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Kalp Krizi ve Alternatif Tedaviler

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Öz

Kalp krizi, dünyada ve ülkemizde en sık görülen kardiyovasküler hastalıklardan birisi olup, üzerinde deneysel tedavilerin en çok uygulama imkanı bulunduğu hastalıklar arasındadır. Miyokard enfarktüsü veya koroner tromboz olarak da bilinir. Kas iskemiyeye uğrar ve oksijenden yoksun kalır, miyokard işlevini yerine getiremez ve kalp krizi meydana gelir. Kullanılan medikal ve cerrahi tedavinin pahalı olması, riskli olması, düşük ve orta gelirli hastalar için ulaşılabilirliğinin zor olması, insanların doğal yöntemlere olan güveninin artması gibi faktörler nedeniyle hastaların alternatif tedavilere yaklaşımları son zamanlarda artmıştır. Dünyada ve ülkemizde kalp krizi tedavisinde farklı yöntemler bulunsa da klasik medikal ve cerrahi tedavi ile birlikte özellikle Çin ve Hindistan gibi birçok ülkede alternatif tedavi araştırmaları yoğun olarak artmıştır. Alternatif tedaviler arasında özellikle Çin başta olmak üzere birçok ülkede sarımsak, yeşil çay, mabet ağacı, meyan kökü, karanfil, zencefil, sarı kantaron, nar suyu ve kızılçık suyu; kan sulandırıcı, kolesterol düşürücü, hipertansiyon önleyici, ateroskleroz önleyici olarak kullanılmaktadır. Konvansiyonel tedavilerin yetersiz kaldığı durumlarda ve doktor kontrolünde tamamlayıcı alternatif tedavi yöntemlerinin kullanılabilceği sonucuna varılmıştır.

Anahtar Kelimeler

Kalp Krizi; Alternatif
Tedavi(TAT),
Önlem;

Heart Attack and Alternative Treatments

Abstract

Heart attack is one of the most common cardiovascular diseases in the world and in our country, and it is among the diseases in which the most research is done on experimental treatments. Also known as myocardial infarction or coronary thrombosis. When a part of the heart muscle undergoes ischemia and is deprived of oxygen, the myocardium cannot perform its function and a heart attack occurs. Patients' approach to alternative treatments has increased due to factors such as the expensiveness of the medical and surgical treatment used, the risky, the difficult accessibility for low and middle-income patients, and the greater confidence of people in natural methods. Although there are different methods in the treatment of heart attack in the world and in our country, research on alternative treatment has increased in many countries such as China and India, along with classical medical and surgical treatment. Among the alternative treatments, especially in many countries, especially in China, garlic, green tea, temple tree, licorice, cloves, ginger, St. John's Wort, pomegranate juice and cranberry juice are used as blood thinners, cholesterol-lowering, anti-hypertension, anti-atherosclerosis in the treatment of heart attack. It has been concluded that complementary alternative treatment methods can be used in cases where conventional treatments are insufficient and under the control of a doctor.

Keywords

Heart Attack;
Alternative
Therapy(CAM);
Prevention;

1. Introduction

Heart attack is a heart disease with the highest morbidity and mortality rate among cardiovascular diseases and is very common in today's societies. It is also known as myocardial infarction and coronary thrombosis. The heart is a powerful organ that pumps blood an average of 60-80 times per minute during rest. It needs to be able to work on its own with the whole body and to feed itself for the continuity of this work. These self-feeding vessels are called coronary arteries. (Ilhan, 2016). If a deterioration occurs in these vessels, what we call ischemia occurs and the heart muscle, namely myocardium, cannot be fed adequately. And in this case, what we call myocardial infarction, that is, a heart attack occurs. Coronary insufficiency tables vary according to the type, degree and location of the stenosis in the coronary vessels. In some patients, there may be chest pain that occurs only during physical activity and is relieved by rest, as well as a heart attack (infarction) that sometimes develops as a result of sudden occlusion of the vessels and can lead to sudden death, starting with severe chest pain (IntKayn. 1).

A heart attack usually has typical symptoms that manifest itself in the form of a pressing and compressive pain in the middle of the chest, radiating from the chest to the neck, spreading to the chin ears and arms, and especially numbness in the left arm and two little fingers (Şentürk, 2008). In humans, many factors such as age, obesity, genetic predisposition, alcohol and cigarette use, malnutrition, etc., form the basis for heart attack and many similar cardiovascular diseases and trigger disease formation.

However, among the important risk factors of heart attack can be counted as; Vascular diseases or heart diseases such as atherosclerosis, a previous heart attack, any rhythm disorder or faint, age (over 40 in men, over 50 in women), smoking, excessive alcohol consumption, some illegal drugs and derivatives; high levels of triglycerides, high bad cholesterol and low good cholesterol content, diabetes, high blood pressure, and chronic high

stres (Jensen et.all. 1991). The diagnosis of heart attack is made by the symptoms seen in the patient, the patient's history, physical examination, EKG and blood tests (Şentürk, 2008).

Every year, approximately 18 million people die due to cardiovascular diseases and other diseases it causes. When the causes of death worldwide are examined, it has been determined that cardiovascular diseases are the number one cause of death in 2019.

It is seen that most of these death rates are in middle-income countries such as Central Asian and Eastern European countries and some low-income countries. Heart attack is one of the diseases with the highest mortality and morbidity rates (IntKayn.2). According to the worldwide research statistics of the World Health Organization, the number of deaths from cardiovascular diseases is expected to reach 23 million in 2030. According to the same report, 18 million people die every year due to heart diseases. According to the report of the American Heart Association, an increase of approximately 46% in heart failure is expected from 2012 to 2030; In 2030, it is predicted that more than 8 million people aged 18 and over in the USA (with 5,8 million in 2011) will have heart failure (Beştepe et. all.2020). It is understood that this estimated increase has triggered further research on heart attacks. Losses due to cardiovascular diseases in Turkey are equivalent to 30% of all deaths, and this rate represents half of the deaths from cancer (Coşkun et.all.2009). 31% of deaths in the world are due to cardiovascular diseases, and 85% of them are caused by heart attack and stroke. When we look at the 2018 Turkey data, 36.7% of the deaths are caused by cardiovascular system diseases, 39.1% of them are due to ischemic heart disease and 22.2% are due to cerebrovascular diseases (T.R. Ministry of Health, 2019).

Considering all these data and evaluations, it is seen that coronary heart disease and cerebrovascular disease are the most common

causes of death among cardiovascular system diseases.

In addition, even though the deaths due to cardiovascular system diseases have decreased over the years, it is still seen that it is the most important cause of death both in the whole world and in Turkey, and the complications related to these diseases are increasing (Türk et. all. 2021).

Considering the deaths caused by cardiovascular system disease, 36% of them are premature deaths occurring before the age of 75. In terms of chronic heart disease, cerebrovascular disease and peripheral arterial disease, atherosclerosis was found to be responsible for 71% of all deaths in 1997. When looking at the 35-45 age range in men, the incidence rate is 7% per year, while this rate rises to 68% at the age of 85-95. In women, the difference decreases as the age progresses, but if you look at the 10 years later, it is seen that the frequency increases at similar rates (Işlegen, 2007).

Many factors such as the increase in education level, increase in income levels, change in dietary habits and controlling infectious diseases in our country and throughout the world have led to an increase in life expectancy. The prolongation of the average life expectancy has significantly increased the percentage of individuals aged 65 and over in the general population in both developed and developing countries, and the calculations show that 20% of the world population will be 65 years and over in 2050 (Genç and Yiğitbaş 2021). Among the alternative treatments, such as garlic, green tea, temple tree, licorice root, clove, ginger, St. John's Wort, pomegranate juice and cranberry juice, which are mainly preferred in many countries, especially in China, in the treatment of heart attacks, blood thinners, cholesterol lowering, antihypertensive herbal treatment sources used as a preventative against atherosclerosis. Despite all the developing opportunities, most of the patients die before they can even reach the health institution. Therefore, people should be informed about heart diseases, heart attack and its symptoms and should be directed to apply to the nearest health institution as soon as the symptoms are felt. Patients with heart attack symptoms apply

to the emergency room, and treatment begins quickly. Oxygen support is provided by measuring the person's blood oxygen value. People with high pain can be benefited from various painkillers (Daşkapan, 2013). The main purpose of treatment; It is the removal and opening of the blockage in the vessels feeding the heart and the immediate restoration of blood flow to that area. Tissue oxygenation is restored and myocardial function is restored. For this purpose, aspirin is given to remove blood clotting (blood thinner-anticoagulant therapy), nitroglycerin and oxygen therapy to relieve chest pain and improve blood flow.

2.CAM (Complementary And Alternative Treatments)

In addition to all these medical treatments, as mentioned before, the tendency to alternative treatments has increased rapidly due to factors such as easier economic opportunities, accessibility for patients and their relatives, and the fact that natural methods create a more reliable impression on people. With this; Complementary and alternative medicine terms are generally gathered under one title and evaluated as a whole. Alternative medicine is defined as any health service that replaces medical treatments and is not included in modern biomedicine or treatments (Dömbekci et. all. 2020). Complementary medicine, on the other hand, is defined as the treatment and care systems applied in addition to medical treatment (Ceyhan and Yiğit 2016). According to the definition made by the United Nations National Institute of Health, "Complementary and alternative medicine; It is a broad field of health that encompasses all health services, methods, practices and accompanying theories and beliefs outside the politically dominant health system in a particular society or culture at a given time (Karayağız and Öztürk 2008).

In other words, many definitions can be made about concepts such as complementary therapy, which are shaped by the culture, value judgments and beliefs of the society we live in. Traditional Medicine, or in other words, folk medicine, aims to

evaluate the information to be obtained from the religious beliefs, socio-cultural values and other elements of the culture of the society in which it is transmitted from generation to generation and to use it in the treatment of diseases (Sütçü, 2018; Ersoy, 2014). A holistic approach to the concepts of health and disease is the essence of complementary alternative therapies. Observation, trial and error, and the use of data obtained in this way as treatment have been transferred from each generation to the next and not only contributed to medical science, but also used as alternative treatment (Ersoy, 2014). The basis of alternative and complementary therapy applications is based on Chinese and Ayurvedic medicine treatments, and it has developed in many areas towards the end of the 19th century. The United States established alternative medicine offices within the national health institutes in 1993 and expanded its powers in 1998. It changed its name to the national center for alternative and complementary medicine (IntKayn.3). The purpose of this center; It is stated as to examine the reliability and effectiveness of complementary and alternative medicine applications and to ensure the participation of scientifically proven practices in traditional treatments (Karayağız and Öztürk 2008).

However, when we summarize the factors that direct people to alternative treatments, the following stands out;

- *effective and high reliability
- *The patient has a feeling that he can control the treatment
- *does not include invasive methods
- * therapists spend more time with the patient
- *besides being accepted easily and getting depressed
- * fear of side effects of applied medical treatments
- *insecurity
- *The patient has no hope of recovery.

(Ceyhanand Yiğit2016)

In general, the most common and most preferred complementary and alternative medical treatments from the past to the present; It covers ancient approaches such as Ayurveda, Acupuncture, Traditional Anatolian Folk Medicine, Herbalism and Yoga, and new approaches such as Oxygen Therapy, Ozone Therapy, Detoxification Therapy, Aromatherapy, Homeopathy, Dietary Support, Electromagnetic Fields, Massage, Reiki, Bioenergy and Hypnosis (IntKayn.4). Ayurveda treatment, which is the most preferred and widely used in countries such as China and India, is one of the oldest treatment methods (X century BC). It literally means 'science of wellness' and originates from the mystical philosophy of the Hindu religion.

It is widely practiced in Nepal, Sri Lanka and Bangladesh. It is accepted as focusing on healthy life instead of preventing the emergence of the disease or instead of intervening when the symptoms of the disease occur or curing the diseases. According to this system, the human body and the universe in which it lives are a whole, and human health is actually considered as a balance of various elements that make up this whole. Ways to live long and healthy; Recommendations on nutrition-lifestyle and physical-psychological health are presented in the form of complex systems such as massage, meditation and yoga techniques. Ayurveda practice can be summarized as maintaining a long and healthy life by reducing the effects of time and strengthening the body's immune system (Ozturk,1990). Another treatment method that attracts the most attention and has been the subject of research in recent years is herbal treatments. Since ancient times, plants have been used as medicine and serious successes have been achieved in the treatment of many diseases. Especially since the end of the 20th century, the tendency to treatments with herbs has increased rapidly due to reasons such as being more economical, easily accessible, and having less side effects and toxic effects. Herbal treatment sources such as garlic, green tea, temple tree, licorice, cloves, ginger, St. John's Wort, pomegranate juice and cranberry juice are used as blood thinners, cholesterol-lowering, anti-hypertensive, and

protective against atherosclerosis.

When looking at complementary therapies in general, they are classified according to different criteria as follows:

1-Traditional Alternative Medicine: This field includes more common and accepted forms of therapy such as acupuncture, homeopathic Oriental practices (Natural therapy, Chinese or Oriental medicine). These therapies have been practiced around the world for centuries.

2-Body Therapies: Touch has been used in medicine since the early days of medical care. Tactile healing is based on the idea that illness or injury in one part of the body can affect all parts of the body. With manual manipulation, the body can fully focus on healing at the site of injury or illness if other parts can be brought back to optimum health. Body techniques are often combined with mind techniques. Examples of body therapies include chiropractic and osteopathic medicine; Massage; body movement therapies; Tai Chi and Yoga can be given.

3-Dietary and Herbal Approach: For centuries, human beings have moved from a simple diet of meats, fruits, vegetables and grains to a diet consisting of foods usually rich in fats and complex carbohydrates. Both, as well as nutritional surplus and deficiency, have become problems that lead to certain chronic diseases in today's society. Many dietary and herbal approaches are used to balance the body's nutritional health. Within diet and herbal approaches, Dietary supplements; herbal medicines; Nutrition / Diet applications are included.

4-External Energy Applications: Some people believe that external energies from objects or other sources directly affect a person's health. Examples of external source energy therapy are Electromagnetic treatments; Reiki and Qigong can be given.

5-Mind-Based Therapies: Standard or traditional medicine both recognize the power of the connection between mind and body. Studies have

shown that people improve more when they have good emotional and mental health. Therapies that use the mind include: Meditation; Biofeedback and Hypnosis.

6-Forms of Sense-Based Treatment: Some people believe that the senses, namely touch, sight, hearing, smell and taste, can affect overall health. Examples of therapies involving the senses are Art, dance and music; Visualization and auxiliary images can be provided (InytKayn.5).

In addition to all these, various researches on cardiovascular, lung and blood diseases and their treatments were conducted by the National Heart, Lung and Blood Institute and the National Institute of Complementary and Alternative Medicine in 2001. In the workshop held on the general use of CAM applications, there were positive opinions on the fact that individuals began to prefer CAM applications to a large extent, and for this reason, a joint decision was taken to initiate large-scale clinical studies in order to maintain and protect the health of the population. It was emphasized that more serious research should be done to understand the basic functioning of CAM applications, that time and resources could be wasted and even risky. It is thought that meaningful basic and clinical studies are needed to standardize the use of procedural CAM interventions and herbal products in treatment(Lin et. all. 2001).

If we look at the interaction between drugs used in the treatment of cardiovascular diseases and CAM;

-Warfarin and its use for antithrombotic therapy:

Many herbal uses have interactions with warfarin. During the use of herbal therapy, it increases the risk of bleeding in patients receiving warfarin or conventional antiplatelet therapy, etc. It can make positive or negative changes in platelet function, such as In many cases, it is thought to increase the likelihood of bleeding; however, numerous cases of increased bleeding tendency have been reported in patients using herbal supplements with or without warfarin.

-Digoxin: It has been explained that some plants can act as digoxin-like active substances and therefore, plants that are likely to act in this way can increase the digoxin effects of plants. Chinese silk vine (*Periploca Sepium*) is a poisonous plant containing cardiac glycosides. *Uzarae radix* (uzara root) has been noted to have cardiac effects like digoxin when used in high doses. Serious side effects of herbal treatments may result from lack of standardization and inadequacy in packaging and preparation.

-Cyclosporine: This substance, which is used for immunosuppression after heart transplantation, is exposed to many drug-drug interactions. For example, interaction with Diltizem causes increased levels of cyclosporine. If diltizem is used in patients with heart transplantation and hypertension, the dose of cyclosporine should be reduced. St. John's Wort is used as herbal treatment for those with depression and mood disorders. Unexpected interactions with cyclosporine have been reported in various sources. It is stated that it causes a decrease in the level of cyclosporine and its rapid elimination from the body (Miller et al. 2004).

3. Summarized of some studies on Cardiovascular Fields

Studies to determine the use of CAM (complementary alternative therapy) in the field of treatment of heart disorders are also carried out in different countries. One of them; It was conducted based on a questionnaire analysis between April 01, 2013 and April 18, 2014 to determine the use of CAM in patients in the Cardiac Surgery unit of Angers University Hospital in France. It was understood that 58% of the 154 patients included in the study used a complementary and alternative medicine at least once in their lifetime, 38% in the previous year before the disease appeared, and 14% between consultation and surgical intervention.

In total, 71% preferred alternative treatment at any stage of their illness, and only 29% of those who used it informed their doctors and paramedics

about it. It has been understood that the use of complementary and alternative medicines is common among patients who apply to cardiac surgery units, but the authorities are not sufficiently informed about this issue (Dalmayrac et. all. 2016). Cardiovascular diseases (CVD) have traditionally been treated with medications and lifestyle changes. The use of complementary therapies in this field has been increasing in recent years. The use and success of CAM in the prevention and treatment of CVD, including hypertension, hyperlipidemia, coronary artery disease, heart failure, and arrhythmias, was discussed in this study.

It has been concluded that alternative methods such as special nutrition programs, meditation, yoga, acupuncture, herbal herbs and vitamin supplements that can be used as an adjunct to traditional medical care to improve cardiovascular health and quality of life can be used in this area as promising, and it has been emphasized that similar results have been obtained from different studies. (Aggarwal et. all. 2017).

Another similar study was conducted to evaluate the effects of Mind-body practices (MBI) (eg, Tai Chi, yoga, meditation) included in CAM on individuals with heart failure (HF). For this purpose, a survey study was conducted with 1314 participants in October 2016. And in it, questions were asked to determine the use and effects of 9 CAM methods covering mind-body practice. Each method was accepted as a separate group. The studies were performed for different groups in periods ranging from 4 minutes to 26 weeks, and the groups were formed with variability between 8 and 65 patients. The results were obtained as; Tai Chi (n = 7), yoga (n = 4), relaxation (n = 4), meditation (n = 2), acupuncture (n = 2), biofeedback (n = 2), stress management (n = 1), Pilates (n = 1) and reflexology (n = 1). Most of the participants (n = 22, 95.8%) experienced quality of life (14/14), exercise capacity (8/9), depression (5/5), anxiety and fatigue (4/4), blood pressure (3/5), stated that there was an improvement in the criteria of heart rate (5/6) and heart rate variability

(7/9) criteria ranging from little to moderate. According to these data; It has been stated that CAM applications can create moderate advantages for people with heart disease and can be applied and preferred as supportive treatment (Gok et. all. 2018).

4. Conclusion

In this study, myocardial infarction, which is the most common cardiovascular disease and has the highest rate of mortality and morbidity, and its alternative treatments, the usability of these treatments, as well as the efficacy and causes of alternative treatments in the world and in our country, are mentioned. It has been concluded that complementary alternative treatment methods can be used in cases where conventional treatments are insufficient and under the control of a doctor.

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