

**THROMBIN-ANTI THROMBIN III
(TAT)
IN PATIENTS WITH ACUTE
MYOCARDIAL INFARCTION**

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Thesis
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

To my Professor

Dr. Hadi Gobran

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**INTRODUCTION
AND
AIM OF THE WORK**

Introduction

Ischemic Heart diseases are the major cause of mortality in adult population in the western societies. It is now accepted that coronary artery disease is a two stages process, namely atherosclerosis , thrombosis. The involvement of thrombosis or abnormal haemostasis has emphasized the need for haemostatic studies in such patients. (*Willerson, 1988*)

Thrombin-anti thrombin III (TAT) is one of thrombin inactivation system and is synthesized in the liver possibly in the endothelial cells. (*Collen, D, et al., 1977*).

The level of thrombin antithrombin III(TAT) is an indicative of thrombin activity and could serve as a parameter of activated coagulation in the circulating blood (*Deguchi et al., 1991*).

Thrombin activation in acute myocardial infarction was demonstrated by Minola and carfora, (1993). Thrombin Antithrombin III(TAT) level in these patients could be of value in guiding thrombolytic therapy and anti coagulant.

Aim of the work :

To investigate the role of TAT III as a diagnostic marker in cases of acute myocardial infarction, and evaluate its usefulness as a marker of reperfusion after thrombolytic and anticoagulant therapy.

Material and method :

20 patients with recent Acute Myocardial infarction diagnosed by two of the three criteria which are typical chest pain, significant ECG changes and elevated cardiac enzymes.

Those Patients will receiving fibrinolytic therapy or anticoagulant, the following tests will be done:

- 1 - Partial thromboplastin time.
- 2 - Determination of TAT III level by an ELISA method before & after fibrinolytic or anticoagulant therapy.

A control group of 20 normal healthy volunteers will be studied.

