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# A QUALITATIVE ANALYSIS ON CARDIOLOGISTS REGARDING MANAGEMENT OF CHEST PAIN IN DEPARTMENT OF A TERTIARY CARE HOSPITAL OF RANCHI, JHARKHAND.



# **Community Medicine**

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# **ABSTRACT**

**Background**- Chest pain is a common challenge for clinicians in the OPD or emergency department.

Aim and objectives-1. To assess cardiologists insight on chest pain. 2. To find out quick management of chest pain.

Material and methods-It was a qualitative study. Total duration of study was 3 months (July 2017-Sep 2017), conducted in Cardiology department of RIMS and R.P.S Super-speciality Hospital, Ranchi. A total of five cardiologist were selected and in depth interview was taken after getting their written consent.

Results- All the cardiologists stated that chest pain is a non-specific symptom. It may be of cardiac or non – cardiac origin. It differs from severe form to relatively less harmful form .Character of IHD related pain is retro-sternal, heaviness and vague, may be radiating to left arm, throat or back persisting for more than 5 mins associated with perspiration, dyspnoea, dizziness as told by most of the cardiologists. Majority agreed on that fact that clinical history is very important in diagnosis and evaluation of chest pain. Various investigation like ECG, Echocardiography, cardiac enzymes estimation (troponin T and I, CKMB), chest X-ray, USG abdomen, coronary angiography, Blood investigation (Hb, creatinine, BUN) could be done. Treatment for cardiac chest pain include aspirin, nitroglycerine, beta blocker, morphine, statins, streptokinase, low molecular weight heparin e.t.c depending upon the condition.

Conclusion- The management of chest pain requires proper clinical history and screening by ECG and ECHO as early as possible

## **KEYWORDS**

Chest Pain, Cardiologist.

#### Introduction-

Chest pain is a common challenge for clinicians in the OPD or emergency department. Cardiologists face the difficult task of rapidly distinguishing cardiac-related chest pain from other conditions, and to thoroughly consider whether invasive diagnostic procedures or treatments are indicated. In emergency departments, roughly 60% to 90% of the patients presenting with chest pain have no underlying cardiovascular disease<sup>3</sup>. Approximately 8 billion dollars are used annually in U.S. to evaluate complaints of chest pain<sup>2</sup>. Chest pain is commonly been related to cardiac causes. Little is known about the prevalence and importance of non-cardiac chest pain in the general population. Various cardiac causes include angina pectoris, heart attack, pericarditis, aortic dissection and amongst the pulmonary causes are pulmonary embolism, pulmonary hypertension, pleurisy and collapsed lung. Gastro-esophageal disease, esophageal spasm, psychiatric disease (panic attacks) and musculoskeletal pain explain many cases of non-cardiac chest pain. 4 Patients presenting with chest pain to the emergency department should, therefore, be stratified according to their level of risk of having a cardiac condition. 5 Classical considerations for risk stratification are History, ECG, Age, Risk factors and Troponin (HEART). With these facts in mind the present study was conducted with the following aim and objectives-

- 1. This research attempts to get cardiologists' insight on chest pain.
- 2. Our research aims for a quick management of chest pain.

## Material and methods-

Study design- Qualitative study.

Study duration-3 months (July 2017-Sep 2017).

Study place- Cardiology department of RIMS and R.P.S Superspeciality Hospital, Ranchi

Sample size-5 cardiologists.

*Method of study*: In depth interview(IDI)

Ethical clearance-It was taken from IEC(Institutional ethical committee) of RIMS, Ranchi.

# **GUIDELINES (For In Depth Interview)**

- What is your opinion on chest pain?
- From the point of view of a cardiologist, what is the presentation of a cardiac-related chest pain? How it differs from non-cardiac cases?
- What do you do when a non-cardiac case comes to you?
- How do you manage a case of chest pain?
- What is your advice to the general public suffering from chest pain?
  - How would you counsel the patient and the attendant?

Results- response to guidelines by cardiologists were as follows-

#### Opinion on chest pain

All the cardiologists stated that chest pain is a non-specific symptom. It may be of cardiac or non—cardiac origin. It differs from severe form to relatively less harmful form .Cardiac causes are Ischemic heart disease (Stable angina, unstable angina, MI), Non-Ischemic heart disease (RHD, Endocarditis, Pericarditis, Pancarditis, Aortic dissection, Mitral valve prolapse), Pulmonary causes are Pneumonia, Pleuritis, Pneumothorax, COPD. Gastrointestinal causes include GERD, Oesophagitis, Cholecystitis, Peptic ulcer, Pancreatitis. Other causes are Tietze syndrome, Manchaussen syndrome, Herpes zoster infection. Age related factors like in old age IHD is common. In young age-aortic stenosis and RHD are most common.

One of them quoted that "chest pain is the only symptom which brings a patient to the doctor".

# Presentation of a cardiac-related chest pain

In general, chest discomfort related to a heart attack or another heart problem may be described by or associated with one or more of the following: Pressure, fullness or tightness in your chest, crushing or searing pain that radiates to your back, neck, jaw, shoulders and arms — particularly your left arm. Pain that lasts more than a few minutes, gets worse with activity, goes away and comes back or varies in intensity, Shortness of breath, Cold sweats, dizziness or weakness, Nausea or vomiting. Character of IHD related pain are retro-sternal in localization. "Pain with heaviness on chest, may be radiating to left arm, throat or back persisting for more than 5 mins associated with perspiration, dyspnoea, dizziness as told by one of the cardiologists".

## Presentation of non-cardiac chest pain

Sudden and pin point localisation with many symptoms associated with their root cause. Approach to a non-cardiac case determine the nature of the disease of patient according to character of chest pain, location of chest pain, duration of chest of chest pain, elevating factors accordingly the patient is referred to the respective department. One of them quoted that "sometimes it is very confusing to differentiate cardiac vs non cardiac pain on the basis of only clinical presentation".

### Management of chest pain

Majority agreed on that fact that clinical history is very important in diagnosis and evaluation of chest pain. Investigation ECG, Echocardiography, cardiac enzymes(troponin T and I,CKMB), chest

X-ray, USG abdomen, coronary angiography, Blood investigation (Hb, creatinine, BUN) Treatment of cardiac chest pain include aspirin, nitroglycerine, beta blocker, morphine, statins, streptokinase, low molecular weight heparin Treatment of non-cardiac chest pain NSAIDS [for musculoskeletal and traumatic pain], antacids [ for peptic disease], chest tube [for pneumothorax].

## Advice to general public suffering from chest pain

One of them quoted that "Time is muscle" more the time is lost, more is the muscle damage so earlier the treatment better the prognosis. If risk factors are present with central chest pain which does not relieve in 5-10 min then must consult the physician. Chest pain should never be dealt on phone. Control hyperglycemia, hypertension, weight management with diet and exercise. Everybody agreed that screening should be done on time Health education and awareness is also very important. Patient should not ignore tests prescribed after symptomatic relief.

#### Counseling of the patient and the attendant

Patient is advised not to panic and take medication as prescribed as they face most difficulty when patients do not complete the drug course or take all the tests. They recommend DASH diet. Most of them quoted that "we should counsel the patient about the nature of disease he suffered and to take medicine regularly"

#### Conclusion-

From this study we conclude that-- Chest pain is non specific, it may arise from cardiac , pulmonary , gastrointestinal or other cause. Cardiac related chest pain mainly presents with heaviness, radiating pain with dyspnoea and dizziness. The management of chest pain requires proper clinical history and screening by ECG and ECHO as early as possible. When a non cardiac case comes, they must be carefully examined and sent to the respective department. Cardiologists advice that weight management and regular exercise must be done by people suffering from chest pain.

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