

A Therapeutic Answer for the Controversy of Insulin Cardio-protection among Dysglycemic Patients

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Abstract

The study aimed to illustrate the cardio-protective effect of blood-let out cupping therapy in dysglycemia. The controversy of insulin cardio-protection among dysglycemic patients is a confusing challenge. Glucose-insulin disproportion is a major reason for accumulation of acidic metabolites in the body leading to the current controversy about insulin role in cardio-protection. The micro-capillary dysfunction, the improper tissue perfusion with blood and the accumulation of acidic metabolites in the myocardium are leading to each other and could contribute to progression into major cardiac events. Withdrawal of these metabolites could disturb this ischemic vicious circle and offer the answer for the controversy of insulin cardio-protection among dysglycemic patients. Suction in cupping therapy works specifically on the blood trapped within the tissues together with the acidic metabolites which are believed to be functionally obliged to it. Skin scratching with the action of repeated suction delivers nitric oxide to the area which is a potent cardio protectant in health and disease.

Seven diabetic patients on insulin with recurrent moderate chest tightness due to variable grades of myocardial ischemia refused coronary catheterization. Therefore; a session of basic cupping therapy on the upper back and front of the chest was advised and employed for them.

Dramatic symptomatic relief and clinical recovery was documented in six patients. They were followed up for 18 months without any further cardiac issues.

On conclusion; cupping therapy in this way becomes a maneuver that could lead to correction of ischemic myocardial situations, and the tissues interstitial space therefore constitutes the intelligent yard where cupping exerts its biological talents.

Keywords: Cardio-protection; Cupping therapy; Dysglycemia; Insulin

Introduction

The rising challenge of cardiovascular disease constitutes an actual burden. The controversy of insulin cardio-protection among dysglycemic patients is also a challenge. Myocardial ischemia/reperfusion injury during coronary procedures represents a further challenge [1-4]. The real clue in ischemic cardiac conditions is to prevent progression into critical ischemia than treating it; prophylaxis is always far better than treatment.

The accumulation of toxic metabolites and inflammatory mediators in the tissues and circulation is a fact that has been reported in literature. Glucose/insulin disproportion is a major reason for accumulation of these toxic metabolites in the body. These substances can induce vascular spasm and other effects on vascular endothelium [4,5]. Elimination of these toxic elements is a challenge that would definitely help to correct an underlying micro-circulatory error.

Aim

Demonstration of the cardio-protective effect of blood-let out cupping therapy among dysglycemic patients.

Design and Setting

Multiple-case clinical study study done in Balghsoon Clinics in Jeddah/Saudi Arabia during Jan. 2011- Oct. 2013.

Patients and Methods

The study included seven diabetic male patients on insulin with recurrent moderate chest discomfort and pain due to variable grades of myocardial ischemia as documented by electrocardiogram (ECG), cardiac enzymes and echocardiography. Their age ranged between 55 and 63 years, two of them were having a history of coronary stents insertion few months earlier. They were scheduled for coronary catheterization and possible stenting. All patients hesitated towards undergoing a coronary procedure, therefore; a session of basic cupping therapy on the upper back and front of the chest was advised and employed for them.

Results

Dramatic symptomatic relief and clinical recovery was documented in six patients based on ECG, cardiac enzymes and echocardiography. They were followed up for 18 months without any further cardiac issues. One patient without previous history of coronary stenting did not experience benefit following the cupping procedure possibly because of being heavy smoker and he was not willing to quit smoking, he followed medical treatment for his heart condition.

Ethical Considerations

An informed signed consent was taken from all patients, they were made aware about safety of the procedure of cupping therapy and they were free to quit the study whenever they like. The research proposal was approved and the study followed the rules of the Research Ethics Committee of Balghsoon Clinics in Jeddah, Saudi Arabia.

Discussion

Impairment of the vascular endothelial function caused by excess accumulation of metabolites in the tissues and circulation is involved in the pathogenesis of wide variety of cardiovascular diseases and hence is considered a therapeutic target [1]. Micro-capillary dysfunction, improper tissue perfusion with blood and accumulation of acidic metabolites in the tissues are leading to each other and constitute the main hidden truth behind chronic and major illness [6]. Production of ischemic metabolites within the myocardium due to lack of proper myocardial perfusion constitutes a toxic element which can contribute to progression of the coronary heart disease [7].

Glucose/insulin disproportion constitutes a major metabolic error that could lead to accumulation of acidic metabolites in the tissues and circulation [4]. The continuing controversy about the role of insulin in cardio-protection among patients with dysglycemia should logically indicate the presence of a missed underlying pathology; [4,8] accumulation of acidic metabolites in the body due to glucose/insulin disproportion could be the hidden reason behind this controversy.

Glucose/insulin proportion can never be precisely adjusted except through the function of the human body pancreatic machine pump. Some leaders in diabetes reported that insulin is cardio protective as diabetic patients who receive insufficient doses of insulin develop cardiac events while other pioneers emphasized that insulin is not cardio protective as some patients who are receiving sufficient insulin still developed heart attacks. Patients who receive insufficient insulin will compensate for their energy needs via consumption of lipids leading to production of acidic metabolites. Patients who are receiving sufficient insulin may consume all their glucose, if they are still in need of energy they will gain it from lipid metabolism which would leave also acidic metabolites behind. This would definitely mean that insulin-dependant diabetic patients would demonstrate accumulation of these toxic metabolites in their tissues and circulation and those patients would no way suffer a cardiac issue during the course of diabetes in their life. A cupping blood-let out therapy on the upper back and front of chest done once a year or once during the course of diabetes could include major cardioprotection for dysglycemic patients via withdrawal of accumulated metabolites from the body [9,10].

Withdrawal of ischemic tissue metabolites from the body, being interstitial and diffuse, is only feasible via superficial scratching on the skin and suction by the traditional therapeutic cups. Suction in

cupping therapy works specifically on the blood trapped within the tissues together with the acidic metabolites which are believed to be functionally obliged to this trapped blood. Skin scratching with the action of repeated suction delivers nitric oxide to the area which is a potent cardioprotectant in health and disease. Sero-clearance mediated through micro-capillary dilatation due to the effect of nitric acid is a further talent of cupping therapy that would improve quality of tissue perfusion with blood and oxygen [10,11]. Cupping blood-let out therapy in this way becomes a maneuver which could lead to correction of an associated ischemic cardiac situation, and the interstitial space is therefore constituting the intelligent yard where cupping exerts its biological talents.

Conclusion

Cupping therapy can provide good therapeutic cardio-protection for patients with dysglycemia due to glucose/insulin disproportion. Withdrawal of the toxic metabolites from the body could constitute the cupping therapeutic answer for the controversy of insulin cardioprotection among dysglycemic patients, and the interstitial space therefore constitutes the intelligent yard where cupping exerts its biological talents.

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