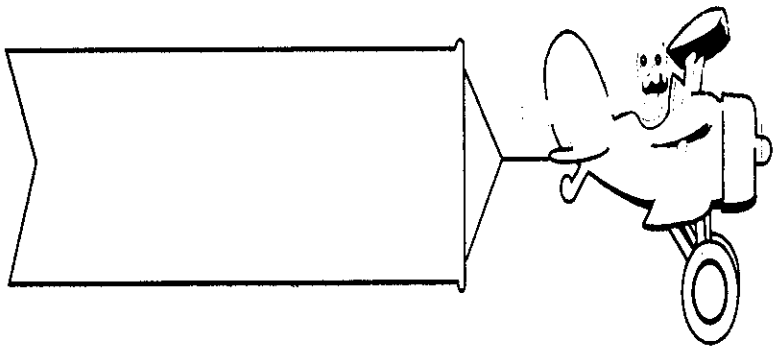

Introduction

INTRODUCTION

Acute myocardial infarction (AMI) is necrosis of heart muscle due to total interruption of its blood supply .

It is one of the main clinical manifestations of coronary heart disease and it is a major cause for morbidity and mortality in such patients ***(Scblant and Alexander 1994)*** .

Before the advent of coronary care units , treatment of AMI consisted of little except bedrest and sedation . The mortality rate was about 30% .

With the advent of coronary care units in the 1960s and 1970s, a limited impact on mortality was achieved through arrhythmia detection and control, as well as improved management of congestive heart failure. The mortality rate decreases to 15-20%.

The introduction of reperfusion therapy in the late 1970s and early 1980s revolutionized the treatment of AMI, reducing mortality to only 5-10%.

Till 1979, emergency coronary artery bypass grafting (CABG) was the only means for reperfusion .

Since 1979, thrombolytic therapy and percutaneous transluminal coronary angioplasty (PTCA) have been added to reperfusion techniques.

The first attempts for surgical reperfusion for AMI was done in the Cleveland Clinic from April 1968 to May 1971.

In the eighties, the prevalence of surgical reperfusion has increased, not as much because of the increased frequency of AMI but primarily for acute failure of other reperfusion methods namely thrombolysis and PTCA ***(Connolly, 1978)*** .

Surgical intervention is not only for reperfusion of the infarcted area but also for the treatment of accompanied complications and associated lesions.

Surgical repair of post infarction VSD was first successfully accomplished by ***Denton Cooley in 1956.***

In 1958 Cooley first used cardiopulmonary bypass for post infarction left ventricular aneurysmectomy.

In the late 1970s, arrhythmia surgery was evolved for control of drug resistant malignant ventricular arrhythmias.

With the development of more safer techniques in cardiac anaesthesia, cardiopulmonary bypass, myocardial protection, circulatory support, and post operative management, urgent CABG and management of post infarction mechanical complications, have now a low mortality rate and minimal complications ***(Daggett et al., 1992)*** .