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A STUDY ON TREATMENT PATTERNS OF REVASCULARISATION AND ITS IMPACT IN SINGLE AND DOUBLE VESSEL DISEASE AT TERTIARY CARE HOSPITAL

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ABSTRACT

Background: Myocardial Infarction (MI) is defined pathologically as the irreversible death of myocardial cells caused by ischemia. MI is a syndrome that can be recognized by a set of symptoms, chest pain dizziness, nausea, sweating, and anxiety. Smoking and high cholesterol levels are the major risk factors for myocardial infarction. **Objectives:** This was a prospective observational study with the aim to study the treatment patterns of revascularisation in patients of single and multi vessel disease in myocardial infarction at tertiary care hospital**. Materials and methods:** A total 110 patients has been conducted and data was collected from male and female patients with Myocardial Infarction were included and pregnant, paediatrics was excluded. The patient's case records, medication charts, lab reports with a suitably designed patient profile were used to collect required information. The results were generated using percentage calculations and graphs. **Results:** -Based on the percentage of Stenosis and length of vessel the Revascularization procedure was done in our study and Based on the percentage of Stenosis the patients who underwent Revascularization Procedures are PTCA 63% and CABG 24% and Medical Management 13%. **Conclusion:** Myocardial Infarction was seen more in males (69%) and at an age group of above 50 years and STEMI was mostly seen in our study. In our study the occurrence of Double vessel disease was more, followed

by Single Vessel disease and Triple vessel disease. Treatment Patterns of Revascularization was followed as per the guidelines of American Heart Association.

KEYWORDS: Myocardial Infarction, Revascularization, Percutaneous transluminal coronary angioplasty, Coronary Artery Bypass Grafting.

INTRODUCTION

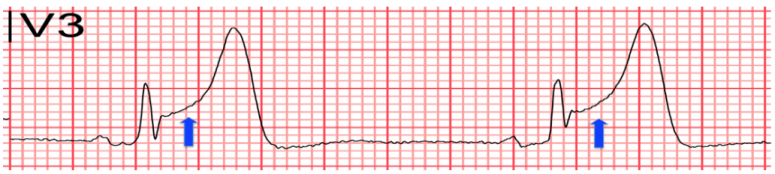
1.1. DEFINITION

MYOCADIAL INFARCTION, commonly known as a heart attack, it is defined pathologically as the irreversible death of myocardial cells caused by ischemia. Clinically, mi is a syndrome that can be recognized by a set of symptoms, chest pain being the hallmark of these symptoms in most cases, supported by biochemical laboratory changes, electrocardiographic (ECG) changes, or findings on imaging modalities able to detect myocardial injury and necrosis.[1]

1.2. TYPES OF MI

1.2.1. STEMI

ST-Elevation Myocardial Infarction is a very serious type of heart attack during which one of the heart's major arteries (one of the arteries that supplies oxygen and nutrient-rich blood to the heart muscle) is blocked. ST-segment elevation is an abnormality detected on the 12-lead ECG.



Electrocardiogram with ST-segments elevated. It is a profoundly life-threatening medical emergency and usually associated with a disease process called atherosclerosis (coronary artery disease).

The STEMI is further divided into

1.2.1.1. TYPE 1: Anterior Wall Myocardial Infarction

- It is also known as anterior wall MI, or AWMI, or anterior ST segment elevation MI, or anterior STEMI.
- It occurs when anterior myocardial tissue usually supplied by the left anterior descending coronary artery suffers injury due to lack of blood supply. When an AWMI extends to the

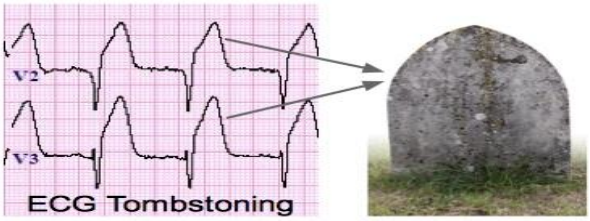
septal and lateral regions as well, the culprit lesion is usually more proximal in the LAD or even in the left main coronary artery.

- This large anterior myocardial infarction is termed an extensive anterior.

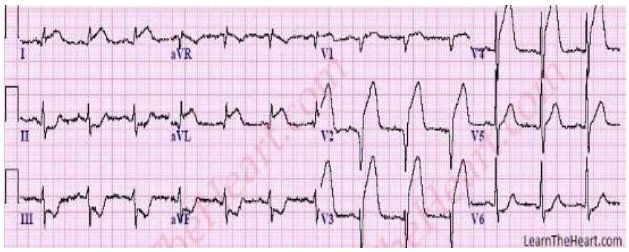
The ECG findings of an acute anterior myocardial infarction wall include

- ST segment elevation in the anterior leads (V3 and V4) at the J point and sometimes in the septal or lateral leads, depending on the extent of the MI. This ST segment elevation is concave downward and frequently overwhelms the T wave. This is called "tombstoning" and the shape is similar to that of a tombstone.[2]

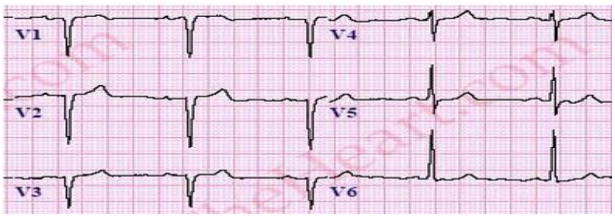
Patterns of revascularization and its impact in Patients



- Reciprocal ST Segment depression in the inferior leads (II, III and aVF).
- According to the American College of Cardiology/American Heart Association guidelines for STEMI, there must be "new ST segment elevation at the J point in at least two contiguous leads of ≥ 2 mm (0.2 mV) in men or 1.5 mm (0.15 mV) in women in leads V2-V3 and/or of ≥ 1 mm (0.1 mV) in other contiguous chest leads or the limb leads." This means 1 millimeter in any two contiguous leads, except leads V2 or V3, where the elevation must be 2 mm in men or 1.5 mm in women.



- The ECG findings of an old anterior wall MI include the loss of anterior forces, leaving Q waves in leads V1 and V2. This is a cause of **poor R wave progression**, or PRWP.



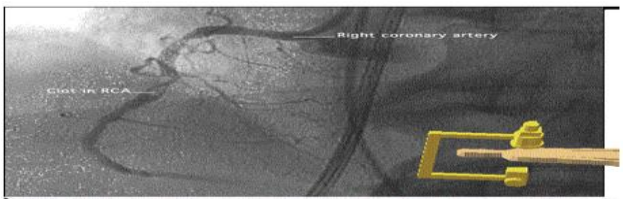
1.2.1.2. Type 2: Inferior St Segment Elevation Myocardial Infarction

It is also known as IWMI, or inferior MI, or inferior ST segment elevation MI, or inferior STEMI

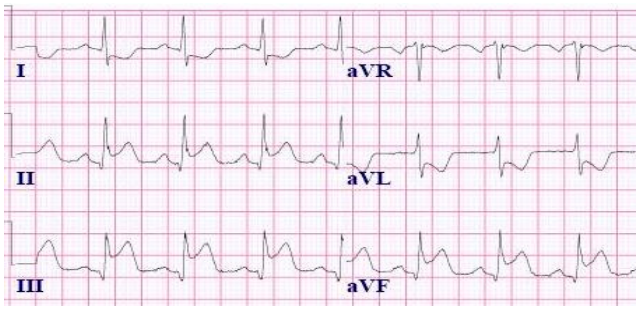
- It occurs when inferior myocardial tissue supplied by the right coronary artery, or RCA, is injured due to thrombosis of that vessel.
- When an inferior MI extends to posterior regions as well, an associated posterior wall MI may occur.

The ECG findings of an acute inferior myocardial infarction include the following

- ST segment elevation in the inferior leads (II, III and aVF).
- Reciprocal ST Segment depression in the lateral and/or high lateral leads (I, aVL, V5 and V6)[3.]



Inferior STEMI

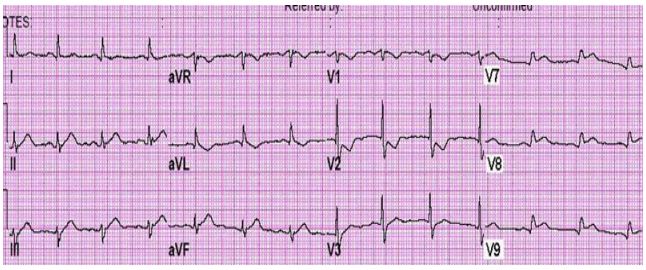


1.2.1.3. Type 3: Posterior St Segment Elevation Myocardial Infarction

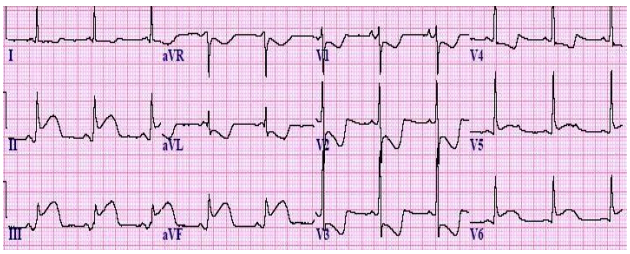
The ECG findings of a posterior wall myocardial infarction are different than the typical ST segment elevation seen in other myocardial infarctions. A posterior wall MI occurs when posterior myocardial tissue (now termed inferobasilar), usually supplied by the posterior descending artery — a branch of the right coronary artery in 80% of individuals — acutely loses blood supply due to intracoronary thrombosis in that vessel. This frequently coincides with an inferior wall MI due to the shared blood supply.

The ECG findings of an acute posterior wall MI include the following

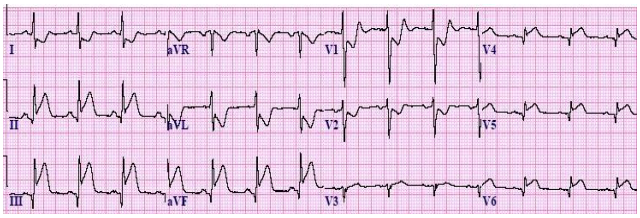
- ST segment depression (not elevation) in the septal and anterior precordial leads (V1-V4). This occurs because these ECG leads will see the MI backwards; the leads are placed anteriorly, but the myocardial injury is posterior.
- An R/S wave ratio greater than 1 in leads V1 or V2.
- ST elevation in the posterior leads of a posterior ECG (leads V7-V9). Suspicion for a posterior MI must remain high, especially if inferior ST segment elevation is also present.
- ST segment elevation in the inferior leads (II, III and aVF) if an inferior MI is also presents.[4]



1.2.1.4. Inferior-posterior STEMI example 1



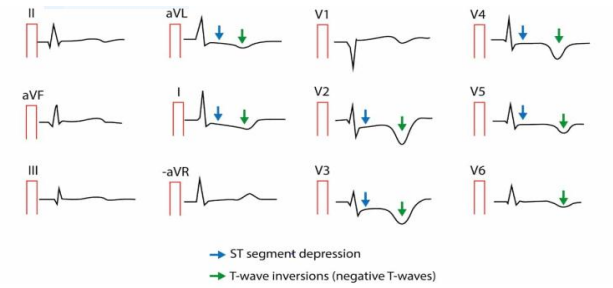
Inferior-posterior STEMI example 2



1.2.2. NSTEMI: NON STEMI segment elevation

- In NSTEMI the absence of ST- segments elevation and the presence of positive cardiac biomarker such as Troponin.
- No progression to Q wave.
- Partial blockage of the coronary artery.

NSTEMI



1.3. ETIOLOGY

Several factors may lead to a blockage in the coronary arteries.

- Smoking
- High amounts of certain fats and cholesterol in blood.
- Bad cholesterol can stick to the walls of your arteries and produce plaque.
- High blood pressure.

The fats include Saturated fats and Trans fats. These fats may lead to an arterial blockage by increasing the amount of bad cholesterol in your blood system and reducing the amount of good cholesterol which further leads to build-up of plaques in the coronary arteries. These saturated fats are available in beef; butter and cheese whereas Trans fat are found or available in hydrogenated oil or partially hydrogenated oil.

- Family history
- High amount of sugar in the blood due to insulin resistance or diabetes[5].

1.4. EPIDEMIOLOGY

- Coronary artery disease is the leading cause of death in the United States; approximately 500,000-700,000 deaths related to cad occur each year, making it the cause of death in an estimated one third of all deaths in the population for those older than 35 years.
- Approximately 1.5 million cases of myocardial infarction occur annually in the United States; the yearly incidence rate is approximately 600 cases per 100,000 people.
- The death rate related to acute mi is approximately three times higher in men than in women.

1.5. DIAGNOSIS

- Regular physical examination.

- **Electrocardiogram:** This first test done to diagnose a heart attack records the electrical activity of your heart via electrodes attached to your skin.
- Because injured heart muscle doesn't conduct electrical impulses normally, the ECG may show that a heart attack has occurred or is in progress.

- **Blood tests:** Certain heart proteins slowly leak into your blood after heart damage from a heart attack. Emergency room doctors will take samples of your blood to test for the presence of these enzymes.

1.5.1. ADDITIONAL TESTS

- **Chest x-ray.** An x-ray image of your chest allows your doctor to check the size of your heart and its blood vessels and to look for fluid in your lungs.
- **Echocardiogram.** An echocardiogram can help identify whether an area of your heart has been damaged and isn't pumping normally.
- **Coronary catheterization (angiogram).** A liquid dye is injected into the arteries of your heart through a long, thin tube (catheter) that's fed through an artery, usually in your leg or groin, to the arteries in your heart. The **dye makes the arteries visible on x-ray, revealing areas of blockage.**
- **Exercise stress test.** In the days or weeks after your heart attack, you might also have a stress test to measure how your heart and blood vessels respond to exertion.
- You might walk on a treadmill or pedal a stationary bike while attached to an ECG machine. Or you might receive a drug intravenously that stimulates your heart similar to the way exercise does.

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- **Cardiac CT or MRI.** An x-ray tube inside the machine rotates around your body and collects images of your heart and chest.

In a cardiac MRI, you lie on a table inside a long tube like machine that produces a magnetic field. The magnetic field aligns atomic particles in some of your cells. When radio waves are

broadcast toward these aligned particles, they produce signals that vary according to the type of tissue they are. The signals create images of your heart.[5]

- **Metabolic syndrome.** This occurs when you have obesity, high blood pressure and high blood sugar. Having metabolic syndrome makes you twice as likely to develop heart disease as if you don't have it.
- **Family history of heart attack.** If your siblings, parents or grandparents have had early heart attacks (by age 55 for male relatives and by age 65 for female relatives), you might be at increased risk.
- **Lack of physical activity.** Being inactive contributes to high blood cholesterol levels and obesity. People who exercise regularly have better cardiovascular fitness, including lower high blood pressure.
- **Stress.** You might respond to stress in ways that can increase your risk of a heart attack.
- **Illicit drug use.** Using stimulant drugs, such as cocaine or amphetamines, can trigger a spasm of your coronary arteries that can cause a heart attack[7].

1.8. SYMPTOMS

- Shortness of breath
- Pressure, tightness, or discomfort, in your chest.
- Pain or discomfort in your jaw, neck,

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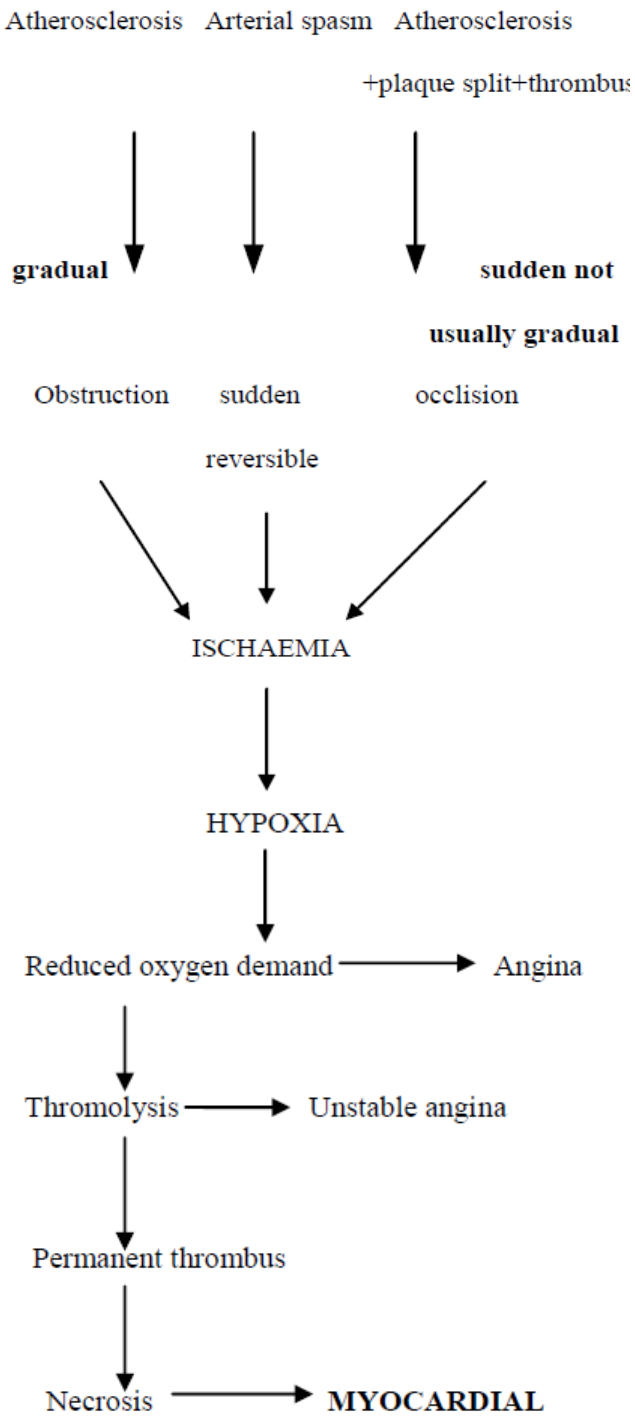
- Dizziness
- Light-headedness
- Nausea
- Sweating are symptoms of NSTEMI
- Palpitations
- Sweating (unexplained by ambient temperature)
- Anxiety or a feeling of impending doom {an extreme bad going to happen}.[8]

1.9. COMPLICATIONS

- **Abnormal heart rhythms (arrhythmias).** Electrical "short circuits" can develop, resulting in abnormal heart rhythms, some of which can be serious, even fatal.
- **Heart failure.** An attack might damage so much heart tissue that the remaining heart muscle can't pump enough blood out of your heart. Heart failure can be temporary, or it can be a chronic condition resulting from extensive and permanent damage to your heart.

PATHOPHYSIOLOGY



1.7. RISK FACTORS

- **Age.** Men age 45 or older and women age 55 or older are more likely to have a heart attack than are younger men and women.
- **Tobacco.** This includes smoking and long-term exposure to second hand smoke.
- **High blood pressure.** Over time, high blood pressure can damage arteries that feed your heart. High blood pressure that occurs with other conditions, such as obesity, high cholesterol or diabetes, increases your risk even more.
- **High blood cholesterol or triglyceride levels.** A high level of low-density lipoprotein (LDL) cholesterol (the "bad" cholesterol) is most likely to narrow arteries. A high level of triglycerides, a type of blood fat related to your diet, also ups your risk of heart attack. However, a high level of high-density lipoprotein (HDL) cholesterol (the "good" cholesterol) lowers your risk of heart attack.
- **Obesity.** Obesity is associated with high blood cholesterol levels, high triglyceride levels, high blood pressure and diabetes. Losing just 10 percent of your body weight can lower this risk, however.
- **Diabetes.** Not producing enough of a hormone secreted by your pancreas (insulin) or not responding to insulin properly causes your body's blood sugar levels to rise, increasing your risk of heart attack.
- **Metabolic syndrome.** This occurs when you have obesity, high blood pressure and high blood sugar. Having metabolic syndrome makes you twice as likely to develop heart disease as if you don't have it.
- **Family history of heart attack.** If your siblings, parents or grandparents have had early heart attacks (by age 55 for male relatives and by age 65 for female relatives), you might be at increased risk.
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- **Sudden cardiac arrest.** Without warning, your heart stops due to an electrical disturbance that causes an arrhythmia. Heart attacks increase the risk of sudden cardiac arrest, which can be fatal without immediate treatment.[9]

1.10. TREATMENT

GOALS OF TREATMENT

- To maintain the patient quality of life
- Prevent the complications.

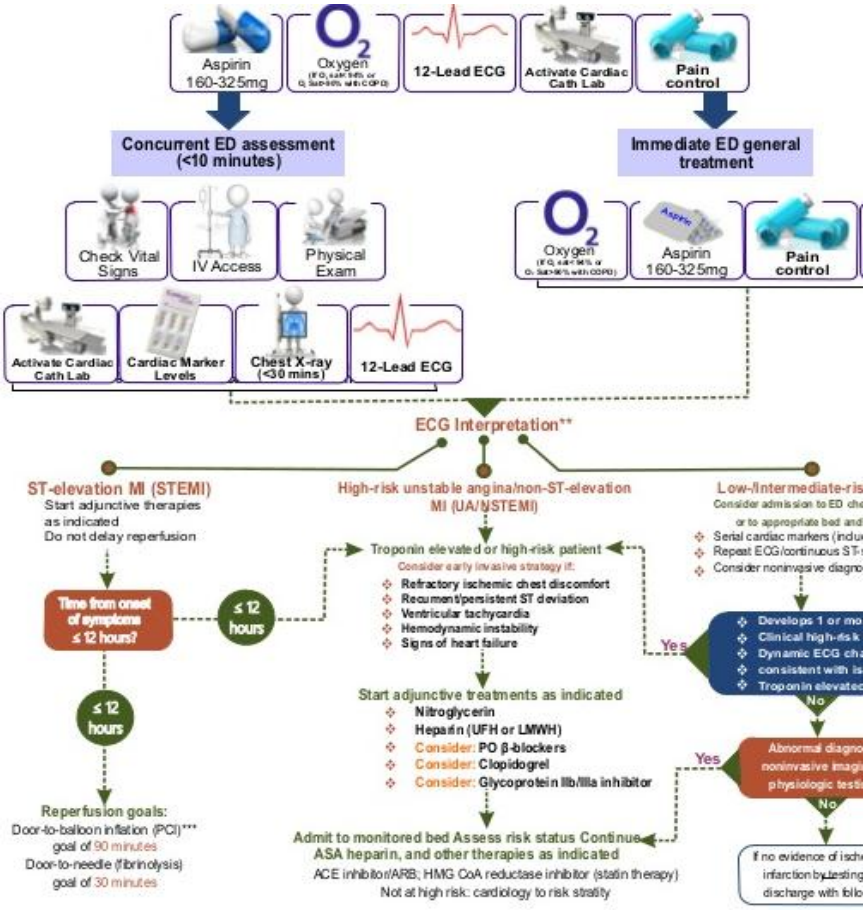
1.10.1. NON PHARMACOLOGICAL TREATMENT

Avoid smoke. The most important thing you can do to improve your heart's health is to not smoke

- **Get regular medical checkups**. Some of the major risk factors for heart attack — high blood cholesterol, high blood pressure and diabetes.
- **Exercise.** Walking 30 minutes a day, five days a week can improve your health.
- **Maintain a healthy weight.** Excess weight strains your heart and can contribute to high cholesterol, high blood pressure and diabetes.

- **Control stress.** Reduce stress in your day-to-day activities. Rethink work alcoholic habits and find healthy ways to minimize or deal with stressful events in your life.

1.10.2. STANDARD TREATMENT



1.10.3. PHARMACOLOGICAL TREATMENT

- **Aspirin.** Aspirin reduces blood clotting, thus helping maintain blood flow through a narrowed artery.
- **Thrombolytic.** These drugs, also called clot-busters, help dissolve a blood clot that's blocking blood flow to your heart.
- **AntiPlatelet agents.** Emergency room doctors may give you other drugs known as platelet aggregation inhibitors to help prevent new clots and keep existing clots from getting larger.

Other blood-thinning medications

- You'll likely be given other medications, such as heparin, to make your blood less "sticky" and less likely to form clots. Heparin is given intravenously or by an injection under your skin. **Pain relievers.** You might be given a pain reliever, such as morphine.

- **Nitro-glycerine.** This medication, used to treat chest pain (angina), can help improve blood flow to the heart by widening (dilating) the blood vessels.
- **Beta blockers.** These medications help relax your heart muscle, slow your heartbeat and decrease blood pressure, making your heart's job easier. Beta blockers can limit the amount of heart muscle damage and prevent future heart attacks.
- **ACE inhibitors.** These drugs lower blood pressure and reduce stress on the heart.
- **Statins.** These drugs help control your blood cholesterol.

1.10.4. SURGICALPROCEDURE/ REVASCULARISATION

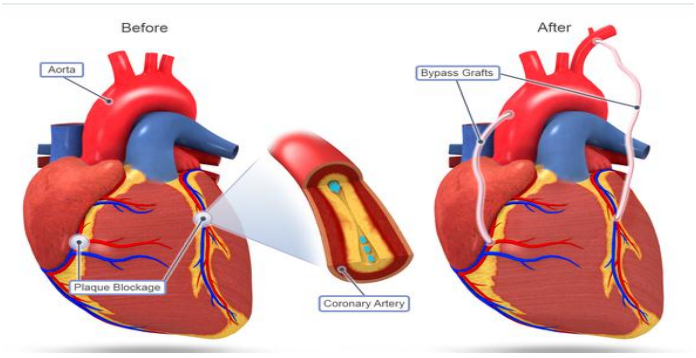
Revascularization: restoration of perfusion to a body part or organ that has suffered ischemia. There are 3 types of revascularization

- Vascular bypass
- Angioplasty.
- Medical Management

1.10.4.1 Medical Management

- In Medical Management to improve the patient quality of life with the help of this drugs such as
- Clopidogrel, Atorvastatin, Aspirin, Beta Blockers.
- In some cases of LVD dysfunction Lasix and Fruselac are prescribed in order to improve patient QOL.

1.10.4.2 Vascular bypass: CABG: a surgical procedure performed to redirect blood flow from one area to another by reconnecting blood vessels.



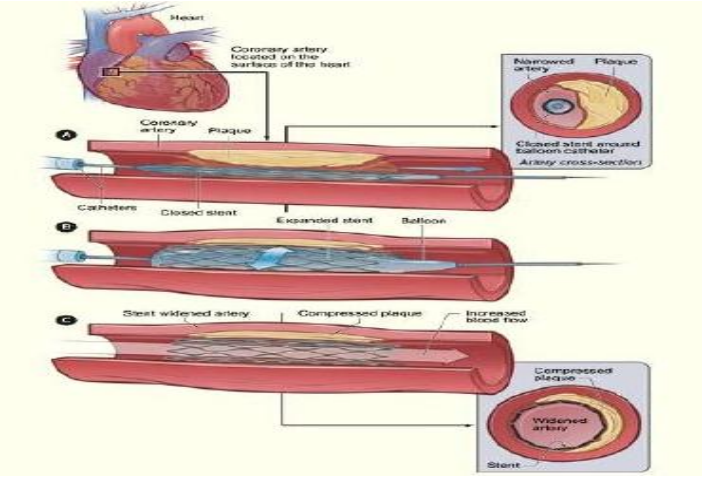
CABG

1.10.3. Angioplasty: PTCA (Percutaneous transluminal coronary angioplasty) a procedure to restore blood flow through artery. The doctor threads a thin tube through a blood vessel in the

arm or groin up to the involved site in the artery and insert a thin tube into the artery into arm or leg and gently guide towards the problem area in your heart once the tube is in place a small balloon is briefly inflated in order to widen the narrowed artery a short length of mesh tubing called a stent is then inserted into the newly widened artery.

Types of angioplasty

- Balloon angioplasty
- Carotid artery angioplasty(groin to carotid arteries)
- Cerebral angioplasty
- Coronary artery stent
- Laser angioplasty, PTCA OF Femoral artery



PTCA

NEED OF THE STUDY

- To study the undeniable impact on QOL.
- Study patterns of Revascularisation.

AIM

To study Patterns of Revascularisation and its impact in single and Multi vessel disease of Myocardial Infarction at tertiary care hospital.

OBJECTIVES

1. To evaluate patterns of Revascularisation.
2. To evaluate its impact of Quality of life in Revascularization Patients.

METHODOLOGY

Materials

- Patient documentation form
- Plan on primary consultant
- Medication chart
- Discharge summary
- Quality of life questionnaire

Methods

Study design and study period:

It is a prospective observational study conducted over a period of 6 months.

Study site

The study was conducted in Sri Vijaya Durga hospital, Kurnool in the department of Cardiology.

Sample size

Total numbers of 110 patients were recruited from the departments of Cardiology, in Sri Vijaya Durga hospital, Kurnool.

STUDY CRITERIA

Inclusion criteria

All individuals eligible for participation are men and women with age groups of 20-85 with Myocardial infarction.

Exclusion criteria

- Pregnant women
- Paediatrics.

Ethical clearance

The study was conducted after obtaining the permission of institutional ethics and committee.

RESULTS

The study was carried out for a period of six months in Sri Vijaya Durga hospital in Kurnool. The study has provided a picture quality of life in MI patients.

Table 7.1: Representing Percentage of different Age groups in Male and Female Suffering from Myocardial Infarction.

AGE	MALE	FEMALE
21-30	4	1
31-40	13	4
41-50	13	11
51-60	26	17
61-70	16	1
71-80	3	0
81-90	1	0

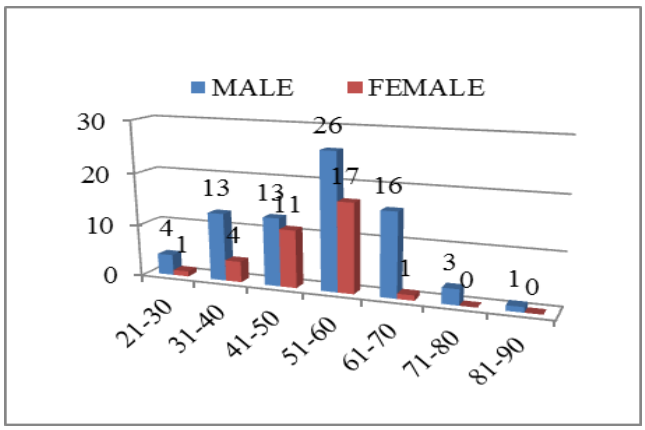


Figure 7.1: A. Representing Percentage of different Age groups in Male and Female Suffering from Myocardial Infarction.

Table 7.2: Representing Age wise distribution in STEMI and NSTEMI.

AGE	STEMI	NSTEMI
21-30	3	2
31-40	14	3
41-50	19	5
51-60	34	9
61-70	11	6
71-80	3	0
81-89	0	1

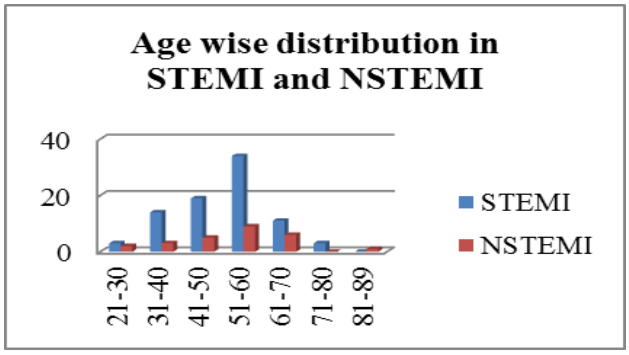


Figure 7.2: A. Representing Age wise distribution in STEMI and NSTEMI.

In our study the STEMI is more than NSTEMI. And the prevalence of STEMI is more at an age group of 50-59 years.

Table.7.3: Representing Gender wise distribution in STEMI and NSTEMI.

Gender	Stemi	Nstemi
Males	57	19
females	27	7

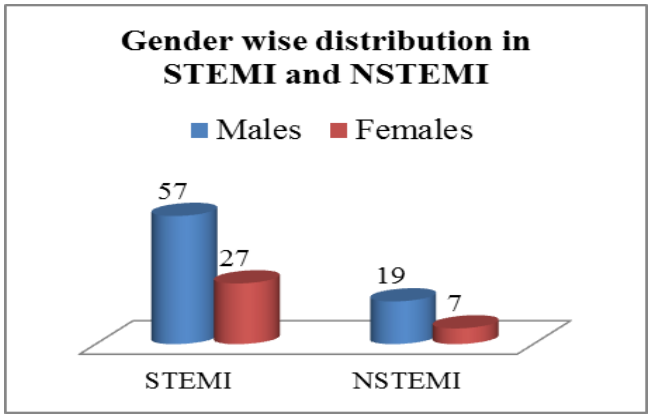


Figure.7.3.A Representing Gender wise distribution in STEMI and NSTEMI.

The occurrence of STEMI was more than NSTEMI and was seen more in Males when compare to females i.e., STEMI 57% (males) and NSTEMI 19%, Females STEMI 27 % (females) and NSTEMI 7%.

Table.7.4. Representing Myocardial Infarction patients with co morbidities.

DM	HTN	Both	None
30	26	34	20

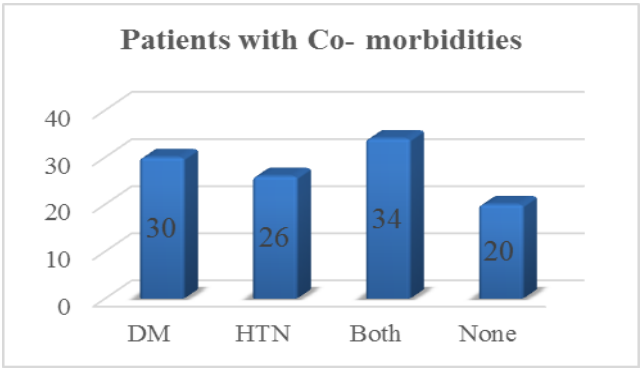


Figure.7.4.

Various co morbidities like Diabetes mellitus and hypertension were seen among the patients and many of these were found to be risk factors of Myocardial Infarction. Hypertension (25%) and Diabetes (29%).

Table.7.5. Representing Myocardial Infarction patients with Social habits.

Smokers	Alcoholic	Both	None
43	3	29	35

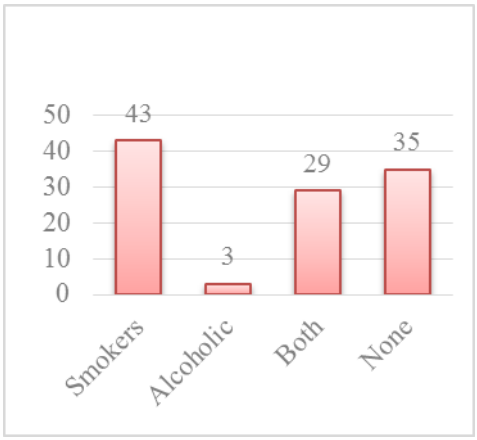


Figure.7.5.A. Representing Myocardial Infarction patients with Social habits.

Smoking was also found to be strong contributing factor which comprises of 43% of the population and alcohol with a percentage of 3%.

Table: 7.6. Representing percentage of occurrence of disease in Single and Multi-vessel disease in Myocardial Infarction.

DISEASE	SVD	DVD	TVD
STEMI	26	38	20
NSTEMI	9	11	6

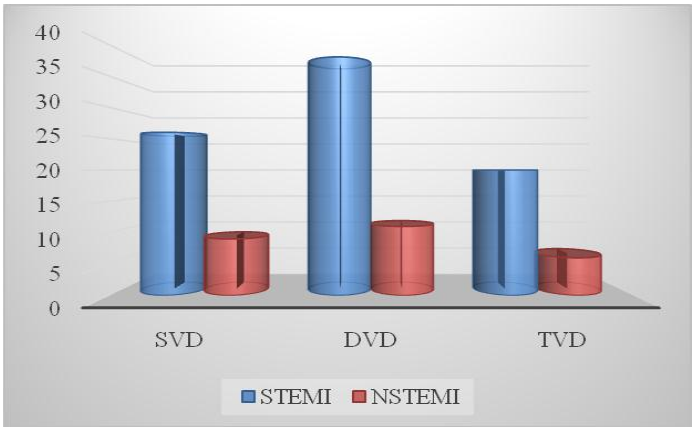


Figure 7.6.

In our study, The occurrence of DVD was more and is mostlly seen in STEMI, followed by SVD in STEMI.

Table:7.9. Representing QOL of patients Before and After revascularization in PTCA.

	BEFORE				AFTER			
Age	**None**	**Mild**	**Mod**	**Sev**	**None**	**Mild**	**Mod**	**Sev**
21-30	0	0	2	0	0	0	0	0
31-40	0	1	9	0	1	9	0	0
41-50	0	0	16	1	4	10	3	0
51-60	0	3	34	0	2	18	8	0
61-70	0	1	9	0	1	8	1	0
71-80	0	0	2	0	0	2	0	0
81-90	0	0	0	0	1	0	0	0

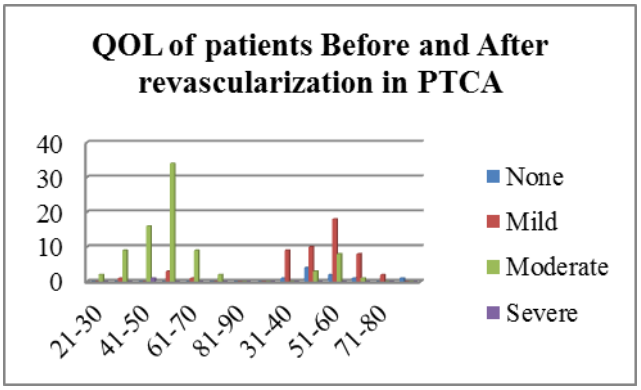


Figure 7.9.: A Representing QOL of patients Before and After revascularization in PTCA.

Figure.7.9

In PTCA the QOL before Revascularization the scoring (Moderate) was 10% and (Mild) 9% at an age of 50-59 years whereas after revascularization it shows an improved QOL

Table 7.10.: Representing QOL of patients Before and After revascularization in CABG.

	BEFORE				AFTER			
Age	**None**	**Mid**	**Mod**	**Sev**	**None**	**Mild**	**Mod**	**Sev**
21-30	0	1	1	0	1	1	0	0
31-40	0	0	3	1	2	2	0	0
41-50	0	1	3	0	2	2	0	0
51-60	0	0	5	2	2	5	0	0
61-70	0	1	3	1	2	3	0	0
71-80	0	1	3	0	3	1	0	0
81-90	0	0	1	0	0	1	0	0

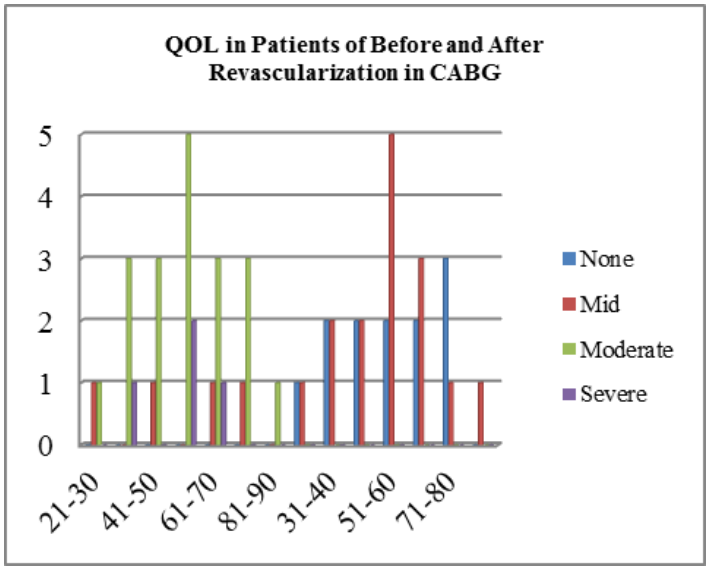


Figure 7.10. A. Representing QOL of patients Before and After revascularization in CABG

In CABG the QOL before Revascularization the scoring (Moderate) was 5% and (Mild) 2% at an age of 51-60 years whereas after revascularization it shows an improved QOL with a percentage of (Mild) 5% and (None) was 2%. And in 41-50 years before revascularization the percentage was 3% (Moderate) and Mild was 1%, after revascularization the percentage was 2% (Mild) and 2% (None).

Figure:7.11. Representing QOL of patients Before and After revascularization in Medical Management.

Age	None	Mild	Mod	Sev	None	Mild	Mod	Sev
21-30	0	2	0	0	1	1	0	0
31-40	0	3	0	0	1	2	0	0
41-50	0	2	0	1	1	1	0	0
51-60	0	2	0	0	1	1	0	0
61-70	0	2	0	0	2	0	0	0
71-80	0	2	0	0	0	2	0	0
81-89	0	1	0	0	1	0	0	0

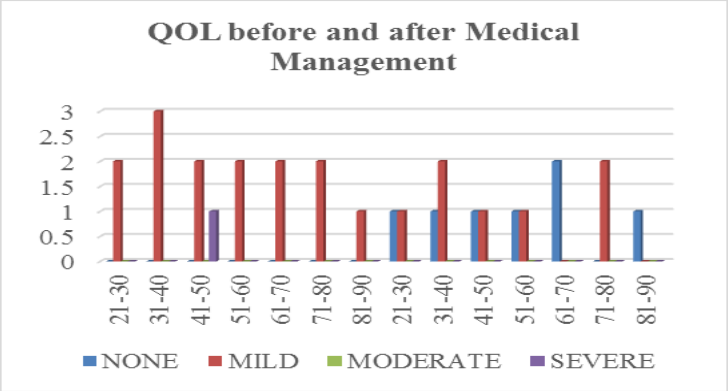


Figure: 7.11.A Representing QOL of patients Before and After revascularization in Medical Management.

In Medical Management the QOL can be improved with the help of this drugs such as Clopidogrel, Atorvastatin, Aspirin, Beta Blockers, in some cases of LVD dysfunction Lasix and Fruselac are prescribed in order to improve QOL.

DISCUSSION

Myocardial Infarction is mainly triggered by many risk factors such as high blood pressure, high cholesterol, obesity, or diabetes, which can be controlled through a healthy diet, regular exercise and by avoiding smoking and alcohol. This study states that hypertension and diabetes were the most common co-morbid conditions associated with Myocardial Infarction. In the present study, Myocardial Infarction was seen more in males (74%) and at an age group of above 50 years and STEMI was mostly seen in our study. Similar trend was cited in study conducted by Blessy Rachel Thomas et al.

In our study the occurrence of Double vessel disease was more, followed by Single Vessel disease and Triple vessel disease.

Based on Percentage of Stenosis the Revascularization was done. If the stenosis percent is ≤ 50% then Medical Management is done, In our study at about 14 patients has ≤ 50% so Medical Management is done. if it is ≤ 80% then PTCA is done, over 69 patients has ≤ 80% of stenosis so PTCA is done and if the stenosis percent is above 80% then CABG is done.

Aspirin, Clopidogrel, Atorvastatin are prescribed commonly for Myocardial Infarction in order to avoid re-occurrence.

In our study the drugs prescribed in PTCA are Clopidogrel, Aspirin, Atorvastatin, Metaprolol, Ciprofloxacin and in some cases of Co- morbidities they prescribe ACE Inhibitors, Beta blockers, Anti diabetics.

In our study the drugs prescribed in CABG are Fruselac, Furosemide, Aspirin, Clopidogrel, Ofloxacin, Clonazepam, Metaprolol in some cases of Co- morbidities they prescribe ACE Inhibitors, Beta blockers, Anti diabetics.

In our study the drugs prescribed in Medical Management are Clopidogrel, Aspirin, Atorvastatin, Betablockers In some cases like LVD dysfunction Furosemide and Fruselac are prescribed.

In the current study, we observed that the Patients QOL admitted at sites with angiography was higher. However, the QOL and functional status of patients was improved after 4 weeks of revascularization. The patients with increased QOL after revascularization are 97.2 %. In our study the improved QOL such as, increased functional status, decreased pain and improved physical activities, which is seen more in PTCA when compare to CABG, Medical Management, And similar trend was cited in Daniel B. Mark. In our current study, we observed an improved QOL in patients of PTCA at an age group of 51-60 years i.e., with a scoring of moderate to mild or none(40-≤ 10), where as in CABG patients we observed an improved QOL in 51 -60 years with a scoring of moderate to mild(40 - 20), in Medical Management the scoring was improved at an age group of 61 -70 years.

The patients at an age group of 21-30 years before and after revascularization the scoring was from moderate to mild, in the same way patients with an age group of 31-40 are moderate and mild to none and mild. Where as in 51-60 years the scoring was from moderate and mild to none and mild and moderate. In 51-60 years mild and moderate to none and mild. In 61-70 years mild and moderate to none mild or moderate. And in 71-80 years and 81-90 years the scoring was mild or moderate to none and mild or moderate to none**.**

CONCLUSION

Myocardial infarction is one of the leading causes of death in India. Changing food habits, lifestyle changes, and family history, social habits have been contributing to this. The most common gender affected is men than women and is found to be markedly increasing. In our study the occurrence of Myocardial Infarction was more in male than female and mostly

occurred at an age group of 51-60 years. Treatment Patterns of Revascularization was followed as per the guidelines of American Heart Association

In our study, the QOL was improved in PTCA, CABG and Medical Management. The QOL was improved mostly in 51-60 years and was mostly improved in PTCA when compared to CABG and Medical Management.

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ABBREVIATIONS

MI: Myocardial Infarction

PTCA: Percutaneous transluminal coronary angioplasty

CABG: Coronary Artery Bypass Grafting

APWMI: Anterioposterior wall myocardial infarction

ASWMI: Anterioseptal wall myocardial infarction

AWMI: Anterior wall myocardial infarction

IPWMI: Inferioposterior wall myocardial infarction

IWMI: Inferior wall myocardial infarction

LAD: Left anterior descending

LCX: Left circumflex artery

LVPW: Left ventricular posterior wall

LWMI: Lateral wall myocardial infarction

LMCA: Left main stem coronary artery

SUMMARY: Essential medicines are defined as those that satisfy the health care needs of majority of the population. The selection of essential medicines needs to be followed.

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