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**COMPARATIVE OUTCOMES FOLLOWING PERCUTANEOUS  
CORONARY INTERVENTION AND CONSERVATIVE TREATMENT  
IN ELDERLY PATIENTS WITH ACUTE MYOCARDIAL INFARCTION:  
SINGLE CENTER RETROSPECTIVE COHORT ANALYSIS**

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**ABSTRACT**

*Cardiovascular diseases remain the leading cause of morbidity and mortality among the elderly population, defined as individuals aged 65 years and older. As this demographic continues to expand globally, with projections indicating that by 2030, one in every five individuals will be over 65, the burden of cardiovascular diseases is anticipated to rise correspondingly. Among the various manifestations of cardiovascular diseases, coronary artery disease is particularly prevalent, often leading to acute coronary syndromes such as myocardial infarction and unstable angina. Elderly patients who present with acute myocardial infarction are at increased risk for adverse outcomes owing to higher comorbidity burden and complicated coronary anatomy. We evaluated the three-year outcomes following coronary revascularization compared to conservative management among elderly patients presenting with acute myocardial infarction.*

*Totally 155 patients over 75 years of age who were admitted for acute myocardial infarction underwent invasive treatment with coronary angioplasty (n=58) or only medical treatment (n=97). In the Invasive Treatment group cohort, 3-year survival probability was 74.1% as compared to 29.9% in the Conservative treatment group cohort (p<0.001). Mean survival time at 3 years of follow up was 31.50 (95% CI 29.35-33.65) months among the patients of Invasive treatment group versus 24.65 (95% CI 22.71-26.59) months among the patients of Conservative treatment group (p<0.001). Mean time to rehospitalization at 3 years was 34.05 (95% CI 32.37-35.72) in the Invasive treatment group cohort compared to 30.03 (95% CI 28.13-31.93) in the Conservative treatment group cohort (p=0.004).*

*Coronary revascularization in elderly patients with acute myocardial infarction significantly reduces all-cause mortality and cardiovascular events over a three-year follow-up period. However, rehospitalization rates remain comparable between treatment groups. Given the need for a thorough clinical assessment before determining treatment, coronary revascularization should be strongly considered as a strategy to enhance overall survival probability.*

**KEYWORDS:** *elderly patients, acute myocardial infarction, coronary angioplasty, pharmacologic treatment, comorbid diseases, mortality, rehospitalization.*

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