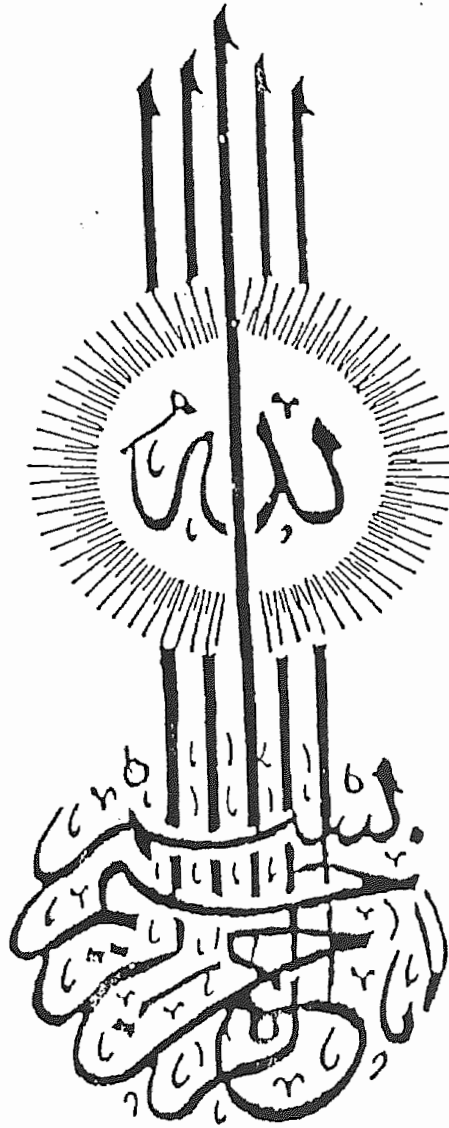




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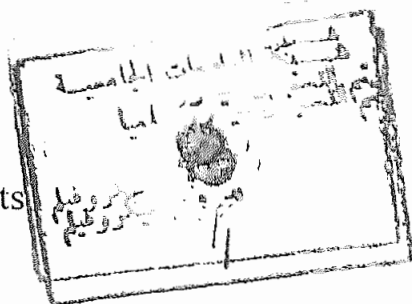
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Thesis

In Partial Fulfilment of the Requirements
for the Degree of M.Sc.
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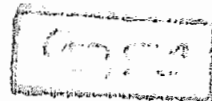
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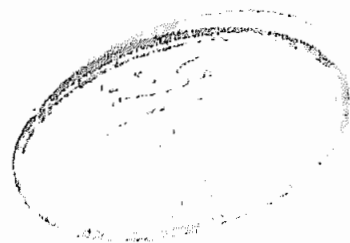
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Study on the Changes of Blood Lipids and Some Trace Elements in Renal Diseases

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INTRODUCTION

INTRODUCTION

The cardiovascular system is greatly affected by renal failure . Patients on maintenance hemodialysis have an increased incidence of myocardial infarction cerebrovascular disease , leading to a cardiovascular mortality rate of three times that of age - matched nonuremic controls (Lazarus et al. , 1975 and Gurland et al., 1976) .

Alteration in blood and tissue concentrations of trace elements in the uremic patients have been extensively investigated over the last few years , particularly those involved in the antioxidant systems i.e. copper , zinc and selenium (Hany et al. , 1992) .

Hemodialysis is used to compensate deficient renal function in uremic patients . It has been reported that dialysis membranes alter the oxidative metabolism of polynuclear leukocytes (Craddock et al. , 1977) . The mobilization of the NADPH oxidase system of these cells leads to the formation of free radicals . Increased free radical activity in chronic renal failure with and without dialysis have been reported and proposed to contribute to many pathological conditions among these are atherosclerosis , heart disease , stroke and cancer (Hunter et al. , 1985 ; Ledwozyn et al. , 1986 and Marx , 1987) .

The major plasma antioxidants appear to be ascorbate , urate , α -tocopherol , albumin- bound bilirubin . Furthermore , transferrin , ceruloplasmin and haptoglobin are considered as preventive plasma