The Effect of Massage on Hypertension

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Abstract

For centuries, massage has been used to calm a crying baby, to comfort a loved one, to reduce pain, and most of all, for relaxation. Therapeutic massage is a natural way of bringing the body to homeostasis. As we all know, many people are affected by hypertension. There are many ways to control high blood pressure and the obvious solution is to take medications or alter your lifestyle, be more cautious with food and add cardiovascular activities. We all know that medications have side effects; some may be mild, severe, and even life-threatening. The cause of hypertension is unknown which means any imbalance in the body can trigger blood pressure to go up. There are a few symptoms that we are aware of which can cause hypertension; for example, stress, bad circulation, lack of sleep, and anxiety. Therapeutic massage and diaphragmatic breathing has been proven to help people who are suffering with high blood pressure, stress, and/or anxiety. Research has shown that, after a one week period of receiving a massage, level of blood pressure, anxiety, and stress had a significant decrease.

Through research, it has also been proven that massaging specific parts of the body can also have a positive effect on blood Pressure. By starting to massage the peripheral part of the body will help dilate the blood vessels in the limbs which will help the blood circulate in a more efficient way.
Introduction

Many of us are affected by hypertension, it may not be directly, but we all know somebody who suffers from hypertension. They named this chronic disease the SILENT KILLER because you can have it for years and not know it because there are no sign and symptom. High blood pressure can lead to serious complications, If not controlled effectively; it can damage the bodies’ vital organs.

Hypertension can damage several organs in the body, with the most common disease being Coronary Heart Disease, heart attack and heart failure from over exertion. Your brain and your heart need a nourishing supply of blood to properly function and if the blood supply diminishes or gets blocked then transient ischemic attack, a stroke or dementia can occur.

Your kidney’s filter excess fluid and waste from your blood. High blood pressure can damage both large and small vessels, causing waste to accumulate and dialysis may be required.

Your eyes have tiny delicate blood vessels as well and they can be vulnerable when you have high blood pressure. Other possible complications are trouble sleeping, bone loss and sexual dysfunction. Given that massage can decrease blood pressure by dilating blood vessels and capillaries, and decrease the heart rate, to promote good circulation, and reduce stress level by decreasing sympathetic nervous system and increase Para-sympathetic system.
To find the information for this research I searched journal articles on the Pubmed Website. I used the search field massage and Hypertension, several studies confirms that therapeutic massage can play an important role for decreasing high blood pressure and other systemic diseases. One particular research was done on African American that lives in New Orleans, the research explains that therapeutic chair massage and patient teaching in diaphragmatic breathing affected their blood pressure, stress levels, and anxiety over a one week-six week time period. This research was done by the Dillard University.

Another research from Pubmed explains that a patient by the name of Ahmed under went a Valve surgery for hypertension. They explained that they had tried digital ocular massage after the surgery to reduce his blood pressure, and they found that his blood pressure had dropped by 20% with massage. This research was done by the Department of Ophthalmology and Visual Sciences, Toronto Western Hospital conducted by Smith M, Geffen N, Alasbali T, Buys YM, Trope GE.

There was a preliminary study done from January to February 2006 of patient 65 to 70 years of age by the Department of Research, National University of Health Science, Lombard, and their team Cambron JA, Dexheimer J, Coe P. Their studies had shown a significant decrease in systolic and diastolic after performing a various forms of therapeutic massage.

This study was done during July to September of 2009 by Day AL, Gillan L, Francis L, Kelloway EK, Natarajan M, of the Department of Psychology, Saint Mary’s University, Halifax,
NS. The aim of the study was to assess the effects of workplace-based massage therapy on physiological and psychological outcomes. They randomly chose 28 participants and divided them into two groups. Experimental group 14 and control group 14. The experimental group had received a weekly massage treatment at work for a four week period while the control group will not. Their results found that both strain and blood pressure of the experimental group were significantly reduced during treatment while the control group did not. The conclusion of their study stated that therapeutic massage can play an important role in reducing blood pressure.

Methods

Design

I will be looking at the relationship between hypertension and massage therapy. As stated in the medical dictionary Massage therapy is defined as the scientific manipulation of the soft tissues of the body for the purpose of normalizing those tissues and consists of manual techniques that include applying fixed or movable pressure, holding, and/or causing movement of or to the body. The technique which will be used is the Swedish technique, which helps to increase the parasympathetic and decrease the sympathetic nervous system.

Subjects

I randomly selected 40 patients between the ages of 25-65 from the apple tree clinic who are being treated for hypertension. There will be two groups of 20 participants.
**Instrumentation**

The type of equipment used will be a blood pressure cuff (to monitor clients blood pressure). A massage table, pillows, oil bottle, disinfection spray to clean the door knobs, hand sanitizer, water bottles for client care, sheets and blankets, and relaxation music.

**Procedures**

A form with a series of questions will be given to the clients as well as their physicians. They will be asked to answer all the questions in order to ensure accuracy of the study and for the safety of the client.

In addition, the experimental group will be instructed to listen to relaxation music for 15 minutes prior to their treatment and to practice diaphragmatic breathing. The room temperature will be kept at a comfortable temperature, 22 degree Celsius with a warm blanket. I will wash my hands and clean the door knobs before and after seeing each participant.

The experimental group will also be asked to stop taking their medications and will have their treatment in the afternoon after work for 45 minutes once a week and the control group will stay on their medications. The study will be done for a 6 week period.

**Data collection & Analysis**

Data will be captured and recorded in the clients files. I will also create an electronic version of the information collected to create charts in Microsoft Excel and monitor the progress of the clients. I will be tracking the date of treatment along with the client’s blood pressure.
Study Purpose & Rationale

The main focus of this study is to show that therapeutic massage can play an important role in decreasing high blood pressure and among other systemic disease. As we all know, the cause of hypertension is idiopathic, and most researcher have found that stress, anxiety, lack of sleep and exercise is linked to an increase in hypertension.

The purpose of the study will be to point out all the things that can possibly contribute to hypertension and how massage can help control it. We know that stress is one of the symptoms that can increase blood pressure as well as muscles tightness, stiffness, spasms, restrictions in the muscles and tissues, limited range of motion, toxins, and waste products of the body. All of these symptoms which I have mentioned above can be treated through massage.

Massage will increase blood circulation bringing more oxygen and nutrients into the muscle and tissues. It can reduce muscle fatigue and soreness. It promotes rapid removal of toxins and waste products from the muscle.

The reason for this study is to educate the public that massage can help lower blood pressures with very minimum side effects compared to prescribed medications.

Questions

Can massage lower blood pressure?

The second question is - how can massage lower my blood pressure?

A future question could be - will therapeutic massage become one of the popular treatments in reducing hypertension?
Limitations

I will not have any exclusion, as for hypertension can affect anybody at any age. These day hypertension affects people of all ages. Even the younger generation is at a higher risk of obesity and diabetes, which all link to hypertension.

Care of Human Subjects

As for the client care, treatment room will have a dimmed light, and instrumental music playing in the background which will make it to be a very relaxed environment. The participants will be encouraged to try to clear their minds of all negativities. A water bottle will be kept in the room in case the client wanted some water. Blood pressure will be taken before and after each treatment, and we also encourage the clients to take their blood pressure twice a day to make sure their blood pressure do not get out of control. We also will advise the clients if they experience any abnormal symptoms such as light headedness, sensation or fainting, and so on to contact their physicians as well as myself. We will also encourage exercise to increase health levels. I will ensure sure that all the participants are aware that they may choose to discontinue their treatment at any time if they feel uncomfortable or unsatisfied.

Conclusion

I want to emphasize that people who suffer from hypertension can benefit from massage therapy. Massage is one of the oldest, simplest forms of therapy. The basic goal of massage therapy is to help the body heal itself and to increase health and well-being.
References


2. Aging Clients Exp Res. 2010 Arterial stiffness and the response to carotid sinus massage in older adults

3. J Glaucoma. 2010 Digital ocular massage for hypertensive phase after Ahmed valve surgery

Appendix A

Client Care Form

A series of questions that the client as well as their physicians must answer to ensure accuracy of the study and for the safety of the client
Appendix B

Consent to Treat Form

This form would ensure that clients understand all aspects of the trial and are willing to commit to the 6 week program.