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Cupping Therapy for Temporary Reduction of Blood Pressure in Hypertension Patients

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ABSTRACT

Introduction: Hypertension is still a major problem in the field of health problems in general. One therapy to cure hypertension is cupping technique therapy.
Objectives: To find a picture of a brief decrease in blood pressure in patients with hypertension using cupping therapy techniques.
Methods: This study was a descriptive study using purposive sampling totaling 85 populations and 46 samples.
Results: The results showed that the average systolic blood pressure before cupping was 164.78 mmHg decreased by 10.87 mmHg to 153.91 mmHg after cupping and the average diastolic blood pressure before cupping was 99.78 mmHg decreased by 4.13 mmHg to 95.65 mmHg.
Conclusion: The results showed that cupping technique therapy can reduce blood pressure for a moment in hypertension sufferers.

Keywords: Cupping therapy; blood pressure; hypertension

Introduction

Various facts show that until now, hypertension is still a major problem in the field of neurology and health in general. To overcome this crucial problem, prevention of hypertension not only includes the preventive aspects, but also rehabilitation therapy is very helpful.[1]

Treatment of hypertension by pharmacotherapy can be done by administering diuretics, Calcium Channel Blockers, Angiotensin Converting Enzyme (ACE) inhibitors. The treatment depends on the patient's consideration including regarding costs, demographic characteristics, comorbidities, and quality of life. Treatment of hypertension is currently not very effective and the price of the drug is also relatively expensive, recurrence often occurs and causes more dangerous side effects.[2,3]

One therapy to cure hypertension is cupping technique therapy. The purpose of cupping is to remove blood from the body that is believed to damage the body and in turn has the potential to cause harm from the usual symptoms to those that lead to a decrease in health.[2,4]

Method

This research is a descriptive study using purposive sampling. The research location will be held in Makassar's Islamic Health Care Center Clinic for a month. The population is all patients with hypertension who do cupping technique therapy and recorded in the medical record. The procedure begins with the measurement of blood pressure before the patient has been placed in bed after resting for approximately 20-30 minutes. After that the patient was buried for 30-45 minutes by cupping technique at 5 points of burping (according to standard cupping therapy in patients with hypertension). Then the patient rests for 20-30 minutes, then blood pressure measurements are taken again after suppression. Then the blood pressure measured is systole and diastole.

Data processing is carried out by taking medic record data in the Makassar City Cupping Clinic and processing it using a computer with a statistical product and service solution (SPSS) version *13,00* program as a tool in collecting and processing data of research results presented in tabular and graphical forms.

Results

Based on the results of research conducted on 46 patients, the distribution table is obtained as follows:

Table 1. Distribution of Patient According to Age, Sex, Degree of Hypertension at The Makassar Islamic Heal Care Center Clinic

Variable	n	%
A. Age (Years)		
30 - 39	8	17.4
40 - 49	25	54.3
≥ 50	13	28.3
B. Gender		
Female	22	47.8
Male	24	52.2
C. Grade of Hypertension		
Grade 1	12	26.1
Grade 2	34	73.9

Source : Secondary date 2018

Based on table 1 it can be seen that sufferers are in the age group of 30-39 years, as many as 8 people (17.4%), the age group of 40-49 years are 25 people (54, 3%), while the age group ≥ 50 years is 13 people (28.3%). Patients who are male, as many as 24 people (52.2%), while women as many as 22 people (47.8%). patients had grade 2 hypertension, which was 34 people (73.9%), while patients had grade 1 hypertension as many as 12 people (26.1%).

Table 2. Distribution of Blood Pressure Pre and Post Cupping Therapy

Variable	Amount (n)	Minimum	Maximum	Median	Average
Blood pressure before cupping					
Systole	46	140	200	170	164.78
Diastole	46	90	120	100	99.78
Blood pressure after cupping					
Systole	46	120	190	155	153.91
Diastole	46	80	120	90	95.65

Source: Secondary Data 2018

Based on table 2 it can be seen that the systolic blood pressure before cupping is 140 mmHg, the maximum value is 200 mmHg, the median value is 170 mmHg, and the mean value is 164.78 mmHg while the diastole blood pressure minimum value is 90 mmHg, the maximum value is 120 mmHg, the median value is 100 mmHg, and the mean value is 99.78 mmHg. Whereas the systolic blood pressure after cupping the minimum value is 120 mmHg, the maximum value is 190 mmHg, the median value is 155 mmHg, and the mean value is 153.91 mmHg while the blood pressure diastole has cupped the minimum value is 80 mmHg, the maximum value is 120 mmHg, the median value is 90 mmHg, and the mean value is 95.65 mmHg.

Table 3. Overview Difference Mean Blood Pressure Pre and Post Cupping Therapy

Variable	Pre Cupping	Post cupping	Difference
Systole	164.78	153.91	10.87
Diastole	99.78	95.65	4.13

Source: Secondary Date 2018

Based on table 3 it can be seen that the difference in systolic blood pressure before and after cupping is 10.87 mmHg while the diastole blood pressure difference before and after cupping is 4.13 mmHg.

Discussion

Based on the age characteristics it can be concluded that the majority of patients are in the 40-49 years group of 25 people and the age group ≥ 50 years are 13 people so that it can be said the incidence of increased blood pressure increases at this age. This is in line with research conducted by Institute of Medicine (US) Committee on Public Health Priorities to Reduce and Control Hypertension (2010) which shows that the incidence of hypertension is prevalent in populations with an age range of 40 - 59 years.[5]

Based on the sex characteristics, it can be concluded that the majority of hypertensive sufferers are male as many as 24 sufferers so it can be said that men suffer more

hypertension than women. This result is in line with the theory put forward by William *(*2009) that men have a high risk of developing hypertension due to the type of work done by men heavier than women as well as smoking or drinking alcohol and also emotions that are less regular. While the risk factors for women with hypertension are very rare as long as they do not follow the risk factors like men. In addition, premenopausal women are still awake by the hormone estrogens which regulates the condition of cholesterol or lipids which are the most common factor in hypertension.[6] But these results are also inversely related to research conducted by Wijaya PA on the Relationship between Lifestyle and the Occurrence of Hypertension in Outpatients in Internal Medicine at the Raden Said Sukanto Central Jakarta Police Hospital in 2009 which showed that more women suffer from hypertension than men guys. This is consistent with WHO's statement in 2005, stated that women with hypertension were higher, namely 37%, while men were 28%.

Based on the characteristics of the degree of hypertension the majority of patients who come for treatment at the Makassar Islamic Health Care Center clinic are in second degree hypertension, namely 34 people by 73.9%, then followed by first degree hypertension for 12 people by 26.1%. This is in line with research conducted by Ernest *et al* (2014) where 19 degrees of hypertension (48.7%), grade 2 hypertension (51.3%) were obtained.[7]

Based on research results from Abdullah M.N in Cupping the Sunnah of the Prophet and Medical Miracles that is cupping can reduce blood pressure.[1] This is consistent with this study which shows that the average systolic blood pressure is 164.78 mmHg (before cupping) will decrease by 10.87 mmHg to 153.91 mmHg (after cupping) while the average blood pressure of diastole is 99, 78 mmHg (before cupping) will decrease by 4.13 mmHg to 95.65 mmHg (after cupping).

According to Umar WA, under the skin and muscles there are many nerve points. These points are interconnected between one another's organs so that cupping is done not always on the affected part of the body but at the relevant nerve node. Impingement is usually done on the surface of the skin (cutis), subcutaneous tissue (sub cutis) this tissue will be "damaged".[8]

As a result of this damage several substances such as *serotonin, histamine, bradykinin , slow reaction substance* (SRS) will be released as well as other unknown substances. This substance causes capillary and arteriol dilatation, and flare reaction in the area to be burned. Capillary dilatation can also occur in places far from the burial site. This

causes an improvement in blood vessel microcirculation.[9] As a result the relaxing effect (relaxation) of stiff muscles and as a result of general vasodilation will reduce blood pressure stably. Most important is the release of *corticotrophin releasing factor* (*CRF*), as well as other releasing factors by *adenohipophyse* . CRF will then cause the formation of *ACTH* , *corticotrophin and corticosteroids* . This corticosteroid has the effect of curing inflammation and stabilizing cell permeability.[10]

Conclusions

There was a decrease average someone with systolic blood pressure after establish bruise late by 10.87 mm Hg, and mean diastolic blood pressure of 4.13 mmHg. It is hoped that subsequent researchers will add to factors other than hypertension in order to better understand the factors that influence cupping therapy in order to reduce blood pressure.

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