The Variation in Serum Iron Level in Pregnancy Induced Hypertension

Thesis

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in Obstetrics and Gynecology

By

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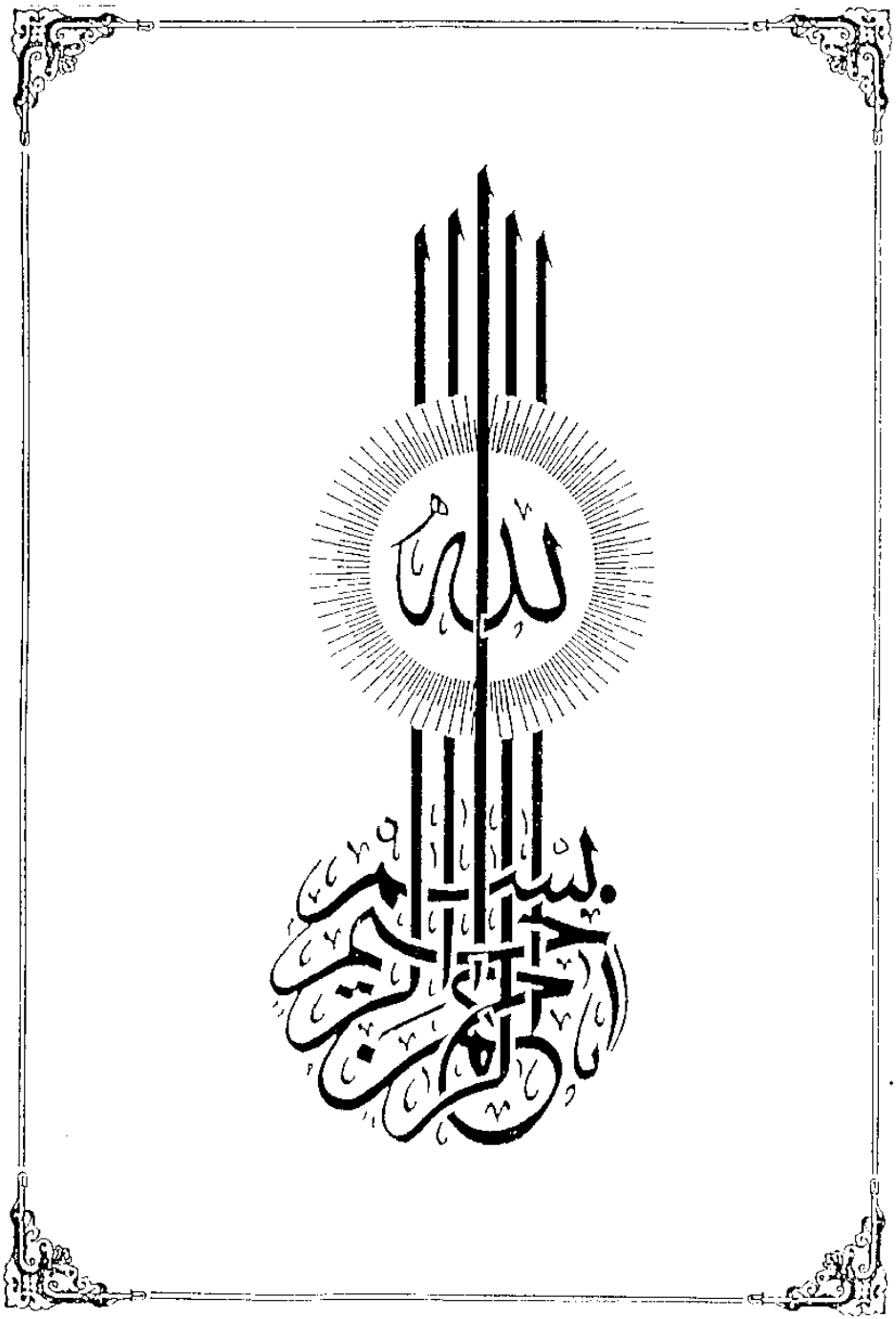

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Abstract

This study was conducted at Ain Shams University Maternity Hospital to assess the changes in serum iron level in relation to pregnany - induced hypertension and to clarify the possible explanation for these changes. It included 100 pregnant women in their third trimester or during labour who were divided equally into 2 groups; the first included pregnant patients presenting with pregnancy-induced hypertension and the second included pregnant females coming to the hospital for routine antenatal care.

A venous sample taken from each patient was analysed for the following :
Serum iron level, hematocrit value, reticulocytic count, serum glutamate oxalo-acetate transaminase (SGOT), and serum creatinine.

It was found that serum iron levels in hypertensive patients were significantly higher than in the control group (181.033 ± 73.37 µg/dl versus to 120.4318 ± 56.443 µg/dl). Yet, the degree of severity of hypertension had no influence on the serum iron levels. On analysing the possible causes of elevation of serum iron in hypertensive pregnant patients, it was found that there was a significant elevation of SGOT in the case group (44.6000 ± 51.314 u/ml compared to 25.2500 ± 11.961 u/ml) in the control group, pointing to possible liver affection.

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No significant difference was found as regards the hematocrit value and reticulocytic count.

The serum iron levels increase in women with pregnancy-induced hypertension. The explanation partially lies on the possible affection of liver function yet, the confirmation needs further detailed studies.

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Key Words

- Serum iron
- Pregnancy-induced hypertension.
- Hemolysis.
- Hemoconcentration.
- Serum glutamate oxalo-acetate transaminase

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