Subconjunctival hemorrhage after wet cupping therapy: a case report

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Author contributions
AlMusleh Z wrote the original draft, and reviewed the final draft. Alrawashdeh A suggested the topic, and reviewed the final draft. Aboushanab T supervised the process of writing the manuscript, wrote the original draft, designed figures and reviewed the final draft.

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Abbreviations
SCH, subconjunctival hemorrhage.

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Abstract

Introduction: Cupping therapy is an integrative and complementary medicine therapy that practiced worldwide by several civilizations for thousands of years. Cupping therapy is reported to be a relatively safe practice especially if performed by qualified therapists. Subconjunctival hemorrhage (SCH) is a common cause of eye redness and can be classified into traumatic and spontaneous. Case presentation: This case report discussed an adverse event related to wet cupping therapy. The patient developed SCH one day after performing cupping therapy. He was completely recovered after 2 weeks. This case report should increase the knowledge of cupping therapists regarding increasing safety of patient when performing wet cupping therapy on specific body parts especially, head, neck and cervical areas. Furthermore, it highlighted the importance of conducting research regarding the mechanical and physiological effects of cupping therapy. Conclusion: Adverse events related to cupping therapy should be reported with every patient. Cupping therapists should be aware of this possible mild adverse event. To the best of our knowledge, this is the first published adult case of SCH related to wet cupping therapy session. More studies are critically needed for evaluation of cupping therapy effects and adverse events especially when performed on head and neck.

Keywords: cupping therapy; wet cupping; Hijama; subconjunctival hemorrhage; adverse event

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Introduction

Cupping therapy is a complementary medicine therapy that practiced by several civilizations for thousands of years [1]. Wet cupping therapy is a type of cupping therapy that performed by doing puncturing or scarifications of the skin before applying cups [1]. It was classified into technical category according to the classification of cupping therapy types [1]. Furthermore, cupping therapy is used to treat various body ailments, such as: pain related conditions [2].

Cupping therapy is considered a relatively safe practice especially if performed by qualified therapists [3]. Cupping therapy adverse events was classified into preventive and non-preventive adverse events [1]. Furthermore, it was classified into systemic and local adverse events [4].

Subconjunctival hemorrhage (SCH) is a common cause of eye redness and can be classified into traumatic and spontaneous [5]. To the best of our knowledge, this is the first adult case of SCH after wet cupping therapy. This case report described a development of SCH as a possible adverse event of cupping therapy. This case report should increase the knowledge and awareness of cupping therapists regarding increasing safety of patient when performing wet cupping therapy on specific body parts especially, head, neck and cervical areas. Furthermore, it highlighted the importance of conducting research regarding the mechanical and physiological effects of cupping therapy when performed on head, neck and cervical areas.

Case presentation

A 40-year-old male patient came to Tabibi PolyClinic with fatigue, headache and dizziness seeking cupping therapy treatment. Consent to publication was obtained from the patient.

The patient reported that he did not have any past history of chronic diseases, and he did not suffer from any other diseases or conditions. Furthermore, the patient was evaluated and he did not have any contraindications of cupping therapy. His blood pressure was 117/71 mm Hg.

A qualified and licensed cupping therapist performed wet cupping therapy for him on 7 points (Figure 1). The three steps method of wet cupping therapy was adapted. The procedure included putting cups on selected points, followed by removal of cups and performing superficial skin scarifications by sterile surgical blade, followed by applying cups for 3 to 5 min. The patient did not complain from any discomfort during the wet cupping session. The next day, he was complaining from right eye redness (Figure 2). He was advised to go to emergency department at Hamad Medical Corporation. His case was diagnosed as SCH which was a self-limited condition and follow-up with a specialist was recommended. He was completely recovered after 2 weeks (Figure 2). The patient did not need any medication for complete recovery. There was no confirmation that the cupping therapy is certainly the cause of the SCH, but the timing of the development of SCH which gave an importance to describe this case to increase awareness about possible adverse event after cupping. More research studies should be conducted to confirm or deny this possible association.

Discussion

Cupping therapy is a relative safe practice especially if performed by a qualified therapist [3]. Scar formation, dermatitis bullae, anaemia, skin abscess, and koebner’s phenomenon are reported adverse events related to cupping therapy [1]. Our case was a SCH followed wet cupping therapy session. To the best of our knowledge it is the first published adult case by these characteristics in the scientific literature.

Previously, there was a reported case of pediatric ocular barotrauma followed dry cupping therapy [6]. The case was for a 6 years old girl, who used a self-suction silicon cup on her eye for 1 to 2 min. She developed eye swelling, and after three days SCH was developed [6]. This case was an accident due to incorrect use of cups rather than adverse event of cupping therapy. Additionally, performing cupping therapy is absolutely contraindicated on eyes and other body orifices.

Previous extracranial arterial dissection cases were reported related to cupping therapy [7–9]. The sudden increase of blood pressure due to the strong suction during cupping therapy was a suggested cause [7, 9].

World Health Organization – Uppsala Monitoring Center causality scale was a tool to assess causality between the adverse event and the treatment [10]. It was used before to assess the causality of adverse event related to cupping therapy [3, 11]. Additionally, causality of adverse events can be classified as: “Certain”, “Probable”, “Possible”, “Unlikely”, “Conditional” and “Unclassifiable” [10].

When there is a timing relationship between cupping therapy and the adverse event, while the condition can be explained by other diseases or conditions, the relation could be described as “Possible” according to the World Health Organization – Uppsala Monitoring Cente classification [10].

Figure 1 Points used during the wet cupping session

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In our case, the SCH developed one day after cupping therapy (timing relationship) while the condition itself can be explained by other reasons such as viral infection, excessive eye use, and another eye disease. So, the classification of this adverse event is “Possible”. According to the Common Terminology Criteria for Adverse Events (CTCAE) version 5, this possible adverse event was classified as Grade 1, mild adverse event [12].

This case is very important to be presented for cupping therapists to be more cautious when performing cupping therapy on some body parts. They should use a mild suction especially if they performed cupping on neck, cervical area and head.

Conclusion

This is the first ever reported adult case of the SCH following wet cupping therapy of an adult patient. There is a possible association, but it is not a certain adverse event. Adverse events related to cupping therapy should be reported with every patient. Cupping therapists should be aware of this possible adverse event, and they should use a mild suction especially if they performed cupping on neck, cervical area and head. More studies are critically needed for evaluation of cupping therapy related effects and adverse events especially if performed on head and neck.

References

6. Liu SS, Tang EWH, Tang GCH, Li KKW. Pediatric ocular barotrauma by a cupping therapeutic device. Research Square. 2019. Available at: https://doi.org/10.21203/rs.2.372/v1