

بسم الله الرحمن الرحيم

قال تعالى:

أَلَمْ نَشْرَحْ لَكَ صَدْرَكَ ﴿١﴾ وَوَضَعْنَا عَنكَ وِزْرَكَ ﴿٢﴾ الَّذِي أَنْقَضَ
ظَهْرَكَ ﴿٣﴾ وَرَفَعْنَا لَكَ ذِكْرَكَ ﴿٤﴾ فَإِنَّ مَعَ الْعُسْرِ يُسْرًا ﴿٥﴾ إِنَّ مَعَ
الْعُسْرِ يُسْرًا ﴿٦﴾ فَإِذَا فَرَغْتَ فَانصَبْ ﴿٧﴾ وَإِلَىٰ رَبِّكَ فَارْغَبْ ﴿٨﴾

صدق الله العظيم

سورة الشرح

Dedication

I dedicate this thesis

To my parents

Sisters & brothers

Dr. Asma Ebrahim Ahmed Elamin

All my colleges

Without their patience, understanding supports, and most of all love; the completion of this work would not have been possible

Abstract

The general aim of this study is to characterize bone metastasis from female breast cancer patients by using bone scan and the data was collected retrospectively from bone scan images for known case of breast cancers females and were received different types of treatment with age ranged between 25-90 years and the sample size will be about 150 patients whom coming to the nuclear medicine departments in Khartoum state during a period from January 2017 to May 2017, and the bone scan will be carried out using gamma camera dual heads and the data was interpreted by nuclear medicine specialists and collected from reports and its analyzed by Microsoft office (EXCELL),.

The researcher concluding that, the breast cancer is commonly affecting the female with age group greater than 40 and less than 60 years old and the age between 55-70 years old is considered as the second age group, ca breast able to attack the left breast more than the right one in the percentage of 50.7% to 49.3% respectively.

The carcinoma of the left breast is commonly gives some considerable metastasis to the Lumber vertebrae, dorsal vertebrae, pelvic bone, ribs, cervical vertebrae and the femur bone respectively; the carcinoma of the right breast is commonly gives some considerable metastasis to the Lumber vertebrae, dorsal vertebrae, pelvic bone, cervical vertebrae, the skull and femur bone respectively, the metastasis in the left and right ca breast following the same behavior in popular anatomical region in spiriting but a different percentage of anatomical region invading and the bilateral breast cancer has zero percentage from the total sample size.

The researcher recommended to increase the sample size for further characterization of ca breast metastasis, and encouraging the annual screening for women breast with low cost or free of charge, and should be done for women whom are accused of breast cancer as well as pre and post radiation therapy cycles, and also recommended to use another radiological modality to grading and staging of the tumor (CT scan) to represent other organs involvement.

الخلاصة

كان الهدف الرئيسي من هذه الدراسة هو توصيف الإنتشار الثانوي في العظم بسبب السرطان الأساسي من الثدي للأناث بواسطة المسح الذري للعظام وقد تم جمع هذه البيانات بأثر رجعي من الصور مسح العظام الذري لحالات معروفة من مرضى سرطان الثدي الأناث الذين تلقوا أنواع مختلفة من العلاج وتراوح أعمارهن بين 25-90 سنة، وقد كان حجم العينة حوالي 150 حالة الذين تم عمل الفحص لهن بأقسام الطب النووي في ولاية الخرطوم خلال الفترة من يناير 2017 إلى مايو 2017، وقد تم تنفيذ مسح العظام الذري لهن باستخدام غاما كاميرا ذات الراس المزوجة وقد تم تشخيص البيانات من قبل إختصاصيي في الطب النووي والتي تم جمعها من تقاريرهم وتم تحليل المعلومات بواسطة برنامج مايكروسوفت (إكسيل)

وقد خلص الباحث إلى أن سرطان الثدي يؤثر بشكل عام على الإناث اللواتي تزيد أعمارهن عن 40 عاما وأقل من 60 سنة، ويعتبر العمر ما بين 55-70 سنة من العمر هو الفئة العمرية الثانية، وقد كان لسرطان الثدي الذي يمكنه مهاجمة الثدي الأيسر أكثر من الثدي الأيمن بنسبة 50.7% إلى 49.3% على التوالي. عادة يعطي سرطان الثدي الأيسر إنبثاا " كبيراً" في فقرات القطنية، الفقرات الظهرية، عظام الحوض، الأضلاع، فقرات العنق وعظم الفخذ على التوالي، وكان سرطان الثدي الأيمن يعطي إنبثاا " ثانويا كبيرا" في الفقرات القطنية، الفقرات الظهرية، عظم الحوض، فقرات العنق ، والجمجمة وعظم الفخذ على التوالي .

والإنبثاا الثانوي من الثديين الأيمن والأيسر لها نفس سلوك الأنتشار في مناطق تشريحية محببة ولكن لها نسب انتشار مختلفة في تلك المناطق، وسرطان الثدي الأساسي الذي يصيب الثديين معا" (الأيمن والأيسر) لم تكن لهما نسبة ظهور مئوية من مجموع حجم العينة.

وكانت توصيات الباحث بزيادة حجم العينة لمزيد من التوصيف للأنبثاا الثانوي من سرطان الثدي، وتشجيع الفحص السنوي للمرأة الثدي بتكلفة منخفضة أو مجانا"، وينبغي أن يتم ذلك للنساء المتهمات بسرطان الثدي وذلك قبل و بعد دورات العلاج الإشعاعي، وأوصى الباحث أيضا باستخدام تقنيات إشعاعية أخرى لتقييم درجة ومرحلة الورم بواسطة التصوير الطبقي المحوري لتوضيح انتشار السرطان في الأعضاء الحيوية الأخرى.

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