Dedication

I dedicate this research

to the soul of my father

who tells me the

meaning of life

To my Mather

To every women

suffering and seeking for

a care

Acknowledgement

Firstly and endly thanks go to ***god" ALLAH***" for helping me to complete this research.

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Abstract

This is a descriptive hospital base study aimed to determine the expression of estrogen and progesterone receptors in breast cancer females in Khartoum state.

The study was carried out in Khartoum state during the period between Jan 2008 Jan 2009.

Fifty archived specimens of embedded paraffin wax block were collected from histopathology lab of Ribat hospital and directorate of labrotaries and the essential data was collected from patient form.

The disease was distributed in tree group of age women less than 30 Years were (4%) ,women between 30-50years were (43%) and women over 50 years were (53%), Ductal carcinoma is the most distributed type of breast cancer among the study group (74%).

After applying imunohistochemstry technique using avidin biotin method the results showed that out of (37) women having ductal carcinoma with ER positive are 10(20%) whereas carcinoma with ER negative is 27(54%). While out of (13) with non- ductal carcinoma with the expression of ER positive are 12 (24%) and those with non- ductal carcinoma and ER negative are 1 (2%).with significant correlation between types of breast cancer and expression of ER receptors P. value <o.o1.

Females having ductal carcinoma and positive expression of PR receptor were 10 (20%), ductal carcinoma and negative expression of PR receptor were 27(54%), non-ductal carcinoma and positive expression of PR receptor were 3(6%) and non-ductal carcinomas negative expression were

PR receptor were 10(20%) With significant correlation between type of breast cancer and expression of PR receptor, P. value <0.01.

The incidence of ER/PR subtypes among the study group showed (ER+/PR+)were 24% those having(ER+/PR-)were 12%. Those having (ER-/PR+) were 4%,those having (ER-/PR-)were high incidence shows 60%.

The study showed that there is no significant correlation between age and type of cancer also between age and expression of ER and PR receptors.

The study recommended more effort for breast cancer were needed, also large sample size to determine the expression of ER and PR receptors among breast cancer.

Appling the immunohistochemestry investigation for (ER-/PR-) negative receptors as routine test to help diagnosis , treatment by hormonal therapy and prognosis.

خلاصة الأطروحة

أجريت هذه الدراسة الوصفية المستشفوية المتراجعة بهدف تحديد تعبر مستقبلات الاستروجين والبروجسترون في سرطان الثدى لدى النساء في ولاية الخرطوم.

الدراسة أجريت في ولاية الخرطوم في الفترة ما بين 2008-2009م، خمسون عينة أرشيفية من القوالب المغمورة بشمع البارفين جمعت من معمل الأنسجة المريضة بمستشفى الرباط الجامعى ومعمل الأنسجة المريضة بإدارة المعامل ولاية الخرطوم وأخذت المعلومات الخاصة بالمريض من فايلات الأرشيف.

تم توزيع النساء في هذه الدراسة اعتماداً على الأعمار إلى ثلاثة فئات عمرية النساء أقل عمراً من ثلاثين ويمثلن (4%) والنساء ما بين 30-50 ويمثلن (43%) ونساء أكبر من خمسين عاماً ويمثلن (53%) ولقد وجد أن سرطان الثدى القنوى هو الأكثر شيوعاً بين النساء بنسبة (74%) .

عند تطبيق التشخيص النسيجى المناعى بتقنية (استربتو افدين بيوتين) المعلمة بالملون (Dab) تم استخلاص النتائج الآتية:

تعبر مستقبلات الأستروجين الايجابى في عينات سرطان الثدى القنوى يمثل 10 (20%) أما الأستروجين السلبي يمثل 27 (54%) ، أما في سرطان الثدى الغير قنوى فكان تعبر مستقبلات الأستروجين الإيجابى 12 (24%) والسلبي يمثل 1 (2%) ولقد وجدت علاقة احصائية بين نوع سرطان الثدى وتعبر مستقبلات الاستروجين لدى (P< 0.01).

النساء اللائى اظهرت نتائجهن تعبر ايجابى لمستقبلات البروجسترون في سرطان الثدى القنوى يمثلن 10 (20%) أما السلبيات لمستقبلات البروجسترون يمثلن 27 (54%) أما في سرطان الثدى الغير قنوى كان تعبر مستقبلات البروجسترون الايجابى يمثل 3 (6%) ،أما السلبي يمثل 10 (20%).

توجد علاقة ذات دلالة احصائية بين نوع السرطان وتعبر مستقبلات البروجسترون (P< 0.01).

كانت معدلات حدوث النمط (الاستروجين/ البروجسترون) (ER/PR) بين مجموعة الدراسة كالآتى:

(+ER+/ PR) يمثل (24%) ، أما (-ER+/PR) يمثـل (12%) بينما (+ER-/PR) يمثل (4%) وكان أكثر الأنماط حدوثاً هــو ((-ER/-PR يمثل (60%) .

وقـد أظهـرت الدراسـة أنـه لا توجـد علاقـة بيـن العمـر ونـوع السرطان الثدى بل توجد علاقة ذات دلالة احصائية بين العمر وتعبر مستقبلات الاستروجين والبروجسترون وذلك يبدو واضحاً فــي الفئة العمرية الأكثر من خمسون عاماً.

اوصت الدراسة بضرورة وجود برنامج مسـح لسـرطان الثـدى بالسودان واستخدام عدد أكبر من العينات لتحديـد تعـبر مسـتقبلات الاستروجين والبروجسترون.

تطبيق التشخيص المناعى النسيجى لمسـتقبلات الاسـتروجين والبروجسترون لتحديد نوع العلاج الهرمونى والمتابعة.

Chapter one

Introduction and Literature review

Chapter TWO

Rationale and Objective

Chapter Three

Material and Method

Chapter Four

Results

Chapter Five

Discussion