THE CHARACTERISTIC OF FERRITIN FROM PATIENTS WITH ACUTE LEUKEMIA

THESIS

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By

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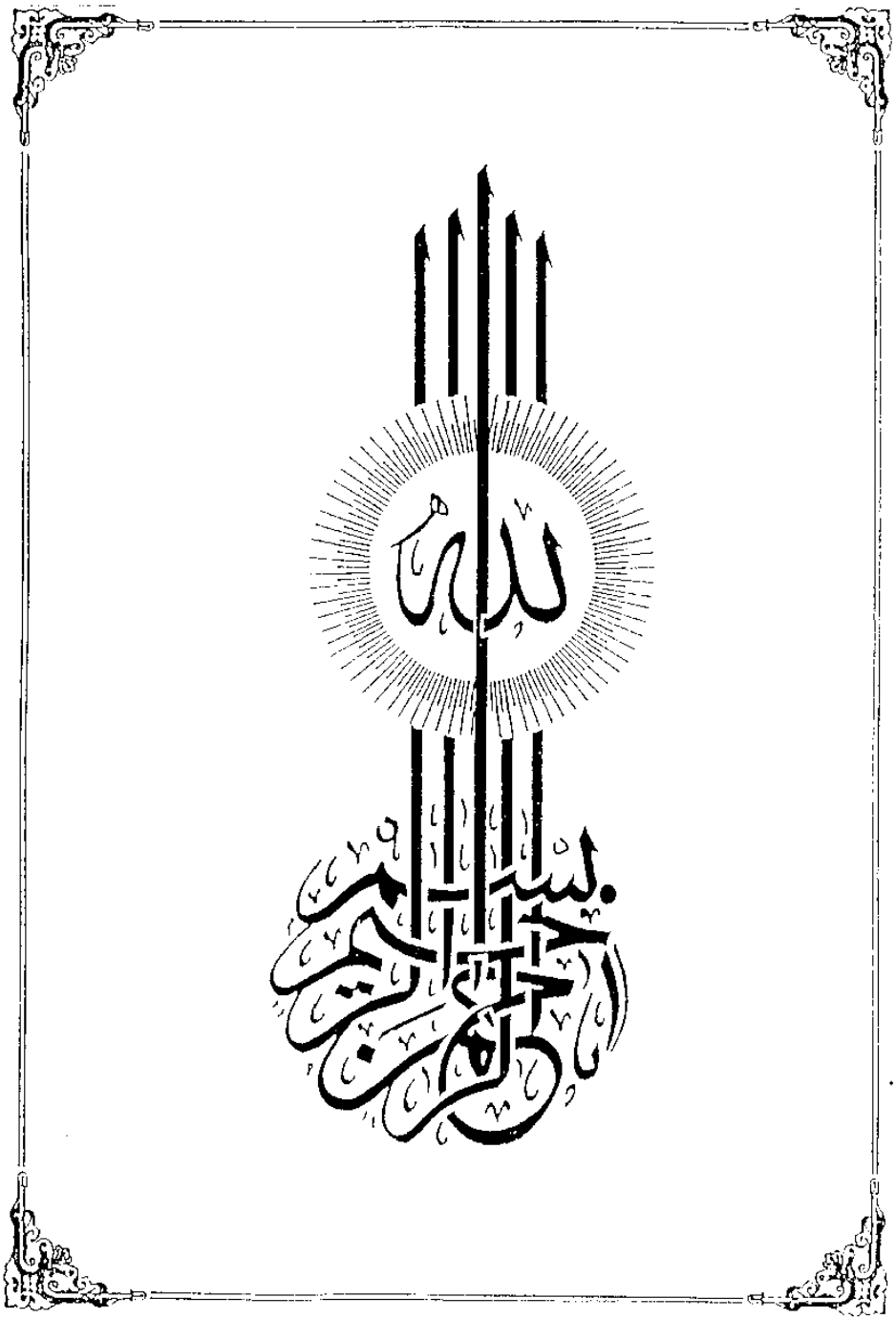

To My Family

and

To My Wife

ACKNOWLEDGEMENT

THANKS TO ALLAH FROM START TO END, THAT THIS WORK HAS BEEN COMPLETED.

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Abstract :

In normal subjects and patients with iron overload,serum ferritin concentrations correlate with the mobilizable iron stores . this is not always the case however,and high serum ferritin concentrations have been found in patients with leukemia especially a cute myeloblastic leukemia (A M L) .

The serum ferritin concentration was estimated in patients with different types of acute leukemia . Pretreatment serum ferritin concentration in the immature myeloblastic leukemia (M1 and M2 of the FAB classification of acute leukemia) was found to be highly increased compared to the more mature types of acute myeloblastic (M5) and the acute lymphoblastic leukemia (L1 & L2), and control subjects.

The serum total iron and calculated transferrin saturation showed a significant increase in patients with acute leukemia as compared to normal subjects , on the other hand the leukemic patients showed signficant decrease in total iron binding capacity .

Electrophoresis of purified gave three bands in leukemia patients and control subjects.

There is no significant difference between the control group , acute lymphoblastic leukemia group and acute myeloblastic leukemia group in affinity to anion exchange chromato graphy.

the distribution of iron and ferritin in sucrose density gradient centrifugation showed that in acute lymphatic are similar to that obtained from acute myeloid leukemia, where the iron content in ferritin was high in the most sucrose gradient fractions.

CONTENTS

LIST OF ABBREVIATION

A°	:	Angestrom.
AL	:	Acute leukemia
ALL	:	Acute lymphatic leukemia
AML	:	Acute myeloid leukemia
CALLa	:	Common acute lymphatic leukemic antigen
CML	:	Chronic myeloid leukemia
CSCL	:	Cesium chloride
FAB group	:	French - American - British group
FAB-E	:	(French-American-British) Egyptian modification.
gm/cc	:	gram/cubic centimeter
K-dalton	:	Kilo dalton
M	:	Molar
mA	:	Milli Ampere
mm/dl	:	milli mole/disiliter
O.D	:	Optical density
PAGE	:	Polyacrylamide gel electrophoresis
PH	:	Power hydrogen
SDS	:	Sodium dodecyl sulphate
TIBC	:	Total iron binding capacity
UIBC	:	Unsaturated iron binding capacity