Summary & Conclusion
SUMMARY AND CONCLUSION

The present study was conducted in Department of Medicine, M.L.B. Medical College, Jhansi.

Case material in the thesis consisted of 50 consecutive patients of coronary artery disease (angina/AMI). Out of 50 patients 41(82%) were male and 9(18%) female. Maximum number of patients (37) were of the age group of 50-70 years. Mean age of the patients was 57.1 years. Majority of patients belonged to middle class and most of them were from urban areas.

In present study out of 50 patients 24(48%) had anterior wall MI, 14(28%) inferior wall MI and 2(4%) had true posterior wall MI, while 10(20%) patients had angina pectoris. Among AMI group 28(70%) had Q-wave MI, 12(30%) had non Q-wave MI, while in angina group 8 patients had unstable angina and 2 had stable angina.

The risk factors for CAD were present in 70% of cases, while 30% patients were without any risk factors. Smoking was the commonest observed risk factor (54%) followed by Tobacco chewing (38%), obesity (24%), Diabetes mellitus (20%), hypertension (18%), elevated cholesterol level (12%)
and family history of premature CAD was present in 4% patients.

At the time of admission most common symptom was chest pain/Heaviness/tightness (68%), associated with sweating (48%) and Nausea/vomiting (44%).

On clinical examination most common finding was decreased intensity of heart sounds (42%), others being S₃ (36%), S₄ 54 (16%) Basal rales (30%), raised JVP (16%), pericardial friction rub (8%), sinus bradycardia (12%), sinus tachycardia (16%), hypotension (18%), hypertension (22%), apical systolic murmur (2%) and abnormal precordial pulsation (22%).

Regarding Killip classification, majority of patients (70%) were in Killip class I, while 22% were in Killip class II, 6% in Killip class III and only 2% were in Killip class IV.

The most common complication observed was ventricular ectopics 34% followed by CHF (30%), recurrent chest pain (18%), sinus bradycardia (12%), pericarditis (8%), RV infarct (6%), thromboembolism (4%), mitral regurgitation (2%) and cardiogenic shock (2%).
Echocardiographic examination was performed with HP-Sonos-2000 cardiac ultrasound machine. Measurement of different cardiac parameters were made to assess systolic and diastolic functions, according to recommendation of the American Society of Echocardiography.

The isolated LV Systolic dysfunction (defined as an Ejection fraction <50% and a normal filling pattern) was found in 9(18%) patients.

The isolated LV Diastolic dysfunction (defined as impaired relaxation or pseudonormalized or restrictive filling and a normal systolic function) was found in 13 patients (26%).

Combined Systolic and Diastolic dysfunction was found in 17 patients (34%).

Impaired relaxation of left ventricle was the predominant diastolic filling abnormality (38%) but pseudonormalized or restrictive filling pattern were also frequently present (10% and 12% respectively).

Development of congestive heart failure occurred in 30% of the patients. Patients with CHF had either impaired relaxation or pseudonormal/restrictive LV filling pattern.
However, patients with later pattern had features of significantly more severe congestive heart failure.

The patients age and mitral E-deceleration time (DT<150 msec) were identified as independent risk factors for developing CHF.

Although most patients with CHF had early systolic dysfunction (decreased EF, raised EDV, ESV and RWMA), a subgroup of 3 patients (20% out of CHF group) had an abnormal filling pattern with preserved ejection fraction.

All above mentioned results correlated well with the previous studies.

Thus, it is concluded that echocardiography may be a useful prognostic tool in coronary artery disease. Early assessment of left ventricular systolic and diastolic functions may be of help in selecting patients at risk of developing CHF, who might benefit from early intervention with ACE inhibition.

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