

## INTRODUCTION & AIM OF THE WORK

A variety of therapeutic strategies has become available now and management of acute myocardial infarction can range from home care or early hospital discharge to an invasive intervention with agents to salvage ischemic myocardium and reduce infarct size.

The early management of myocardial infarction is undergoing a new evolution. Aggressive treatment and new invasive modalities have brought improved prognosis to these patients.

As an essay, this work aims to give an idea about the most new yet the most beneficial and appropriate for our community.

Views towards intracoronary thrombolysis are - to a great extent-conflicting. De feyter considered it as the begining of era of active treatment for myocardial infarction which still - tillnow - conservative and is directed to treatment of pain, arrhythmias and heart failure. At the moment this approach can be considered respectable. For those who propose active management and believe in I.C. streptokinase treatment, until now, insufficient scientific data are available to be back this up. For those who have doubts, but like to be active, the best is to put their patients in a well-conducted randomized trial. This will eventually resolve the question: You can but should you? However, even if i.c. streptokinase is proven to be beneficial to the patient, this technique will not receive widespread application because of its great impact on limited health resources. (de Feyter 1984).

Rentrop stressed the value obtained in field of pathogenesis. As an important research tool, intracoronary infusion of thrombolytic agents has enhanced our understanding of the pathogenesis of acute myocardial infarction. In addition, it facilitates the analysis of benefits and limitations of reperfusion. (Rentrop, 1985).

Group raised the question of how many population will benefit? The patient population that can potentially benefit from this procedure is largely unknown. However, it is certain that the institution of thrombolytic therapy must begin in the early hours of acute infarc-

tion. The vast majority of patients with MI are cared for in hospitals that do not perform cardiac catheterizations. Thus the question of efficacy of intravenous fibrinolytic therapy is very important. Randomized clinical trials are already in progress and answers to important questions are forthcoming. (Missri et al, 1984).

Sobel went for a wide step and put a question about the nature of management with such invasive technique: These considerations have serious public health implications. Are we to convert myocardial infarction into a surgical disease? Every time we encounter a patient with suspected thrombus, should we try to induce lysis, perform angiography, and respond to the high-grade residual obstruction likely to result in early reocclusion by performing angioplasty or surgery? We do not have the answers to these questions. In the final analysis, thrombolysis will probably be one of many steps required for the management of patients with thrombotic occlusions. (Sobel, 1984).

The urging need to shift from intracoronary to intravenous route represents a need for communities like our Egyptian hospitals. Many authors expressed the reasons behind such idea, Valentine stated: nevertheless, the intracoronary administration of STK is impractical because of limited access to the facilities and personnel necessary for its use. Intravenous STK does not require specialized facilities and can be performed earlier in the course of AMI. If the efficacy and safety of i.v. STK are comparable to i.c. STK, then could have substantial impact on the treatment of patients with AMI. (Valentine et al, 1985).

Furthermore, some investigators concluded that the value of intracoronary application is limited clinically by several factors. Since the majority of hospitals are not equipped with cardiac catheterization laboratories, and the existing laboratories are usually not sufficiently staffed to perform intracoronary infusions of streptokinase at all times, substantial investments would be necessary to make this therapy available to all patients with acute myocardial infarction. Where such facilities do exist, initiation of therapy is delayed while the cardiac catheterization laboratory is prepared and baseline angiographic studies are initiated. (Anderson et al, 1984) & (Taylor et al, 1984).

This work will not devote its pages and paragraphs for this concept, it will give a short as well as comprehensive notes on many aspects of the thrombolytic therapy: a detailed history and pharmacology as well as seven items concerning its beneficial effects and five its possible hazards.

The essay outlines the mechanisms of coagulation and anti coagulation and also the role of thrombosis in acute myocardial infarction.

Means of estimating the efficacy of thrombolytic therapy are discussed throughout the whole number of studies employed. How thrombolytic therapy can be applied is a matter of discussion in one of the chapters of this work. In addition, there are two very important chapters: the 9th about the combination of other new intervention methods with the thrombolytic therapy and the 5th dealing with the new information about the second generation of thrombolytic therapy.