SUMMARY AND CONCLUSIONS
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The present study entitled "Study of coronary risk factors and clinical profile in patients of acute myocardial infarction" was performed on 60 consecutive cases of acute transmural myocardial infarction who were admitted in I.N.E.U/Medical wards of M.L.B. Medical College, Jhansi between August, 1987 to May, 1989. All the patients were subjected to detailed history especially for coronary risk factors and clinical profile. Detailed physical examination was done in every case especially looking for complications. All the patients were subjected to different laboratory investigations like blood, sugar, serum cholesterol, serum glutamic oxaloacetic acid, creatinine phosphokinase and serum uric acid. Electrocardiogram was done in every case on 1st, 2nd, 3rd and 7th day and whenever needed.

1. Average age was 53.4 years (range 30-100 years). Six cases were >40 years of age. More than 80% of cases were between 40-70 years. Fifty five (91.67%) were males and 5(8.33%) females. Average age of males and females was 53.5 and 52.4 years respectively.

2. There were 55 (91.67%) Hindus and 5(8.33%) Muslims. Thirteen patients (21.67%) were service class and teachers, 17(28.67%) were businessmen and 16(26.67%) were manual workers/labourers.
3. Nine (15%) patients were illiterate, majority of patients (66.67%) had education below intermediate, while 18.33% patients were highly educated.

4. Thirteen patients (21.67%) had an family income of ₹1000 rupees/month, 23.33% between 1000-2000; 21.67% between 2000-3000 and 23.33% were having more than 3000/- rupees per month.

5. Twenty eight (46.67%) patients were not involved in significant physical activity.

6. Four patients (6.67%) did not have any risk factor, while 41.67% had one, 31.67%, two; 11.66%, three and 8.33% had more than three risk factors. Mean risk factor score was 1.73.

7. Single most important risk factor was smoking being present in 78.33% cases. Out of all smokers 77.3% were bidi smokers and 22.8% cigarette smokers. Among bidi smokers, 61.76% had smoked more than 20 pack years and in cigarette smokers more than 90% smoked 7 10 pack years. Among cigarette smokers most of them kept changing their brands. All the 6 patients who were of less than 40 years age, were smokers.

8. Diabetes was present in only 13.33% and hypertension in 8.33%. Out of five females three were diabetics and two were hypertensive. Hypercholesterolemia was present in 21.67%, hyperuricemia in 15%, obesity in 15% and type A personality in 36.67% cases.

9. Family history of CAD/sudden death was present in 28% cases. Out of which 16.67% it was present at premature age of less than 55 years.
10. Incidence of alcohol intake was very low being 11.67% - regular and 5% occasional drinkers. Habit of tobacco chewing was present in one fourth cases.

11. Forty seven (78.33%) were vegetarian and 13 (21.67%) non vegetarian. A high percentage of patients (69.34%) were using mustard oil and 21.67% margarine as principal cooking media.

12. In 45% patients some precipitating factor initiated the symptoms and prodromal symptoms during preceding hours or days before the onset of infarction were present in 46.66% cases.

13. There was some predilection for myocardial infarction to occur during early hours of morning between 4 AM to 8 AM in 23.33% cases.

14. There was an average delay of 4.83 hours in contacting the doctor after beginning of chest pain and an average delay of 12 hours in hospital admission.

15. Duration of chest pain varied from 15 minutes to 24 hours, average being 5.5 hours. All but two patients had pain in front of chest. One had epigastric pain and another did not have pain at all. Commonest site of chest pain was retrosternal + left chest (40%) only retrosternal in 16.67% and only left chest in 3.13% cases. Radiation of pain away from chest was present in 60% cases. Character of chest pain was quite variable like heaviness, constriction, piercing stabbing and burning type.
16. In one third patients there was no effect of sublingual nitrate and in 23.33% there was slight decrease in pain. Only 34 patients tried sublingual nitrate.

17. Perspiration was present in 81.66%, sense of impending death in 70%, chabrahat in 55%, cold extremities in 41.66%, nausea and vomiting present in more than 50% cases, and 21.66% patients complained of headache.

18. On specifically enquiring the patients about their own impression about the cause of illness, 56.6% cases could not form any definite impression. Only 16.67% who were known cases of CAD in the past could suspect the real cause of symptoms. The rest attributed the pain to many imaginary causes like “Gas” trouble, heavy meal, excessive cold, over exertion, hyperacidity, hypertension, faulty sitting posture and excessive talking.

19. Five patients had myocardial infarction in the past, five were diagnosed cases of angina pectoris and five more though undiagnosed gave history of angina in past.

20. In 46.66% cases the post infarction period was uncomplicated. Either arrhythmias or conduction defect was present in 46.66%, significant post infarction angina in 25%, left ventricular failure in 16.66%, congestive cardiac failure and cardiogenic shock in 0.33% each, post infarction pericarditis in 5% and cerebral embolism in 3.33% cases.
21. Right bundle branch block alone was present in 10%, LAD in 6.66%, RBBB + LAD in 1.66% and LAD in 1.66% patients.

22. Mortality rate was 6.33%. All the deaths occurred within first week of infarction, but none on the first day. Out of all five patients who died, two of them had sudden death, two due to cerebral embolism and one due to cardiogenic shock.

We believe that incidence of myocardial infarction in females is still low in our community.

Smoking appears to be the most important risk factor and more so in young people. Diabetes and systemic hypertension appear to be important risk factors in females. Habit of bidi smoking needs further research on the subject.

There is widespread ignorance and apathy for treatment among masses regarding myocardial infarction. The clinical picture is very variable. Hospital mortality in our series is low probably because of late admissions.