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Zinc Status In Pregnant Women In The Third Trimester

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degree of Master of Biochemistry

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Dedication

To the soul of my friend Raja Abdelgader, the friend of all and the sun of life that had been shining through darkness of my world and suddenly set down .Never forget you. I would like to dedicate this work to you, requesting your acceptance and forgiveness.

I also dedicate this work to my teachers and family for their unlimited supports.

Basmat

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Abbreviations

Zn	Zinc
GH	Growth Hormone
DNA	Deoxyribonucleic acid
RNA	Ribonucleic acid
TH	T helper
CNS	Central Nervous System
Cu	Copper
SOD	Supper oxidas dimatas
Zn TP -1	Zinc transport proteins-1
SPSS	Statistical package for social sciences
BMI	Body Mass Index
Obs	Obstetrics
Gyn	Gynecology

Abstract

The objective of this study was to evaluate zinc in pregnant women. The study was carried out in Khartoum State, Bushier Hospital (Obstetrics and Gynecology Department) during the period from November 2015 to January 2016. Fifty pregnant women, 25 first trimester and 25 third trimester, were included in this study. Twenty matched non-pregnant women were taken as control group. Their ages ranged between 20 and 40 years.

In present study the mean of Zn in third trimester (0.27 ± 0.12 mg/l) was significantly lower than first trimester (0.43 ± 0.25 mg/l) ($p < 0.01$). Zn in third trimester was significantly lower compared to control group (0.48 ± 0.21 mg/l) ($p < 0.001$).

(18 %) had normal Zn (82%) had Zn deficiency.

المستخلص

الهدف من هذه الدراسة هو تقييم معدل الزنك في النساء الحوامل. أجريت هذه الدراسة في ولاية الخرطوم، في مستشفى بشاير قسم النساء والتوليد. في الفترة ما بين نوفمبر 2015 ويناير 2016 وقد شملت 50 من النساء الحوامل، 25 في الأشهر الثلاثة الأولى و 25 في الأشهر الثلاثة الأخيرة و 20 من النساء غير الحوامل كمجموعة تحكم . وتتراوح أعمار هن بين 20 و 40 عاما.

في الدراسة الحالية متوسط معدل الزنك في النساء الحوامل في الأشهر الثلاثة الأخيرة (0.12 ± 0.27 ملغ / ل) أقل بكثير من الأشهر الثلاثة الأولى (0.43 ± 0.25 ملغ / ل) ($p < 0.01$). كان متوسط معدل الزنك في النساء الحوامل في الأشهر الثلاثة الأخيرة أقل بكثير مقارنة بالنساء غير الحوامل (0.21 ± 0.48 ملغ / ل) ($p < 0.001$) كان معدل الزنك طبيعي بنسبة (18%) و (82%) لديهم نقص في معدل الزنك.

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