# INTRODUCTION AND

# AIM OF THE WORK

# INTRODUCTION

In United States nearly 1.500.000 suffer from acute myocardial infarction (AMI) annually and approximately one-fourth of all deaths are due to AMI. More than 60 % of the deaths associated with AMI occur within one hour of the event and are attributable to arrhythmias, most often ventricular fibrillation. Approximately 1.7 million patients with suspected AMI are admitted yearly to coronary care units in the United States; in about one-third of the patients, the diagnosis of AMI is confirmed *(Richard et al., 1993)*.

In 1980, before the introduction of thrombolytic therapy, the mortality rate during hospitalization and the year following infarction were approximately 10 %. However, there is considerable variation in prognosis depending on a wide variety of clinical factors, and several recent large-scale trials have suggested a far lower mortality when therapeutic modalities are used *(Califf et al., 1990)*.

Acute myocardial infarction (AMI) is a common cause for hospital admission to acute geriatric units. The diagnosis of AMI is difficult in the elderly because they often present with non-specific clinical features or may be unable to give an accurate history because of confusion, dementia or dysphasia, *Anonymous, (1986)*. Consequently, AMI may be diagnosed on the basis of raised cardiac enzymes activities.

In about 20% of elderly patients, acute admission to hospital is preceded by a fall which may itself result in increased values of cardiac enzymes *Ratcliffe et al., (1984), Mallinson and Green (1985)*. Such

an increase in elderly patients may thus occur in the absence of myocardial damage leading to an erroneous diagnosis of AMI.

# AIM OF THE WORK

The aim of this work is to evaluate the usefulness of serum creatine kinase : aspartate aminotransferase (CK : AST) ratio in differentiating between myocardial and non-myocardial increases in serum creatine kinase activity in the elders.