

Dedication

To my sweet heart mama..

To the soul of my father..

To my support and candle my husband..

To my sister and my brothers..

To my teachers and friends..

Acknowledgments

This research took me almost a year, by that time; I have met with a great people who were contributed in many ways to come out with this project. It is a pleasure to convey my gratitude to them all in my humble acknowledgment.

Firstly I would like to note my gratitude to Dr. Amar Mohamed Ismail for his supervision, advice, encouragement and guidance from the very early stage of this research as well as giving me opportunities of experiences throughout the work, attending meetings and conferences. I am in debt to him more than what he knows.

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Lina

ملخص الأطروحة

أجريت هذه الدراسة المقطعية الوصفية من أجل تقييم مستوى البرولاكتين (هرمون اللبن) في مصل دم النساء المصابات بمرض سرطان الثدي ولربط مستوى هرمون البرولاكتين بعوامل المخاطره للإصابة بسرطان الثدي.

شملت الدراسة خمسون مريضا يعانون من سرطان الثدي وأربعون من الأصحاء كمجموعة ضابطة، وأجريت هذه الدراسة بمركز الخرطوم للعلاج بالإشعاع في الفترة من أبريل الي ديسمبر ٢٠١٣م. تم قياس هرمون البرولاكتين في مصل الدم للمرضي والمجموعة الضابطة بواسطة تغذية العملية الصغري للأنزيم المناعي. قم تحليل البيانات باستخدام اختبار (ت) وارتباط بيرسون في البرنامج الاحصائي في الحاسوب.

أظهرت النتائج أن مستوى البرولاكتين في المصل يزداد بشكل ملحوظ في مجموعة المرضى مقابل المجموعة الضابطة (معامل الارتباط ٠.٠٠١). وأيضاً أظهرت النتائج زيادة ملحوظة في متوسط مستوى البرولاكتين في مصل النساء المصابات بمرض سرطان الثدي اللاتي أعمارهم فوق الأربعين سنة (معامل الارتباط ٠.٠٠٣).

ختمت الدراسة أن مستوى البرولاكتين في المصل يزداد في النساء المصابات بسرطان الثدي مقارنة بالمجموعة الضابطة و مستواه يرتبط طردياً مع السن ومراحل المرض ولا يرتبط مع التاريخ الاسري للمريض.

Abstract

A descriptive cross-sectional study was conducted to evaluate Prolactin level in women with breast cancer, and to correlate serum Prolactin level with risks factors of breast cancer.

The study included, fifty patients histopathologically diagnosed with breast cancer and forty healthy individuals as control group, the study was carried out in Radio Isotope Centre Khartoum (RICK), during the period from April to December 2013. Serum prolactin level in both patients and control group was estimated using Micro-practical Enzyme Immunoassay technology (MEIA), data analyzed using t-test and Pearson correlation in SPSS computer program.

The results showed that serum prolactin level is significantly increased in patients versus Controls with (P -value 0.001), also the results showed significant increase in the mean serum prolactin level among patients with breast cancer >40 years (postmenopausal) compared with <40 years (premenopausal) with (P -value 0.003).

The study concluded that Serum PRL levels were higher in women with breast cancer than the controls, prolactin level positively correlated with age, stage of the disease and there was no correlation with the family history.

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List of Abbreviations

Abbreviation	
PRL	Prolactin
RICK	Radioisotope centre Khartoum