty-one healthy subjects enrolled randomly. The Mean± standard deviation (SD) age recorded 24.93±2.74 years. The age ranged from 20- 30 years. The sex included male, 84% (26) and female, 16% (5), respectively.

Table 1 shows results of blood biochemistries between Hijama and phlebotomy techniques. Significant differences observed between serum values of triglyceride, cholesterol, urea, and uric acid concentrations in the blood produced of Hijama with phlebotomy techniques (p<0.05).

Discussion

Noticeable differences found between triglyceride, cholesterol, urea, and uric acid in serum of Hijama with phlebotomy techniques. Our results are an agreement with the fact that the blood as a material of the study was similar between both techniques. It seems that current concept may be due to the

Table 1: Resultants of blood biochemistries between the Hijama and the phlebotomy techniques.

Features of Sample population	Hijama	Phlebotomy	P value
Number of subjects	31	31	
Triglyceride	226.8 ± 103.16	154.35 ± 78.28	<0.001
Cholesterol	294.70 ± 106.75	200.87 ± 69.86	<0.001
Uric acid	7.76 ± 2.68	6.68 ± 2.18	<0.04
Urea	34.77 ± 10.92	31.67 ± 8.68	<0.02
Creatinine	0.92 ± 0.32	0.88 ± 0.14	>0.05
Glucose	86.80 ± 33.02	84.16 ± 15.66	>0.68
Potassium	4.40 ± 0.5	4.22 ± 0.34	>0.15
Sodium	137.77 ± 1.76	138.12 ± 2.39	>0.48

effects of the Hijama technique. The following evidence may be suggested the conception of healing condition that the Hijama practice supports it.

WHO definition of Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. However, complementary or alternative medicine (CAM) refer to a broad set of healthcare practices that are not part of that country's own tradition and are not integrated into the dominant health care system [28]. The Hijama compatible with the earlier definition; Traditional medicine.

The eighty percent of people in developing world benefit from traditional medicine[29] as in chronic diseases and from Hijama in 35.7% [30]. The Hijama is the name of unique traditional Islamic healing method. The healing concept depends on the removing bad or unclean blood(morbid substances) from the body through some techniques [31]. It addressed for the first-time since 10 Hejira years (A.H) by the Prophet of Islam. The Hijama was a known practice among Muslims. It applied as a remedy for the ancient ailments, suchlike liverish and blood diseases. It was practiced by the famous medical traditionalist physicians as Avicenna, Al-Jurjani, and Al-races in the past [32-34]. The antiqued therapeutic is known as the immemorial art and include enema, cupping, leech and counter-irritation [35]. Ayurvedic medicine is an ancient healing technique from Indian and founded on the control of the humoral system up to 2500 BC. It used bloodletting as a protocol of blood born disease via Leech-therapy [36]. The concept of human health has been defined according to the knowledge of ancient through control of humours (homer's medica). The humours are a complex concept and originated from the elements. The four essential elements of the life include Air, Water, Fire, and Earth. Each of them has four qualities Air= hot, wet, Water= cold, wet, Fire=hot, dry and Earth=cold, dry. They have organized four senses of humour and temperaments that linked to multiple organs. These consist of Blood; Sanguine with Heart, Phlegm; Phlegmatic with Brain, Yellow bile; choleric with liver and Black yellow; Melancholic with Spleen [37]. The humours imbalance or misplacement leads to the sickness [38]. One of the ways of developing a balance between different senses of humour is the elimination procedure [39]. The hot and wet upset presented clinically as blood humor disorders. Bloodletting eliminated superfluous humour from the body. It is accepted as one of the universal practice methods of remedy in the bloody illness [40].

Hijama consists of two components cupping and scarification, respectively. Cup instrument has dual functions in Hijama process. It used as a vacuum and collection device of removing blood. A cup made an animal horn with a hole in the pointed end in the past. It changed to a new design with a bell-shaped glass or bronze. Cupping process motivates hyperemia and congestion of superficial skin vessels. However, it may be stimulated a few skin reflexes on the Chinese meridian roots. The mechanism of Hijama has not been clearly understood as yet [41]. According to the recent Tibah theory, ultrastructure of the skin (capillary) permits the skin act as a filter for removing and cleaning the blood and interstitial fluid from the causative pathological substances(CPS) [42]. The another mechanism is recently suggested that the removing oxidant by Hijama and declining the level oxidative stress [43].

There is the difference between Hijama and wet- cupping. Conforming to the database searching, wet- cupping technique is one of the types cupping technique[1] and was recorded in 200 years ago [44]. However, Hijama is older than it. The target sites of Hijama are special areas of the body surfaces. The most common site of Hijama located at the back and between scapula, back of the neck, the vertex of the head, lumbosacral region, and posterior aspect of the calf [45-49]. In addition, command of the performance Hijama and effectiveness in the number of illness are established in the specific lunar days and lunar months, perfectly exclusive. The earlier concept may support the healing effect of astrological events on the human body. A recent concept has not seen in wet- cupping alone. Aside, the practice guideline of Hijama has been originated by the Messenger. It founded with the Islamic texts [49-53]. The practice of Hijama has been advised for the protection of the health and therapy of the bloody humour disorders such as liverish and blood diseases [54,55].

There are association therapeutic points between Hijama with cupping and bloodletting. The Persian cupping therapy was used in the therapy of 1001 types illness [56]. Cupping therapy has various types as conditions; wet cupping, retained cupping, moving cupping, flash cupping, medicinal cupping, needle cupping and combined cupping 43. Cupping therapy mechanism has not been clearly understood. The suggested and known mechanism included that reducing inflammation, skin stiffness and peripheral, local substance P (44), decreased natural Killer cell [57].

All popular techniques of bloodletting used as management or treatment in different diseases. The cupping technique has been applied in the treatment of chronic pain [58] musculoskeletal pain, carpal tunnel syndrome, acne disease. The treatment of Hijama and wet cupping reported in a tension and migrant headache, low back pain, hypertension, thalassemia (Iron overload) and effective in the profile of dyslipidemia. A recent report indicated that the immunological, biochemistries and hematological blood products of the Hijama had significant differences with similar blood samples of the vein. It is an improvement with our resultants. Current concepts may be implicated about the effectiveness of Hijama. The different hypothesis may be advised that Hijama technique and anatomy of skin areas are both efficient on the outcome of the study. Pressure settings and scarification of the skin are both essential in the style. They can be influenced by the quality of blood biochemistries. We know that pressure effect is applied by a cup, should be had generalized and equally affected in the covered area under cupping space. Whereas, the outcome of the study indicated that there was a selection of the quality of blood products. However, cupping may be influenced by the lymphatic content and structure vessels, wall. It can

induce hyperemia condition that conducts considerable of blood flow to the superficial. In addition, magnitude levels of pressure or applying time may be originated on the value of current distinctions of blood products. The designed study attempted to keep the effectiveness recent factors at limited value and prevented interchange variability through uniform applied pressure. In conclusion, there were suggestive differences between triglyceride, cholesterol, urea, and uric acid in serum of the Hijama with phlebotomy techniques. Planned studies should be required to determine the basic mechanism.

Acknowledgement

The author thanks for supporting our study by the division of the Traditional Islamic center of folk medicine.

References

1 Pelczar ME (1996) Vascular access: an historical review. Asepsis 18: 9-13.

2 DePalma RG, Hayes VW, Zacharski LR (2007) Bloodletting: past and present. J Am Coll Surg 205: 132-144.

3 Kerridge IH, Lowe M (1995) Bloodletting: the story of a therapeutic technique. Med J Aust 163: 631-633.

4 Hart GD (2001) Descriptions of blood and blood disorders before the advent of laboratory studies. Br J Haematol 115: 719-728.

5 Akhtar J, Siddiqui MK (2008) Utility of cupping therapy Hijamat in unani medicine. Indian journal of traditional knowledge 7: 572-574.

6 http://en.wikipedia.org/wiki/Bloodletting.

7 Papavramidou N, Thomaidis V, Fiska A (2011) The ancient surgical bloodletting method of arteriotomy. J Vasc Surg 54: 1842-1844.

8 Robinson WD (1917) Blood-Letting. Trans Am Climatol Clin Assoc 33: 142-152.

9 Kaiser H (2011) Bloodletting and rheumatism: a retrospective view. Z Rheumatol 70: 255-262.

10 Turk JL, Allen E (1983) Bleeding and cupping. Ann R Coll Surg Engl 65: 128-131.

11 Morabia A (2006) Pierre-Charles-Alexandre Louis and the evaluation of bloodletting. J R Soc Med 99: 158-160.

12 Parapia LA (2008) History of bloodletting by phlebotomy. Br J Haematol 143: 490-495.

13 Malouf L.Al-Monjed (1992) Dar El-Machreq sarl publication.Beirot-Lebanon.

14 https://en.wikipedia.org/wiki/Hijama.

15 Kim TH, Kim KH, Kang JW, Lee MS (2012) Does wet-cupping (blood-letting cupping) cause iron deficiency anemia? Comments about "a prospective evaluation of adult men with iron-deficiency anemia in Korea" published in Internal Medicine. J Acupunct Meridian Stud 5: 136-137.

16 Sayed SME, Baghdadi H, Abou-Taleb A, Mahmoud HS, Maria RA, et al. (2014) Al-hijamah and oral honey for treating thalassemia, conditions of iron overload, and hyperferremia: toward improving the therapeutic outcomes. J Blood Med 5: 219-237.

17 Huijuan C, Han M, Xun L, Shangjuan D, Shang Y, et al. (2010) Clinical research evidence of cupping therapy in China: a systematic literature review. BMC Complement Altern Med 10: 70-75.

18 EI Sayed SM, Mahmoud HS, MMH (2013) Nabo.Methods of Wet Cupping Therapy (Al-Hijamah): In Light of Modern Medicine and Prophetic Medicine. Altern Integ Med 2: 1-16.

19 Irving TB (2001) The Holy Quran. Suhrawardi research & publication.

20 Tabatabai M (1985) Al-Misan commentary on Quran. Foundation of Tabatabai 13: 14-20.

21 Hashem Qomi Ali ibn Ebrahim.Qomi commentary on Quran.Qom: Dar alketab co. 1983.

22 Al-Kulayni, Shaykh SA (1944) Al-Kafi. Dar al-ketab al-Islamieh Co. 6: 376.

23 Al –Saduq (1992) Man La yahduruh al-Fagi. Qum: Jameh Modarresin 1: 52-61.

24 Hor Ameli Shaykh (1988) Vasael al-shieh. Qum: Ale Al-bayt Co. 24: 432.

25 Sajid MI (2016) Hijama therapy (wet cupping) - its potential use to complement British healthcare in practice, understanding, evidence and regulation. Complement Ther Clin Pract. 23: 9-13.

26 Baghdadi H, Abdel-Aziz N, Ahmed NS, Mahmoud HS, Barghash A, et al. (2015) Ameliorating Role Exerted by Al-Hijamah in Autoimmune Diseases: Effect on Serum Autoantibodies and Inflammatory Mediators. Int J Health Sci 9: 207-232.

27 http://en.wikipedia.org/wiki/Avicenna.

28 http://www.pro-newsletter.com/images/PDF/pron34.pdf.

29 http://www.who.int/medicines/areas/traditional/definitions/en/

30 Alrawi SN, Fetters MD (2012) Traditional arabic & islamic medicine: a conceptual model for clinicians and researchers. Glob J Health Sci 4: 164-169.

31 Elolemy AT, Albedah AM. Public knowledge, attitude and practice of complementary and alternative medicine in riyadh region, saudi arabia. Oman Med J 27: 20-26.

32 Nimrouzi M, Mahbodi A, Jaladat AM, Sadeghfard A, Zarshenas MM (2014) Hijamat in traditional Persian medicine: risks and benefits. J Evid Based Complementary Altern Med 19: 128-136.

33 Avicenna (1987) The Canon of Medicine of Avicenna. Sorosh publication.

34 Zayn al-Din al-Jurjani (1110) Thesaurus of the Shah of Khwarazm. Sciences of the Academy publication.

35 Al-Rhazes (Ibn Zakaria al-Razi) al –Hawi (The Virtuous Life).

36 Proceedings of the Royal Society of Medicine (1955) Ancient Therapeutic Arts. Proc R Soc Med. March 48: 230.

37 Rastogi S, Kaphle K (2011) Sustainable Traditional Medicine: Taking the Inspirations from Ancient Veterinary Science. Evid Based Complement Alternat Med 2011: 151435.

38 Jackson WA (2001) A short guide to humoral medicine. Trends Pharmacol Sci 22: 487-489.

39 Patterson TJS (2001) The roots of āyurveda: selections from Sanskrit medical writings. Med Hist 45: 142-143.

40 Glynn JR, Heymann TD (1985) Factors that influence patients in Sri Lanka in their choice between Ayurvedic and Western medicine. Br Med J Clin Res Ed 291: 470-472.

41 Yoo SS, Tausk F (2004) Cupping: East meets west. International Journal of Dermatology 43: 664-665.

42 Sayed SME, Mahmoud HS, MMH (2013) Methods of Wet Cupping Therapy (Al-Hijamah): In Light of Modern Medicine and Prophetic Medicine. Altern Integ Med 2: 1-16.

43 Tagil SM, Celik HT, Ciftci S, Kazanci FH, Arslan M, et al. (2014) Wet-cupping removes oxidants and decreases oxidative stress. Complement Ther Med 22: 1032-1036.

44 Cao H, Li X, Liu J (2012) An updated review of the efficacy of cupping therapy. PLoS One. 7:e31793.

45 Chen B, Li MY, Liu PD, Guo Y, Chen ZL (2015) Alternative medicine: an update on cupping therapy. QJM. 108: 523-525.

46 Dons'koi BV, Chernyshov VP, Osypchuk DV, Baksheev SM(2016) Repeated cupping manipulation temporary decreases natural killer lymphocyte frequency, activity and cytotoxicity. J Integr Med 14: 197-202.

47 Hanninen O, Vaskilampi T (1982) Cupping as a part of living finish traditional healing. A remedy against pain. Acupunct Electrother Res 7: 39-50.

48 Rozenfeld E, Kalichman L (2016) New is the well-forgotten old: The use of dry cupping in musculoskeletal medicine. J Bodyw Mov Ther 20: 173-178.

49 Chen D, Jiang N, Cong X (1993) 47 cases of acne treated by Prick–bloodletting plus cupping. J Tradit Chin Med 13: 185-186.

50 Ahmadi A, Schwebel DC, Rezaei M (2008) The Efficacy of wet-Cupping in the treatment of Tension and migraine Headache. Am J Chin Med 36: 37-44.

51 http://tim.sums.ac.ir/icarusplus/export/sites/tim/journal-club/download/efficacyofwecuppinginthetreatmentoftensionandmigraneheadache.pdf

52 AlBedah A, Khalil M, Elolemy A, Hussein AA, AlQaed M, et al. (2015) The Use of Wet Cupping for Persistent Nonspecific Low Back Pain: Randomized Controlled Clinical Trial. J Altern Complement Med 21: 504-508.

53 Aleyeidi NA, Aseri KS, Matbouli SM, Sulaiamani AA, Kobeisy SA (2015) Effects of wet-cupping on blood pressure in hypertensive patients: a randomized controlled trial. J Integr Med 13: 391-399.

54 El Sayed SM, Baghdadi H, Abou-Taleb A, Mahmoud HS, Maria RA, et al. (2014) Al-hijamah and oral honey for treating thalassemia, conditions of iron overload, and hyperferremia: toward improving the therapeutic outcomes. J Blood Med 5: 219-237.

55 Niasari M, Kosari F, Ahmadi A (2007) The effect of wet cupping on serum lipid concentrations of clinically healthy young men: a randomized controlled trial. J Altern Complement Med 13: 79-82.

56 Danyali F, Vaezmahdavi MR, Ghazanfari T, Naseri M (2009) comparison of the biochemical, hematological and immunological factors of cupping blood with normal venous blood. Spring; Physiolo & Pharmacol 13: 78-87.

57 Zhao XX, Tong BY, Wang XX, Sun GL (2009) Effect of time and pressure factors on the cupping mark color. Zhongguo Zhen Jiu 29: 385-388.

58 Huang YL (2008) Cupping-bloodletting therapy of Saudi Arabia and its clinical application. Zhongguo Zhen Jiu 28: 375-377.