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A Retrospective Observational Study on Post Surgery Myocardial Infraction Patients in Teritiary Care Hospital

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ABSTRACT

Background: In recent years various risk factors we are observing in cardio related diseases especially in elderly patients. One of the common cardiac problems is Myocardial Infarction. Myocardial Infarction is also called as "Heart Attack". A heart attack, or myocardial infarction(MI), is permanent damage to the heart muscle. Due to the buildup of fatty deposits, including cholesterol, form substances called Plaques. During heart attack, plaque ruptures and spill cholesterol & other substances in to blood stream and clot formation occurs at the site of rupture. The formed clot blocks the blood flow through the coronary artery which may be complete or partial. In such condition usually physician recommends PTCA (percutaneous transluminal coronary angioplasty) or Bypass surgery for the MI patients. Certain drugs are prescribed before the treatment and after the treatment. And some life style modifications are suggested by the physician or clinical pharmacist.
Objectives: The purpose of this study is To study the risk factors of MI patients, To study the outcomes of post surgery MI patients, To study the treatment choice for the MI patients, To study the life style modifications in the post surgery MI patients, To detect the interactions present in the treatment of MI patients.
Methods: This was a retrospective observational study being focused on risk factors, outcomes of surgery, treatment choice & life style modifications of MI patients. Data that can be collected that includes patient demographics, laboratory data, diagnosis, treatment (surgery) and their outcomes.
Results: According to our study in 55 populations MI were observed to be more in Males (69.1%) than in Females (30.9%). HTN were observed in 80% of the study population when compared with DM (16.36%). Most common symptoms observed in our study population were chest pain, SOB& vomiting. In our study abnormalities were mostly observed in 2D Echo, ECG, CAG &GRBS. First line treatment in our study used to treat MI was Anticoagulants and Antiplatelets.
Conclusion: In our study population we observed that most common chief complaints listened from the patients was Chest pain this occurs due to the narrowing of the coronary arteries which decreases the supply of oxygen. In our study population the treatment mostly used to treat MI are Anticoagulants and Antiplatelets.

Keywords: Myrdial infraction MI, ECHO, ECG, Anticoagulants, Antiplatelets.

INTRODUCTION

A heart attack, or myocardial infarction (MI), is permanent damage to the heart muscle. "Myo "means muscle, "cardial" refers to the heart, and "infarction" means death of tisssue due to lack of blood supply. A heart attack occurs when the flow of blood to the heart is blocked. The blockage is most often a buildup of fat, cholesterol and other substances, which form a plaque in the arteries that feed the heart (coronary arteries). Coronary arteries are a network of blood vessels that surround heart muscle and supply it with blood that is rich oxygen and nutrients. Heart muscle needs this

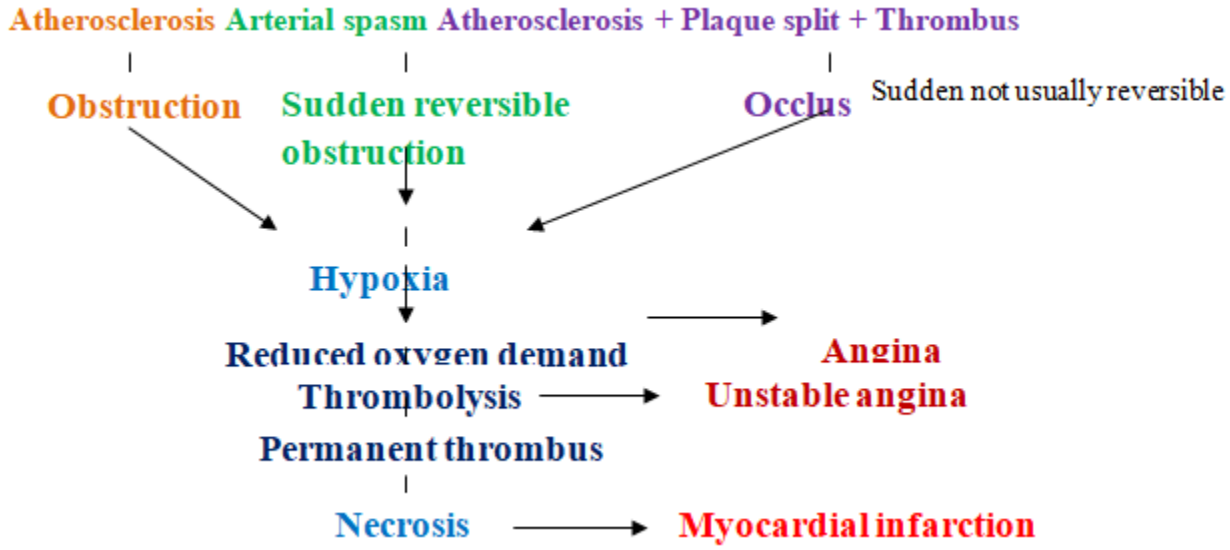
continuous supply of oxygen and nutrients to function. Sometimes, a plaque can rupture and form a clot that blocks blood flow. The interrupted blood flow can damage or destroy part of the heart muscle.

Epidemiology: The most common cause of death and disability in the western world and worldwide is coronary artery disease. There are 32.4 million myocardial infarctions and strokes worldwide every year.
Myocardial infarctions are the leading cause of death in the industrialized nations of the world. In the United States, there are about 4, 50, 000 deaths due to MIs each year. Now 95% of patients hospitalized with an MI will survive due to improvements in emergency response time, and treatment techniques. The risk of having an MI increases with age, but 50% of MIs in the United States occur in people under the age of 65 years old. Males have higher risk. Women during reproductive period have low risk.

Etiology: A heart attack occurs when one or more of your coronary arteries become blocked. Overtime, a buildup of fatty deposits, including cholesterol, form substances called plaques, which can narrow the arteries (atherosclerosis). This condition, called coronary artery disease, causes most heart attacks. During a heart attack, a plaque can rupture and spill cholesterol and other substances into the blood stream.

A blood clot forms at the site of the rupture. If the clot is large, it can block blood flow through the coronary artery, starving the heart of oxygen and nutrients(ischemia).The blockage of the coronary artery may be complete or partial.- A complete blockage means you've had an ST elevation myocardial infarction (STEMI) - A partial blockage means you've had a non-ST elevation myocardial infarction (NSTEMI) [1].

Pathophysiology



Clinical presentation: Severe pressure, fullness, squeezing, pain, or discomfort in the center of the chest that lasts for more than a few minutes.

- Pain or discomfort that spreads to the shoulders, neck, arms, or jaw.
- Chest pain that gets worse.
- Chest pain that doesn't get better with rest or by taking nitroglycerin.
- Chest pain that happens along with any of these symptoms. - Sweating, cool, clammy skin, or paleness
  - Shortness of breath
  - Nausea or vomiting
  - Unexplained weakness or fatigue
  - Rapid or irregular pulse [2]

Diagnosis:
ECG, Bloodtests, Chest X ray, ECHO, Angiogram. Cardiac CT, MRI.

Treatment:

Pharmacological treatment of MI

I. Fibrinolytes
II. Anti platelets
III. Anticoagulants
IV. Glycoprotein B / IIIA receptor inhibitors
V. Nitrates
VI. Beta blockers
VII. ACE inhibitors
VIII. Angiotensin receptor blockers
IX. Aldosterone antagonist
X. Lipid lowering agents[3]

Non- pharmacological treatment

Angioplasty

METHODS AND MATERIALS

Study period: 6 months
Study Type : Retrospective Observational study
Study Institute : Swami Vivekananda Institute of Pharmaceutical Sciences, Vangapally.
Note: Data collected is confidential and legal according to law.
Software used: EXCEL
Data collection form were designed based on the literature done, and appropriate parameters included according to the department selected (cardiology).

RESULTS AND DISCUSSION

Table 1: Distribution based on Age (n=55)

Age	No of cases	Percentage (%)
Below 40	02	3.65
40-70	38	69
Above 70	15	27.27

Table 2: Distribution based on Gender (n=55)

Age	No of cases	Percentage (%)
MALE	38	69.1
FEMALE	17	30.9
MALE	38	69.1

Table 3: Distribution based on Past medical/surgical history (n=55)

Past m/s history	No of cases	Percentage (%)
HTN	44	80
DM	31	56.36
PAST H/O CAD	09	16.36

Table 4: Distribution based on social history (n=55)

Social history	No of cases	Percentage (%)
ALCOHOLISM	07	12.73
SMOKING	02	3.64

Table 5: Distribution based on Physical examination (n=55)

Physical examination	No of cases	Percentage	Normal range
RR	41	74.54	98.6F
BP	17	30.9	90/60-120/80 mmHg
HR	08	14.54	60-100bpm
SPO2	03	5.45	95% & above

Table 6: Distribution based on Chief complaints (n=55)

Chief complaints	No of cases	Percentage (%)
CHEST PAIN	42	76.36
SOB	20	36.36
VOMITINGS	07	12.73
SWEATING	05	9.09
COUGH	04	7.27
FEVER	04	7.27
PEDAL EDEMA	03	5.45
GENERALIZED WEAKNESS	02	3.64
GENERAL MYALGIA	02	3.64
DYSPENIA	02	3.64
ABDOMINAL PAIN	02	3.64
BACK PAIN	01	1.82
PALPITATIONS	01	1.82
ANOREXIA	01	1.82
GIDDINESS	01	1.82
NAUSEA	01	1.82
HEADACHE	01	1.82

Table 7: Abnormal distribution of TROP-I (n=55)

Investigations	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
TROP-I	02	3.64	12	21.8

Table 8: Abnormal distribution of CAG (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
CAG	02	3.64	28	50.91

Table 9: Abnormal distribution of APTT (n=55)

Investigations	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
APTT	01	1.82	02	3.64

Table 10: Abnormal distribution of CBP (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
CBP	19	34.54	16	29.09

Table 11: Abnormal distribution of USG Screening/Abdomen (n-55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
USG SCREENING/ ABDOMEN	01	1.82	01	1.82

Table 12: Abnormal distribution of ECG (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
ECG	10	18.18	28	50.91

Table 13: Abnormal distribution of 2D ECHO (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)
2D ECHO	02	3.64	38	69.09

Table 14: Abnormal distribution of Serum electrolytes (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)
SERUM ELECTROLYTES	16	29.09	08

Table 15: Abnormal distribution of GRBS (n=55)

Investigation	No of cases (normal)	Percentage (normal)	No of cases (abnormal)	Percentage (abnormal)

Table 16: ANTICOAGULANTS (n=55)

Drugs	No of cases	Percentage (%)
HEPARIN	34	61.82
ENOXAPARIN	7	12.73

Table 17: ANTIPLATELETS (n=55)

Drugs	No of cases	Percentage (%)
ASPIRIN	40	72.73
CLOPIDOGREL	33	60
TICAGRELOR	24	43.64
TIROFIBAN HCL	03	5.45

Table 18: STATINS (n=55)

Drugs	No of cases	Percentage (%)
ATORVASTATIN	45	81.82
ROSUVASTATIN	13	23.64

Table 19: PROTON PUMP INHIBITORS (n=55)

Drugs	No of cases	Percentage (%)
PANTOPRAZOLE	42	76.36
ESOMIPRAZOLE	2	3.64

Table 20: ANTI DIABETIC (n=55)

Drugs	No of cases	Percentage (%)
METFORMIN	5	9.09
GLIMEPIRIDE	2	3.64
INSULIN	2	3.64
GLICLAZIDE	1	1.82
DAPAGLIFLOZIN	1	1.82

Table 21: ANTI TUBERCULAR (n=55)

Drugs	No of cases	Percentage (%)
ETHAMBUTOL	1	1.82
PYRAZINAMIDE	1	1.82
RIFAMPIN	1	1.82
ISONIAZID	1	1.82

Table 22: BETA-2 AGONIST (n=55)

Drugs	No of cases	Percentage (%)
ALBUTEROL	10	18.18
FORMOTEROL	1	1.82

Table 23: CALCIUM CHANNEL BLOCKERS (n=55)

Drugs	No of cases	Percentage (%)
AMLODIPINE	8	14.54
CLINIDIPINE	3	5.45
NIFEDIPINE	1	1.82

Table 24**: DIURETICS (n=55)**

Drugs	No of cases	Percentage (%)
FUROSEMIDE	21	38.18
SPIRANOLACTONE	20	36.36
METOLAZONE	2	3.64
HYDROCHLORTHIAZIDE	1	1.82
TORASEMIDE	1	1.82

Table 25: INOTROPIC AGENTS (n=55)

Drugs	No of cases	Percentage (%)
DOBUTAMINE	1	1.82
DIGOXIN	1	1.82

Table 26: LAXATIVE (n=55)

Drugs	No of cases	Percentage (%)
LACTULOSE	9	16.36
MAGNESIUM HYDROXIDE	1	1.82

Table 27: CORTICOSTEROIDS (n=55)

Drugs	No of cases	Percentage (%)
HYDROCORTISONE	10	18.18
BUDESONIDE	8	14.54
METHYL PREDNISOLONE	1	1.82

Table 28: NITRATES (n=55)

Drugs	No of cases	Percentage (%)
GLYCERYL TRINITRATE	20	36.36
ISOSORBIDE DINITRATE	06	10.90
ISOSORBIDE MONONITRATE	03	5.45

Table 29: VITAMINS (n=55)

Drugs	No of cases	Percentage (%)
ASCORBIC ACID	2	3.64
THIAMINE	2	3.64
VIT B6 (PYRIDOXINE)	1	1.82
PHYTONADIONE	1	1.82
BIOTIN	1	1.82
METHYL COBALAMIN	1	1.82
D-PANTHENOL	1	1.82

Table 30: ANTIBIOTICS (n=55)

Drugs	No of cases	Percentage (%)
CEFPODOXMINE	7	12.73
CEFIXIME	7	12.73
CEFOPERAZONE SODIUM	4	7.27
CEFTRIAXONE SODIUM	1	1.82
DOXYCYCLINE	1	1.82
LEVOFLOXACIN	1	1.82

Table 31: ANGIOTENSIN II RECEPTOR ANTAGONISTS (n=55)

Drugs	No of cases	Percentage (%)
TELMISARTAN	08	14.54
VALSARTAN	01	1.82
OLMESARTAN	01	1.82

Table 32: NSAID's (n=55)

Drugs	No of cases	Percentage (%)
PARACETAMOL	4	7.27
ACECLOFENAC	1	1.82
TRYPSIN	1	1.82
CHYMOTRYPSIN	1	1.82
IBUPROFEN	1	1.82
DICLOFENAC	1	1.82

Table 33: ANTI ANXIETY (n=55)

Drugs	No of cases	Percentage (%)
ALPRAZOLAM	03	5.45
CLONAZEPAM	01	1.82

Table 34: BETA BLOCKERS (n=55)

Drugs	No of cases	Percentage (%)
METOPROLOL	11	20
BISOPROLOL	07	12.73
CARVEDILOL	04	7.27

Table 35: ACE INHIBITORS (n=55)

Drugs	No of cases	Percentage (%)
RAMIPRIL	06	10.90
LISINOPRIL	01	1.82
ENALAPRIL	01	1.82

Table 36: TRACE ELEMENTS (n=55)

Drugs	No of cases	Percentage (%)
ZINC	01	1.82
FERROUS FUMARATE	01	1.82

Table 37: ANTI ANGINALS (n=55)

Drugs	No of cases	Percentage (%)
RONOLAZINE	02	3.64
TRYMETAZIDINE	01	1.82

Table 38: ELECTROLYTE SUPPLEMENTS (n=55)

Drugs	No of cases	Percentage (%)
POTASSIUM CHLORIDE	05	9.09
MAGNESIUM SULFATE	01	1.82

Table 39: ALPHA/BETA ADRENERGIC AGONISTS (n=55)

Drugs	No of cases	Percentage (%)
NOR EPINEPHRINE	6	10.90
NOR ADRENALINE	5	9.09

Table 40: OPIOID ANALGESICS (n=55)

Drugs	No of cases	Percentage (%)
TRAMADOL	07	12.73
FENTANYL CITRATE	03	5.45
ACETAMINOPHEN	02	3.64

Table 41: VASODILATORS (n=55)

Drugs	No of cases	Percentage (%)
NICORANDIL	09	16.36
NITROGLYCERIN	06	10.90

Table 42: OTHER DRUGS (n=55)

Drugs	No of cases	Percentage (%)
ONDANSETRON	22	40
IVABRADINE	18	32.73
PHENIRAMINE	14	25.45
N-ACETYL CYSTEINE	12	21.82
TENECTEPLASE	06	10.90
THYROXINE	04	7.27
EPLERENONE	04	7.27
SODIUM BICARBONATE	02	3.64
ETORICOXIB	02	3.64
BETA HISTAMINE	02	3.64
PRAZOSIN	02	3.64
CHLOROZOXAZONE	02	3.64

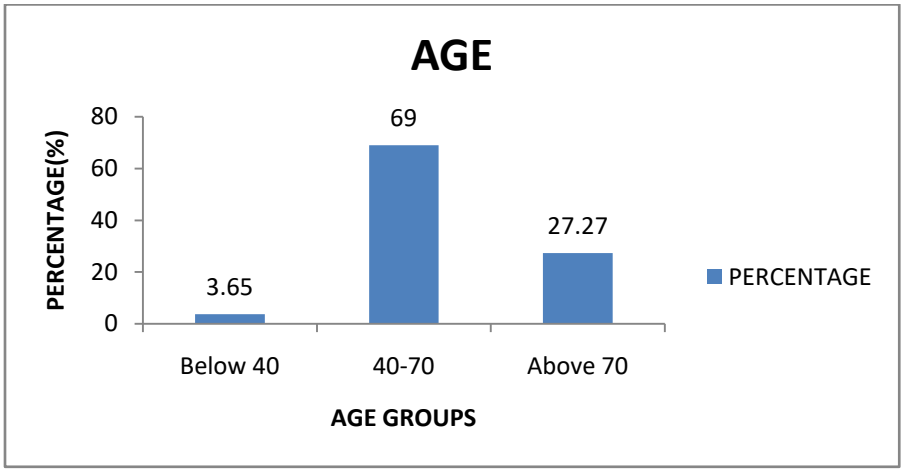


Fig-1: Distribution based on Age

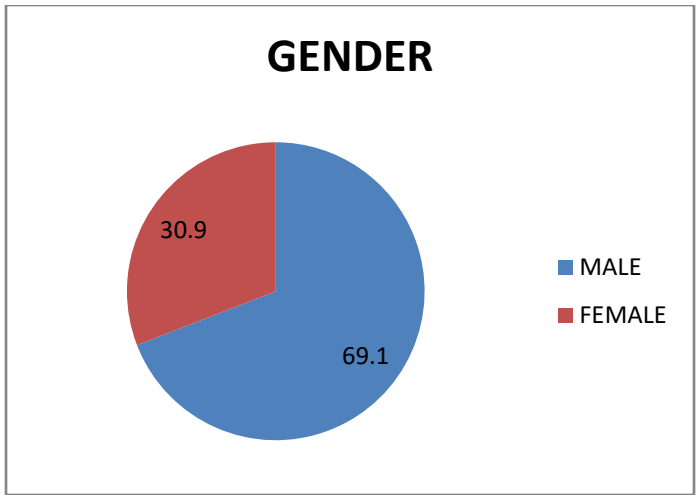


Fig-2: Distribution based on Gender

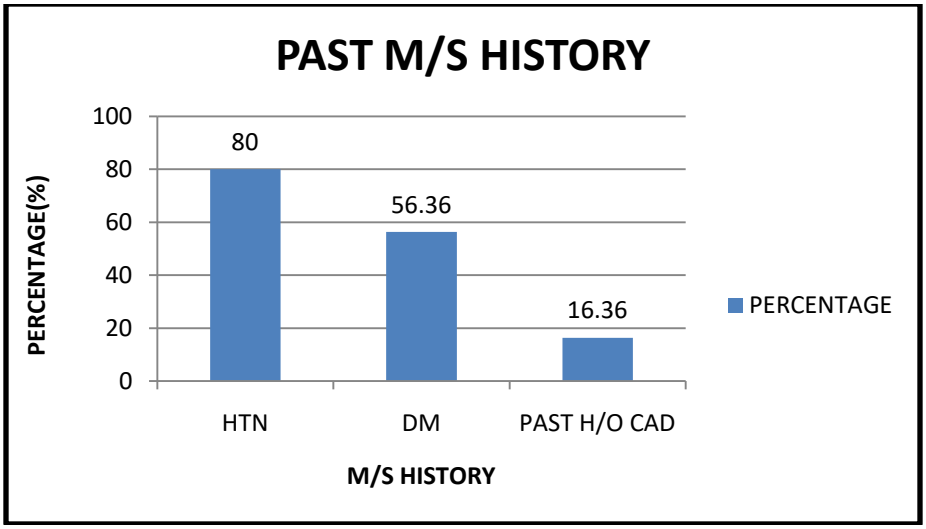


Fig-3: Distribution based on Past medical/surgical history

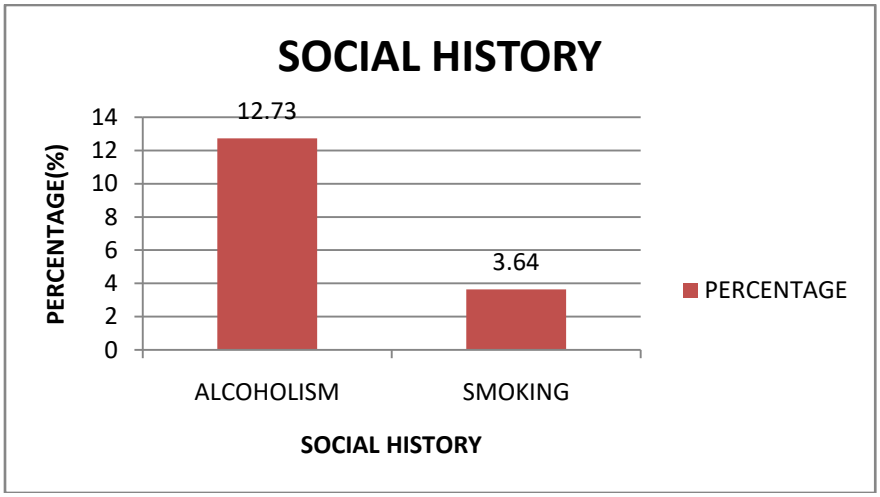


Fig-4: Distribution based on Social history

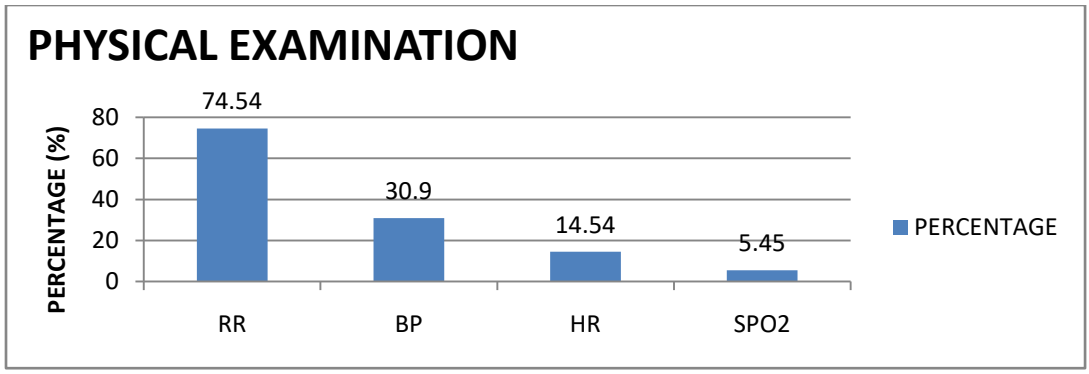


Fig-5: Distribution based on Physical examination

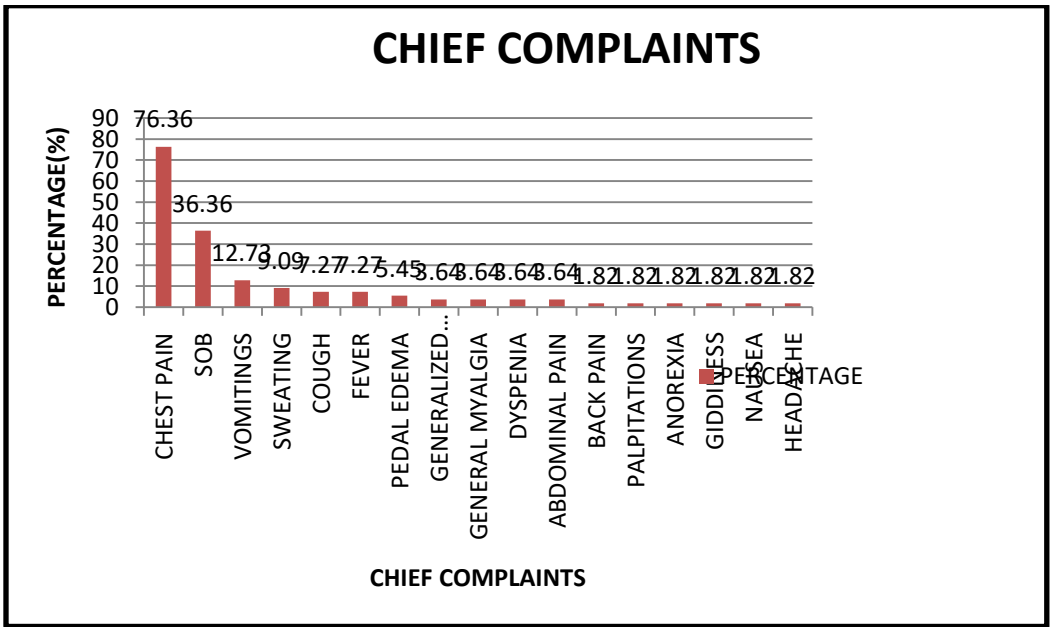


Fig-6: Distribution based on Chief Complaints

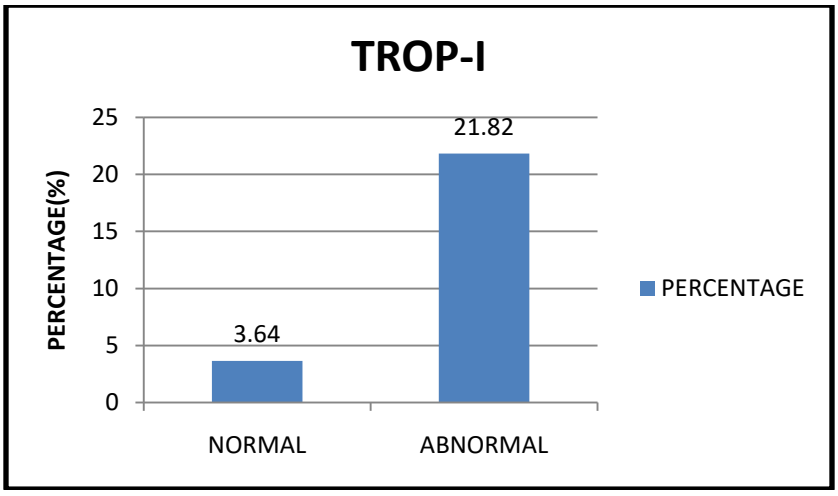


Fig-7: Abnormal distribution of TROP-I

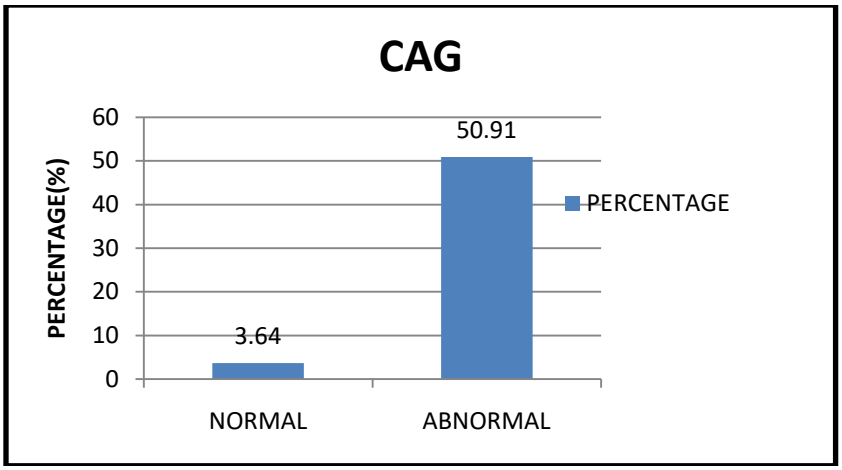


Fig-8: Abnormal distribution of CAG

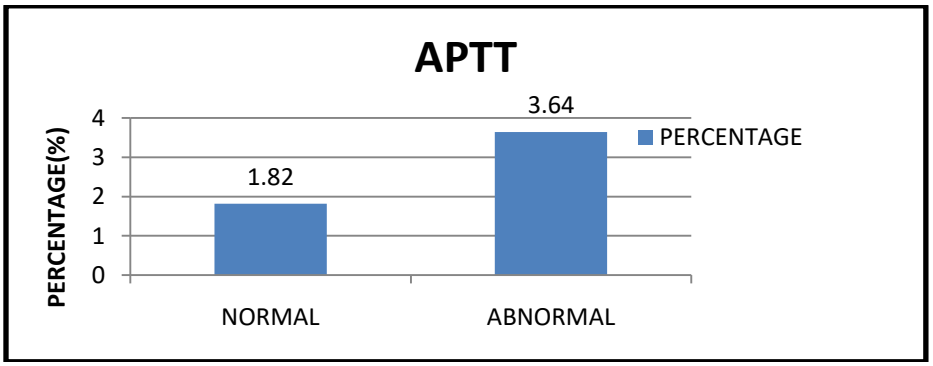


Fig-9: Abnormal distribution of APTT

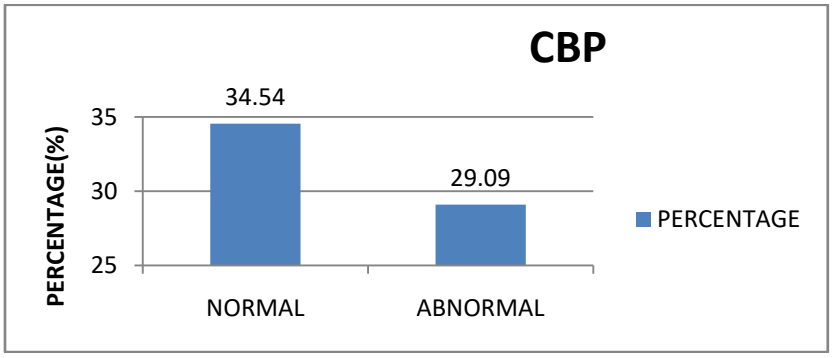


Fig-10: Abnormal distribution of CBP

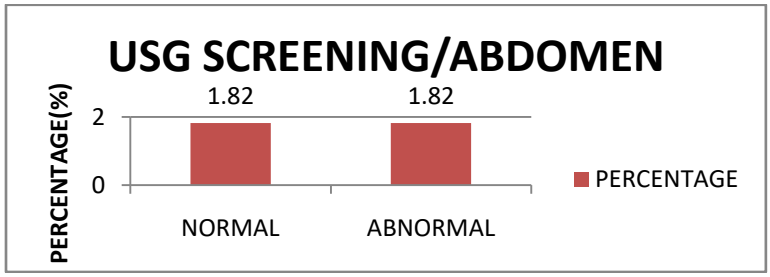


Fig-11: Abnormal distribution of USG Screening/Abdomen

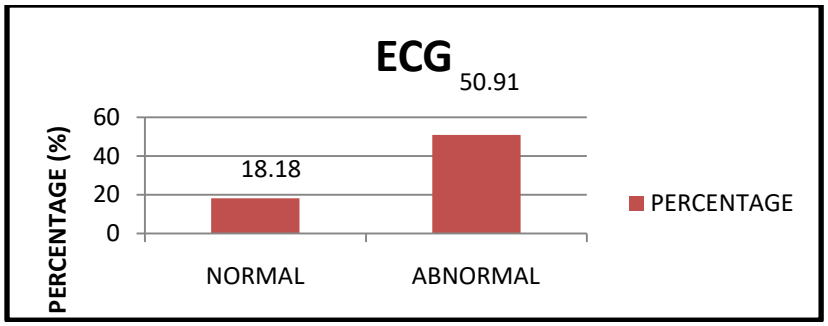


Fig-12: Abnormal distribution of ECG

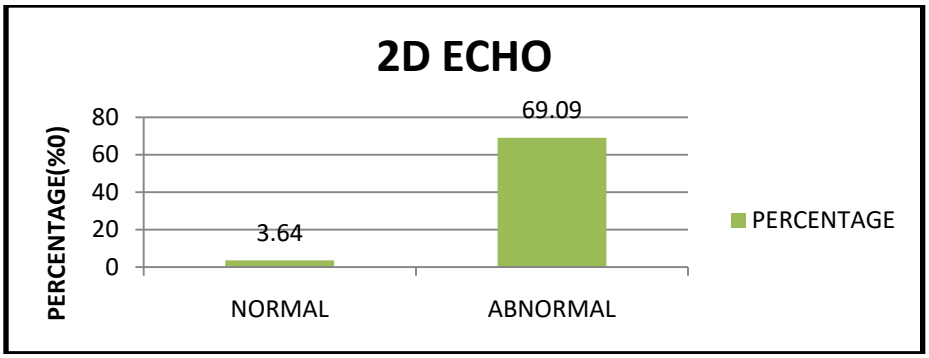


Fig-13: Abnormal distribution of 2D ECHOES

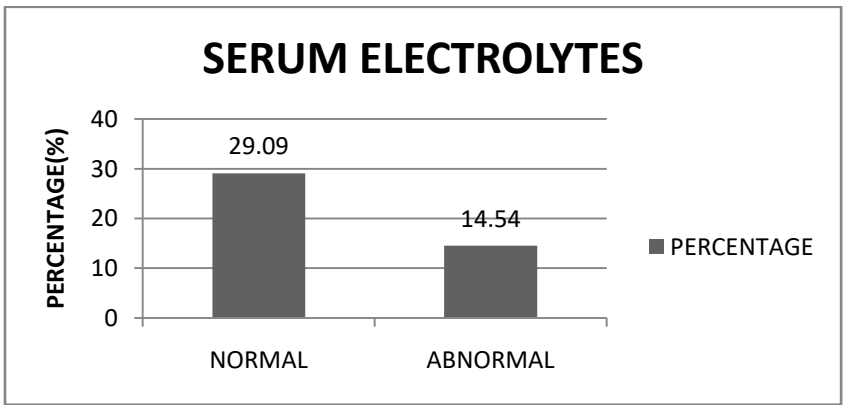


Fig-14: Abnormal distribution of Serum electrolytes

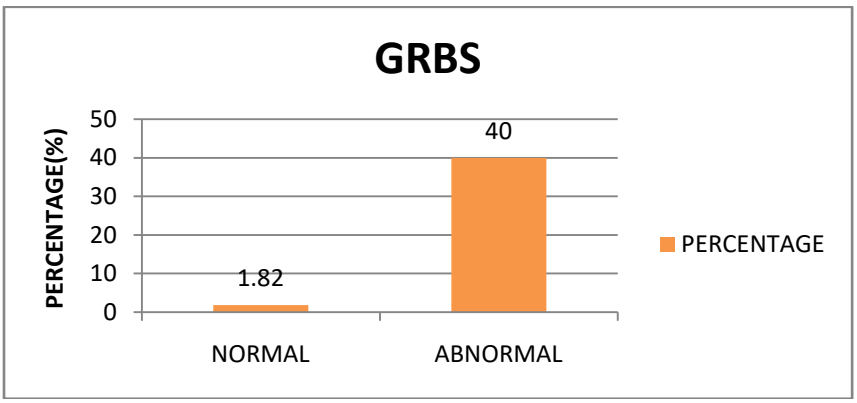


Fig-15: Abnormal distribution of GRBS

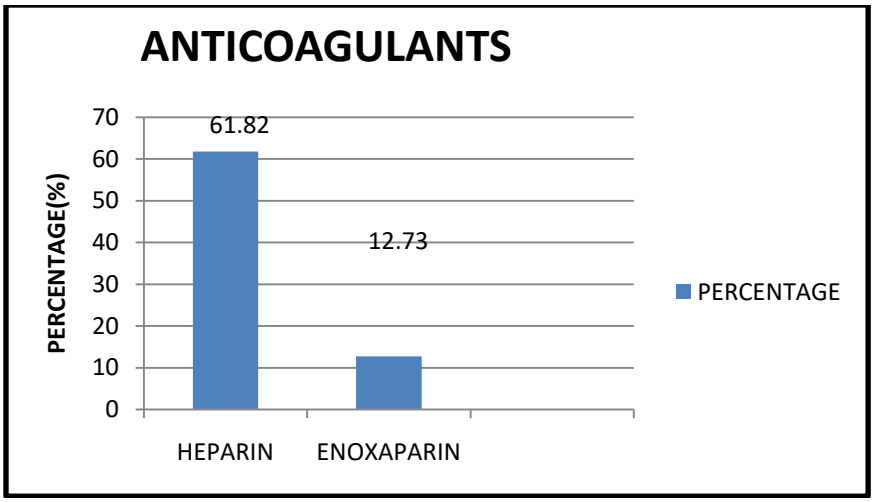


Fig-16: Anticoagulants (n=55)

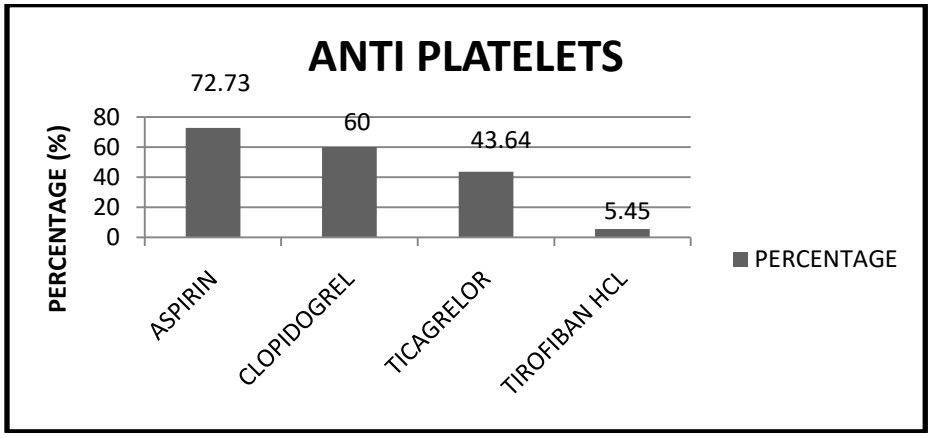


Fig-17: Antiplatelets (n=55)

1. Gender: In our study population (n=55) out of these 38 (69.1%) are male and 17 (30.9%) are females (Table: 2). According to our study males are more prone to Myocardial infarction than females.

2. PAST M/S History: In our study population (n=55) out of these 44 (80%) have past history of hypertension, 31 (56.36%) have past history of diabetes and 09 (16.36%) have past history of CAD (Table: 3).So according to one study people with Past history of hypertension are more susceptible to Myocardial infarction the others.

3. Social history: In our study population (n=55) out of these 07 (12.73%) take alcohol and 02 (3.64%) smoke. (Table:4). We observed that people who take alcohol are more in number than compared to person who smokes.

4.Pysical examination: (Table :5) In our study population (n=55) out of these 42(76.36%) have chest pain, 20 (36.36%) have SOB, 07 (12.73%) have vomiting, 05 (9.09%) have sweating, 04 (7.27%) have cough and fever, 03 (5.45%) have Edema, 02 (3.64%)have generalized weakness, general myalgia, dyspenea, abnormal pain, 01 (1.82%) have lack pain, palpitations, anorexia, giddiness, nausea, headache. Among all chief complaints the most observed complaints are chest pain, SOB and vomiting.

TROP-I: In our study population (n=55) out of these 02 (3.64%) have normal value and 12(12.18%) have abnormal value.(Table:6). According to one study patients with abnormal value are more than normal value.

CAG: In our study population (n=55) out of these 01 (3.64%) have normal value, 28 (50.91%) have abnormal value. (Table: 7) According to one study patients with abnormal value are more than normal value.
APTI: In our study population (n=55) out of these 01(1.82%) have normal value, 02 (3.64%) have abnormal value. (Table: 8) According to one study patients with abnormal value are more than normal value.

ECG: In our study population (n=55) out of these 10 (18.18%) have normal ECG,28(50.91%) have abnormal ECG. (Table: 11) According to one study patients with abnormal ECG are more the normal ECG.

2DECHO: In our study population (n=55) out of these 02 (3.64%) have normal 2DECHO, 38(69.09%) have abnormal 2DECHO profile. (Table: 12) According to one observation patients with abnormal ECG profile are more than normal ECG profile.

GRBS: In our study population (n=55) out of these 01(1.82%) have normal GRBS value, 22(40%) have abnormal GRBS value.(Table:14) According to one observational study patients with abnormal GRBS value are more the normal GRBS value.

ANTICOAGULANTS: In our study population (n=55) out of these 41 patients were managed with anticoagulants. In these 34 (61.82%) were treated with Heparin, 7 (12.73%) were treated with Enoxaparin, (Table: 15). These drugs are used for slowing down the blood clot formation.

ANTIPLATELETS: In our study population (n=55) out of these 41 patients were managed with antiplatelets. In these 40 (72.73%) were treated with Aspirin, 33 (60%) were treated with Clopidogel, 24(43.64%) were treated with Ticargeela, 03(5.45%) were treated with Tilofiban HCl. These drugs are used for preventing the platelets clumping and also prevent clots foam forming and growing.

STATINS: In our study population (n=55) out of these 51 patients were managed with statins. In these 45(81.82%) were treated with Atrovastatin, 13 (23.64%) were treated with Rosuvastatin. (Table: 17)These drugs are used to lower the cholestrol levels in body.

Proton Pump Inhibitors: In our study population (n=55) out of these 44 patients were managed with PPI"s .In these 42 (76.36%) were treated with Pantaprazole, 2 (3.64%) were treated with Esomeprazole. (Table: 18) These are used to treat heart burn.

ANTIDIABETIC: In our study population (n=55) out of these 11 patients were managed with Antidiabetes. In these 5 (9.09%) were treated with Netfomin, 2 (3.64%) were treated with Glimepiedide and Insulin and 1(1.02%) were treated with Gliclazede and Dapagliflozin. (Table: 19)These drugs are used to control blood glucose levels in body.

ANTITUBERCULAR: In our study population (n=55) out of these 1 (1.82%) patients were managed with Antitubesculiae drugs like Ethambutol pyeazinamide, Rifampin, Isoniazid. (Table: 20) These drugs are used to treat tuberculosis.

BETA 2 AGONISTS: In our study population (n=55) out of these 11 patients were managed with Beta 2 Agonists. In these 10 (10.18%) patients were treated with Foemoterol. (Table:21) These drugs are used to treat scales the smooth muscles of airways to relive shortness of breath, cough like symptoms.

CALCIUM CHANNEL FLOURLESS: In our study population (n=55) out of these 12 patients were managed with Calcium channel Flourless. In these 8(14.50%) patients were treated with Anilodpine, 3(5.45%) patients were treated with Clinidipine, 1(1.82%) patients were treated with Nifedepine.(Table:22). These are used to lower the blood pressure and to relive from symptoms like chest pain.

DIURETICS: In our study population (n=55) out of these 45 patients were managed with Diuretics. In these 21(38.18%) patients were treated with Fusosemide, 20 (36.36%) patients were treated with Spilanolactone, 2 (3.64%) patients were treated with Metolazone, 1 (1.82%) patients were treated with Thydeochlothiazide and Toeascmide. (Table: 23). These are used to lower the blood pressure.

CORTICOSTEROIDS: In these 10 (18.18%) patients were treated with Thydiocortisone, 8(14.54%) patients were treated with Budesonide, 1 (1.82%) patients were treated with Methyl Predrisdone. These are used to relive allergic symptoms (Table: 27).

NITRATES: In our study population (n=55) out of these 29 patients were managed with Nitrates. In these 20(36.36%) patients were treated with Glyceryl trinitrates, 06(36.36%) patients were treated with Isolifide dinitrate, 03 (5.45%) patients were treated with Isolifide Mononitrate . (Table: 28). These are used to improve blood flow to heart muscle and also relive angina symptoms.

VITAMINS: In our study population (n=55) out of these 09 patients were managed with vitamin supplements. In these 2(3.64%) patients were treated with Ascorbic acid and Thiamine, 1(1.82%) patients were treated with vit B61, Phytoniadone,Biotin, Methyl cofalamin. (Table: 29). These are used to improve vitamins in body.

ANTIBIOTICS: In our study population (n=55) out of these 21 patients were managed with Antibiotics. In these 7(12.73%) patients were treated with Cefpodoxomine sodium, 01(1.82%) patients were treated with Ceftriaxone sodium, Doxycycline and Cevofloxacin . (Table:30) These are used to treat bacterial infections.

NSAID'S: In our study population (n=55) out of these 09 patients were managed with NSAID'S. In these 04 (7.27%) patients were treated with Pacueterly, 1(1.82%) patients were treated with aceclofenac, Trypsin, Chymotrypsin, Ibupeofer, Didofenac. (Table: 32) These are used to relive symptoms like headache and cold.

ANTI ANGINALS: In our study population (n=55) out of these 21 patients were managed with Antiginals. In these 05(7.27%) patients were treated with potassium chloride, 01(1.82%) patients were treated with Magnesium Sulphate. (Table: 37) These are used to prevent heart attack.

OPOID ANALGESICS: In our study population (n=55) out of these 12 patients were managed with Opoid Analgesic. In these 7(12.73%) patients were treated with Teamadol, 03(5.45%) patients were treated with Fentanyl citate, 02 (3.64%) patients were treated with Acetaminophen. (Table: 40). These are used to treat modulate to serve pain.

INOTROPIC AGENTS: In our study population (n=55) out of these 2 patients were managed with Inotropic agents. In these 1(1.82%) patients were treated with Dofulamine, Digoxin. (Table: 24). These are used to treat high blood pressure, chest pain.

LAXATIVES: In our study population (n=55) out of these 10 patients were managed with Laxatives. In these 09(16.36%) were treated with Lactose and In these1 (1.82%) were treated with Magnesium hydroxide.

ANTICHOLINERGICS: In our study population (n=55) out of these 10 patients were managed with Anticholinegesics. In these 8(14.54%) patients were treated with Iplatiopium, in these 2(3.64%) patients were treated with Ateopine sodium. (Table: 26). These are used to treat COPD.

ANGIOTENSIN II RECEPTOR ANTAGONISTS: In our study population (n=55) out of these 10 patients were managed with Angiotenin II Receptopr antagonists . In these 8 (14.54%) patients were treated with Telmisation, 1(1.82%) was treated with Valsactan, Olmesactan, (Table: 31). These are used to treat lower blood pressure.

ANTIANXIETY: In our study population (n=55) out of these 4 patients were managed with Antianxiety. In these 3(5.45%) patients were treated with Alpeazolam, 1(1.82%) was treated with cloxazepam. (Table: 33). These are used to treat anxiety disorder.

BETA BLOCKERS: In our study population (n=55) out of these 22 patients were managed with Beta blockers. In these 11(12.73%) patients were treated with Metopitol, 7(12.73%) was treated with Caevedutol. (Table: 34). These are used to treat irregular heart thythm and chest pain. These also treat high blood pressure.

ACE INHIBITORS: In our study population (n=55) out of these 8 patients were managed with ACE Inhibitiors .

ELECTROLYTE SUPPLEMENTS: In our study population (n=55) out of these 6patients were managed with Electrolyte supplements. In these 5 (9.09%) patients were treated with potassium chloride, 1 (1.82%) were treated with Magnessium sulphate. (Table: 38). These are used for contraction of muscles and for regulating blood pressure.

ALPHA/ BETA ADRENERGIC AGONISTS: In our study population (n=55) out of these 11 patients were managed with Alpha /Beta Adrengic agonists. In these 6 (10.90%) patients were treated with Nor Epinerphine 5 (9.09%) were treated with Nol Adverline. (Table: 39). These are used to treat Hypertension.

CONCLUSION

Our study was to evaluate the occurrence of Myocardial infarction on patients. Among our study population (n=55) Myocardial Infarction were observed more in Males (69.1%) than in Females (30.91%). This is due to life style modifications like consumption of alcohol and smoking. Higher percentage of our study population belonged to the age group 40-70. In our study we observed that people with past history of Hypertension (80%) are more prone to Myocardial Infarction than patients with Diabetes mellitus (16.36%), this is due to excess strain on coronary arteries serving the heart becomes slow & narrowed due to build up of fat & cholesterol. In our study we also observed that abnormalities were mostly in CAG which occurs due to the obstruction of Blood vessels and also in ECG this is because during heart attack, blood flow in heart is affected & heart tissue can begin to lose oxygen so that the tissue cannot conduct electricity. Abnormalities also observed in Troponin levels, this occurs when cardiac myocytes are damaged; troponin is released in to the circulation. In our study population we observed that most common chief complaints listened from the patients was Chest pain this occurs due to the narrowing of the coronary arteries which decreases the supply of oxygen. In our study population the treatment mostly used to treat MI are Anticoagulants and Antiplatelets.

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