

CHAPTER V

DISCUSSION

Krauss et al.^[11] followed clinical course of 108 patients with acute coronary insufficiency (ACI), there was only single hospital death. Six others developed later MI during hospitalization. Patients who presented with deterioration of chronic angina had a significantly increased mortality as compare to those with the recent new onset of coronary pain. All six hospital MIs and the single hospital death occurred in patients with recurrent pain after admission to coronary care unit. Gazes et al.^[12] reported 20% (29 of 140) of the patients developed an acute MI within eight month after the onset of preinfarctional (unstable) angina with an associated mortality of 41.4% (12 of 29). A combination of high-risk factors in a patient eg., frequent angina in the hospital, previous stable angina and ischemic ST change during pain, were identified as a high-risk case. Russek^[44] have shown that the relatively favourable outlook for "good risk" patients, despite symptoms of severe angina pectoris, is related to comparatively normal left ventricular function. When refractory angina pectoris is associated with impair left ventricular performance as observed in "poor risk" patients in his series. The prognosis

appears grave whether medical or surgical therapy is adopted.

The findings of present study support these observations and indicate that patients with the following variables have statistical significance for prediction of unfavourable outcome (acute MI and for acute complications) : previous history of MI (RR = 2.75, 95% CI of RR = 1.3 - 5.7, $P < 0.01$), previous history of angina pectoris (RR = 1.4, 95% CI of RR = 1.01 - 1.9, $P < 0.05$) and patients with crescendo resting pain. (RR = 1.91, 95% CI of RR = 1.2-3.0, $P < 0.05$)

There is no mortality rate in this study, previous studies on unstable angina revealed a hospital mortality of 0-60%. The incidence of nonfatal myocardial infarction during hospitalization in our study was 14.74%, previous studies have reported an incidence of 7-80% [11-14, 47, 50]. The difference in our mortality and nonfatal myocardial infarction between our study and the previous studies is probably because of difference definitions of unstable angina and patient selection. The Unstable Angina Pectoris National Co-operative Study Group reported a hospital mortality of 3% for patients treated medically. Their study also indicated an incidence of 8% for nonfatal myocardial infarction during hospitalization. [69]

Patients with unstable angina whose age more than 50 years of old had statistical significance for prediction of bad outcome.^[59]

There is considerable controversy about what is the most appropriate treatment for patients with unstable angina, some workers suggest that a conservative approach is all that is necessary.^[71] Others support the early use of investigative techniques, angioplasty, and operation.^[72] Much of these conflict items may be due to the difference of the definition of unstable angina.

In patients with severe angina, treatment with nitrates, beta-blockers, and calcium antagonist would theoretically be the best approach. Betablocker is designed to prevent or blunt spontaneous rise of heart rate or blood pressure, or both, that could precipitate angina at rest. Addition of nitrates also helps to reduce blood pressure and venous filling pressure.^[73,74] A decade of experience has established that combined therapy with propranolol and long-acting nitrates can stabilize patients with unstable resting angina and reduce the incidence of myocardial infarction and death compared with the incidence in the 1960s, before the availability of beta-blockers.^[180]

In conclusion, This study has shown that patients with unstable angina have high morbidity included high incidence of acute MI (14.74%), high incidence of acute complications (27.37%). Those patients with immediate poor prognosis are those who have age > 50 years, previous history of MI, previous history of angina pectoris and those who have crescendo resting pain. Normal ECG finding, for the first 3 consecutive days after admission, seem to be a predictor of good prognosis for unstable angina patients.

Conventional therapy with nitrates, beta blockers and calcium antagonist in addition to analgenics is still worthwhile in most cases of patients with unstable angina.