

الاية

(و قل ربى زدنى علما)

الاية: (114)

سورة طه

Dedication

To;

My parents...

Showhda Algeiada Alaama...

Ahmed Alkhair Soul ...

Acknowledgment

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Abstract:

This study aimed to assess radioactive iodine therapy as a treatment of choice for hyperthyroidism, in order to assess the efficiency of the treatment. Gamma camera scintigraphy of thyroid gland, radioiodine uptake, and laboratory test of TFT profile together being the most accurate methods of identification and assessment of thyroid pathologies and its response outcome. This was analytical case-control study was designed to define the role of radioactive iodine treatment in the hyperthyroidism patients at Khartoum Oncology Hospital (KOH) from October 2018 to December 2019 by measuring the radioiodine uptake of the thyroid gland and TFT profile pretreatment and correlate the results with the TFT findings in 3 months, the data was collected using master data sheet and analyzed by Excel and SPSS program. 120 patients (23 males, 97 females; mean age, 42.98 ± 12.099 year) underwent radioactive iodine therapy. The mean value of thyroid uptake percentage during these scans was (18.28 ± 12.17), the most affected age group was 40-49 years having a frequency of 33 (27.5%). The mean dose used to ablate thyroid tissue was 13.45mCi. the levels of the thyroid hormones T3 & T4 and TSH post-treatment result showed that the mean value of these hormones was 6.9, 4.2, 2.8, and 2.5 (nmol/L) for T3, 222.1, 134, 119, 119.2 and 113.4 (nmol/L) for T4, and 0.37, 6.34, 5.3, 2.8, and 2.3 (nmol/L) for TSH respectively, A significant paired sample T-test was performed in order to test the difference between these values for the same patients mentioned at the Confidence level of CL=95% and p value= 0.05, the test was significant at P= 0.000, which mean that the thyroid hormone is significantly changing in these period and parenchymal tissues were ablated successfully and this study ensures that radioiodine therapy is the treatment of hyperthyroidism patients for their gradually reducing elevated TFT to reach normal range.

المستخلص:

هدفت هذه الدراسة إلى تقييم العلاج باليود المشع كعلاج مفضل لفرط نشاط الغدة الدرقية ، من أجل تقييم كفاءة العلاج. يعد التصوير الومضاني لكاميرا جاما للغدة الدرقية ، وامتصاص اليود المشع ، والاختبار المختبري لملف تعريف TFT معاً أكثر الطرق دقة لتحديد وتقييم أمراض الغدة الدرقية ونتائج استجابتها. تم تصميم هذه الدراسة التحليلية للحالات والشواهد لتحديد دور العلاج باليود المشع في مرضى فرط نشاط الغدة الدرقية في مستشفى الخرطوم للأورام (KOH) من أكتوبر 2018 إلى ديسمبر 2019 عن طريق قياس امتصاص اليود المشع للغدة الدرقية والمعالجة المسبقة لملف TFT وربطها. النتائج مع نتائج TFT في 3 أشهر ، تم جمع البيانات باستخدام ورقة البيانات الرئيسية وتحليلها بواسطة برنامج Excel و SPSS. 120 مريضا (23 ذكور ، 97 أنثى ، متوسط العمر ، 42.98 ± 12.099 سنة) خضعوا للعلاج باليود المشع. كان متوسط قيمة نسبة امتصاص الغدة الدرقية خلال هذه الفحوصات (12.17 ± 18.28) ، وكانت الفئة العمرية الأكثر تضرراً 40-49 سنة بمعدل تكرار 33 (27.5%). متوسط الجرعة المستخدمة لاجتثاث أنسجة الغدة الدرقية كان 13.45 mCi أظهرت نتائج ما بعد العلاج من مستويات هرمونات الغدة الدرقية T3 و T4 و TSH أن متوسط قيمة هذه الهرمونات كان 6.9 و 4.2 و 2.8 و 2.5 (نانومول / لتر) لـ T3 و 222.1 و 134 و 119 و 119.2 و 113.4 (nmol / L) لـ T4 و 0.37 و 6.34 و 5.3 و 2.8 و 2.3 (نانومول / لتر) لـ TSH على التوالي ، تم إجراء اختبار T لعينة زوجية كبيرة من أجل اختبار الفرق بين هذه القيم لنفس المرضى المذكورين عند مستوى الثقة $CL = 95\%$ والقيمة $p = 0.05$ ، كان الاختبار مهماً عند $P = 0.000$ ، مما يعني أن هرمون الغدة الدرقية يتغير بشكل كبير في هذه الفترة وأن الأنسجة المتني قد تم استئصالها بنجاح وتضمن هذه الدراسة أن العلاج باليود المشع علاج مرضى فرط نشاط الغدة الدرقية لتقليل TFT المرتفع تدريجياً للوصول إلى المعدل الطبيعي.

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