A STUDY ON EFFECTIVENESS OF HOMOEOPATHIC MANAGEMENT OF ISCHEMIC HEART DISEASE WITH BOTHROPS LANCEOLATUS

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ABSTRACT

This descriptive study evaluates the effectiveness of Bothrops in treating ischemic heart disease. Bothrops Lanceolatus is the venom of yellow viper. This snake belongs to the animalia kingdom of reptilia class and phylum chordate. They are also known as fer-de-lance, martinician pit viper generally found in the island of Martinique. Its venom is anticoagulant. So it is expected to be useful in thrombosis and thrombotic affections such as stroke[2]. In this study 10 patients diagnosed as coronary artery disease with coronary angiogram were given bothrops and effective improvement were noted in both exertional dypsnea assessed by NYHA classification and the occurrence of angina which is assessed by Canadian Cardiovascular Society Grading Of Angina Pectoris.

KEY WORDS: Coronary artery disease, ischemic heart disease, NYHA , Canadian cardiovascular society grading of angina, Bothrops

INTRODUCTION AND BACK GROUND.

Coronary Artery Disease (CAD), is a type of **Ischemic Heart Disease (IHD)**,[2] involving the reduction of blood flow to the heart muscle due to build up of plaque in the arteries of the heart.[3,4,5] It is the most common of the cardiovascular diseases.[6] Types include stable angina, Acute coronary syndromes including unstable angina, NSTEMI, and STEMI[7] A common symptom is chest pain or discomfort which may travel into the shoulder, arm, back, neck, or jaw.

Risk factors include high blood pressure, smoking, diabetes, lack of exercise, obesity, high blood cholesterol, poor diet, depression, and excessive alcohol. A number of tests may help with diagnoses including: electrocardiogram, cardiac stress testing, coronary computer tomographic angiography, and coronary angiogram.[8] It makes up 15.6% of all deaths, making it the most common cause of death globally.[9]

Signs and symptoms are chest pain that occurs regularly with activity, after eating, or at other predictable times and is termed stable angina and is associated with narrowing's of the arteries of the heart.

Angina that changes in intensity, character or frequency is termed unstable. Unstable angina may precede myocardial infarction.

Coronary artery disease is the leading cause of death for both men and women. Evaluating effectiveness of alternative system in managing heart disease is essential. Studies are required to prove that homoeopathic system can be used in case of emergency management.

MATERIALS AND METHODS:

Study setting: S N Homoeo hospital, Kalavoor Alappuzha

Study duration: minimum one year and more

Study design: Descriptive study to estimate benefits of bothrops in treating ischaemic heart disease and the usage of medicines like Cratagues Q, Cal ars 3X, Ceonanthus Q, Galanthus nivalis 6 at appropriate times.

Selection of samples: Purposive sampling

Sample size: 10

Tools used:

- New York Heart Association (NYHA) functional classification of heart failure[10]
- Canadian cardiovascular society grading of angina pectoris[11]

Inclusion criteria

- Patients of age group between 50 and 80yrs, of both sexes previously diagnosed as having coronary artery disease.

Exclusion criteria

- Patients with other type of heart disease like valvular heart disease, cardiomyopathies, other debilitating diseases like malignancies

PROCEDURE

A total of 10 patients who were previously diagnosed as coronary artery disease with coronary angiography are selected from S N Homoeo Hospital Kalavoor Alappuzha. They were examined and a detailed case taking was done. The level of dyspnea in all the 10 patients were assessed by using NYHA Classification,(New York Heart Association) functional classification of heart failure) which is widely used in practice and in clinical studies. It is based on symptom severity and the amount of exertion needed to provoke symptoms. The occurrence of angina is graded by the CANADIAN CARDIOVASCULAR SOCIETY GRADING OF ANGINA PECTORIS, a classification system used to grade the severity of exertional angina.. The data was collected by random sampling technique as per the inclusion criteria and processed in our case record. The case was analyzed accordingly and totality was evolved. Medicines were prescribed mainly on the pathological base. Patients who were under modern system were advised to stop all medicines which were taken previously   The potency selection and repetition of the dose were done according to the demand of the case. Medicines like cratagues Q, cal ars 3x, ceonanthus Q and galanthus nivalia 6 were given in certain conditions appropriately. The patients were given one month medicine and was reviewed on each month. Each case was followed for a mimimum period of one year and more.

Data collection and assessment:

Datas were collected during case taking and assessment were done during the follow up period during every month

Statistical analysis

The parameters were assessed pre and during the treatment with the NYHA classification and Canadian cardiovascular grading of angina. Comparison and correlation of the parameters were done. Students paired t test was done to analyze means of NYHA and Angina score between the 2 groups.

RESULTS:

In this study all the 10 cases had improved in the NYHA classification in which 2 patients who had done angioplasty previously were on the same class 1 of NYHA. Regarding the   Canadian coronary society of angina grading all the 10 cases had shown effective improvement in the occurrence of angina.

Among the 10 patients 9 were males and 1 was female (Table: 1). The youngest was 51yrs of age and the eldest was of 74 yrs of age and the mean age was 61.80 with a standard deviation of 6.795. The duration of treatment was a minimum of 14 months and maximum of 74 months with a mean of 34.5 months and a standard deviation of 19.478. Among 10 patients 6 were not having any family history of CAD, 2 patients had family history of CAD in father and 2 patients had history of CAD in mother (Table: 3).

Among the 10 patient only 2 persons had an addiction of alcohol, 5 persons had an addiction of smoking . Among the 10 patients 6 patients were having hypertension, 6 were having T2 DM, 3 were having dyslipidaemia (Table: 4). Among the 10 patients 2 had done Angioplasty and opted for homoeopathic treatment. .3 patients were on allopathy treatment before and due to gastritis, preferred to continue with homoeopathy and the rest 5 had came for homoeopathic treatment soon after their angiography. Among the 10 patients 5 had Tripple Vessel disease, 3 had double vessel disease and 2 doesn't had the report of angiograph.

When a correlation was done between age and achievement of improvement in NYHA, it is found that age doesn't influence the achievement of improvement. Another correlation was done between age and occurrence of angina. It is found that age doesn't influence the occurrence of angina in patients. Similarly when a correlation was done between presence of family history and improvement in NYHA and occurrence of angina, it states that the presence or absence of family history of CAD doesn't influence the achievement of improvement in both NYHA and occurrence of angina.

The presence or absence of history of addiction (alcohol and smoking) doesn't influence the achievement of risk reduction in both nyha and occurrence of angina. A positive co relation was found between patients with hypertension and improvement in NYHA. Patients with hypertension had improved better in NYHA grading than patients without hypertension. This shows this mode of treatment is more effective in heart patients with hypertension. But the presence or absence of hypertension doesn't influence the occurrence of angina.

The correlation studies states that the presences of T 2 diabetes and dyslipidaemia doesnt influence the achievement of   improvement in NYHA classification and occurrence of angina. The correlation study between patients who had done angioplasty and NYHA improvement states   that patients undergone angioplasty had got a better improvement in NYHA classification and in occurrence of angina. Pretreatment NYHA mean was 3.3 and post treatment mean was 1. Pre treatment angina score mean was 2.7 and post treatment mean was 1.3.

TABLES

Table :1 Classification of cases based on gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	9	90.0	90.0	90.0
Female	1	10.0	10.0	100.0

Table:2 Classification of Cases based on past History

Medication	Frequency	Percent	Valid Percent	Cumulative Percent
ABSENT	5	50.0	50.0	50.0
PRESENT	5	50.0	50.0	100.0

Table:3 Cases differentiated based on family history of IHD

Family History	Frequency	Percent	Valid Percent	Cumulative Percent
ABSENT	6	60.0	60.0	60.0
PRESENT IN FATHER	2	20.0	20.0	80.0
PRESENT IN MOTHER	2	20.0	20.0	100.0

Table: 4 Cases classified based on comorbidities

Comorbidities	Frequency	Percent
Alcohol usage	2	80.0
Smoking	5	50.0
Hypertension	6	60.0
Dyslipidemia	3	30.0
Diabetes	6	60.0

Table : 5 Statistical significance: Paired Samples Test

		Paired Differences						
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	NYHA PRETREATMENT - NYHA POSTREATMENT	2.300	1.059	0.335	1.542	3.058	6.866	9	.0001
Pair 2	ANGINA SCORE PRETREATMENT - ANGINA SCORE POST TREATMENT	1.400	0.699	0.221	0.900	1.900	6.332	9	.0001

DISCUSSION:

In the present study, 9 patients   were males and 1 was female, this representation doesn't evidence contribution of gender in cardiovascular diseases. Also, Lifestyle risk factors show differences among age, gender, race, and ethnicity. Similarly risk factors like alcohol consumption and Cigarette smoking are common among men than women. Whereas less physical activity which contribute to rising rates of overweight and obesity, have shown a great influence in adding risk to CVD.[12,13] The two most common symptoms for men include angina (dulling chest pain) during physical activity and breathing problems. Women can suffer the same symptoms as men but also have an entirely different set of symptoms: angina during resting or sleeping, the location of pain is more likely to be in the neck and throat and be described as "crushing," mental stress, nausea, vomiting, shortness of breath, abdominal pain and sleep problems.[14] A positive family history is an established risk factor for ischaemic heart disease, the literature suggests that inherited factors are important in the development of premature ischaemic heart disease, and also with the presence of smoking habits.[15] Several studies showed that diabetes imposes a greater risk of heart disease in women than in men and that this risk is not explained after adjustment for smoking, hypertension, and hypercholesterolemia.[16-18] Framingham scale also shows that diabetes remained as a risk factor for IHD mortality in women, even after adjustment for HDL-C. Also low HDL-C and high VLDL-C contributed to IHD events in a population of subjects with NIDDM.[19,20] It is evidenced in studies conductes in various cardiology speciality that NYHA scores improves after treatment, which is also seen in present study.[21]

CONCLUSION

With the above results it can be concluded that Bothrops Lanceolatus is effective in treating coronary artery disease. The factor of age, addiction ,family history, presence of Diabetis and Dyslipidaemia doesn't influence the treatment. The cases with hypertension can be treated better. The presence or absence of previous treatment also will not influence the achievement of risk reduction.There is a significant reduction in the mean values of NYHA and Canadian Angina score after treatment with Bothrops in patients with CAD. This descriptive study can be considered as a pilot study and further study can be conducted with larger sample size and better tools like echocardiograph to show the effectiveness of Bothrops in treating ishaemic heart disease.

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