



STUDY OF INCIDENCE OF PRESENTING COMPLAINT IN CORONARY ARTERY DISEASE

General Medicine

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ABSTRACT

INTRODUCTION: The major symptoms associated with cardiac disease include chest discomfort, dyspnea, fatigue, oedema, palpitations and syncope. **AIMS AND OBJECTIVES:** Study of various presenting symptoms in coronary artery disease. **MATERIALS AND METHODS:** **Inclusion criteria:** Patients admitted in S.V.R.R.G.G. Hospital with the diagnosis of coronary artery disease. **Exclusion criteria:** Patients who are already having coronary artery disease before admission in this hospital. **RESULTS:** In this study the commonest presenting complaint in coronary artery disease was chest pain followed by breathlessness, fatigue, syncope and left upper limb pain. **CONCLUSION:** Coronary artery disease is the leading cause of death worldwide. To prevent mortality and morbidity from coronary artery disease, it is better to have knowledge of presenting complaint.

KEYWORDS

Chest pain, Syncope, Angina, Myocardial Infarction, Acute coronary syndrome.

INTRODUCTION

The most common cause of myocardial ischaemia is atherosclerotic disease of epicardial coronary arteries. Coronary artery disease (CAD) is the most common, serious, chronic life threatening illness in the United States, where more than 11 million persons have CAD¹. This condition causes more deaths, disability and economic costs than any other illness. The major symptoms associated with cardiac disease include chest discomfort, dyspnea, fatigue, oedema, palpitations and syncope. Some patients deny pain in form of discomfort, but the significance remains the same². Pain that is stabbing, pleuritic, postural or reproducible with palpation is usually noncardiac, when discomfort that radiates to one or both shoulders or is precipitated by exertion increases the likelihood of acute coronary syndromes³.

The New York Heart Association (NYHA) and Canadian Cardiological Society (CCS) functional classification systems have served for decades and remains useful for both patients and clinical research, despite their limitations^{4,5}. Afferent fibres, whose cell bodies are in the spinal ganglia of the upper four or five thoracic spinal nerves, travel in all the sympathetic cardiac nerves except the superior cervical. They subserve pain sensibility, and the severe pain of angina pectoris may be greatly relieved by surgical removal of the related sympathetic ganglia⁶.

Table 1
The characteristics of cardiac and non-cardiac chest pain

	Cardiac pain (Usually angina)	Non-cardiac pain (Usually musculoskeletal or gastro-oesophageal)
Descriptors of pain	Heavy, tight, pressure, dull	Sharp, stabbing, shooting, needle
	Band, squeezing	
Site	Central anterior	Left submammary
	Left arm, right arm, teeth	Right submammary
	Interscapular, epigastric	
Precipitants	Exercise, emotion	Stress
	Cold	Locally tender
	Post-prandial	Posture, particular movements of arms or neck
		Swallowing (odynophagia)

When a patient with heart disease is volume overloaded or when there is pulmonary congestion caused by heart disease, the patient is likely to complain of dyspnea. Cardiac syncope is defined as the transient loss of consciousness caused by inadequate blood flow secondary to an abrupt decrease in cardiac output. The common faint (vasovagal syncope) results from bradycardia and hypotension caused by excessive vagal discharge.

AIMS AND OBJECTIVES

To study the incidence of presenting complaints in coronary artery disease in patients admitted in SVRRGG Hospital, Tirupati.

MATERIALS AND METHODS

INCLUSION CRITERIA: Patients admitted in SVRRGG Hospital with the diagnosis of coronary artery disease based on clinical history, ECG findings and Echo findings. This study included 50 patients who are admitted in SVRRGG Hospital, Tirupati.

EXCLUSION CRITERIA: Patients who were already diagnosed as coronary artery disease patients before admission in this hospital.

All selected individuals were subjected to a detailed questionnaire, medical examinations and anthropometric measurements. Blood samples were collected for blood glucose and serum lipid profile estimation, and resting ECG, Echo are taken. Results were analyzed using appropriate statistical tools.

RESULTS

Table 2. Incidence of presenting complaints in CAD.

S.No	Presenting complaint	No. of patients (out of 50)	Percentage
1	Chest pain	30	60
2	Breathlessness	22	44
3	Fatigue	5	10
4	Syncope	4	8
5	Only left upper limb pain	2	4

In this study the presenting complaints of CAD were chest pain, breathlessness, fatigue, syncope and left upper limb pain. The commonest presenting complaint was chest pain (60%). The second commonest presenting complaint was breathlessness (44%), followed by fatigue (10%), and syncope (8%). In this study we observed only left upper limb pain without chest pain in 4% of cases.

DISCUSSION

In the second half of the 20th century, coronary vascular disease became the dominant cause of global mortality and a major contributor to disease related disability⁷. Chest pain is a common presentation of cardiac disease but can also be a manifestation of anxiety or disease of the lungs or musculoskeletal or gastrointestinal system⁸. In the evaluation of patients with definite or suspected heart disease, important information can be acquired from the history, physical examination, chest radiograph and other routine laboratory tests⁹.

In this study chest pain is the commonest presenting complaint (60%) followed by breathlessness (44%). In our study 10% of coronary artery disease patients presented with fatigue followed by 8% with syncope and 4% with left upper limb pain. CAD chest pain constricting

character suggests angina, a prolonged (more than half an hour) dull central constricting pain or pressure suggests myocardial infarction. Syncope may reflect cardiac or CNS events, chest pain, palpitations, dyspnea point to a syncope of cardiac cause¹⁰.

CONCLUSION

Coronary artery disease is the leading cause of death worldwide. But, if CAD is diagnosed early with immediate intervention mortality due to CAD will be reduced. For this purpose knowledge of commonest presenting complaints in CAD is essential. Hence all physicians should know that the commonest presenting complaints in CAD are chest pain, breathlessness and rarely syncope, fatigue and only left upper limb pain.

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