

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :

{ قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ }

صدق الله العظيم

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## *Dedication*

*My parents, who have been raising me to be the person I am today. They have been with me every step of the way, through good bad. They have been a source of encouragement and inspiration to me throughout my life, a very special thank you for providing a “writing space” and for nurturing me through the months of writing.*

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# Abstract

## **Background:**

The lack of anatomical details in standard <sup>131</sup>I iodine whole body scanning (<sup>131</sup>I WBS) interferes with the proper localization of metastatic differentiated thyroid carcinoma (DTC) lesions. In addition, nearby or overlapping variable physiological distribution of <sup>131</sup>I may affect the specificity of <sup>131</sup>I uptake, giving indeterminate results. The aim of this study was to demonstrate the clinical usefulness of simultaneous co-registration of <sup>99m</sup>Tc MDP bone scanning as an anatomical landmark with <sup>131</sup>I scanning in the evaluation of metastatic DTC.

## **Material and Methods:**

Twenty-five patients (16 females and 9 males, mean age + SD = 52 + 13 years) with metastatic DTC (17 papillary, 8 follicular), were included. Whole body scanning were obtained 48 hours after oral administration of 185-370

MBq 1311 and 2 hours after IV administration of 185-370 MBq 99 mTc MDP. Occasionally, additional simultaneous co-registration of localized detailed images was also performed. The two planar images were fused with optional fusion of SPECT images. Fusion image were considered to improve image interpretation in comparison with standard 1311 scanning when they provided better localization of lesion.

## الخلاصة

قلة التفاصيل التشويحية في معيار الود المشع 131 للمسح لإرى الكامل للجسم تتداخل مع افضلية تحديد انتشار سرطان الغدة الوقية المتمايز.بالإضافة في مكان قريب أو يتداخل مغرراً في التوزيع الفيورولوجي للود و ذلك يعطى نتيجة غير محدده.هدف هذه الدراسة كانت أن توضح الفائدة السرورية لتسجيل المشوك الأني مادة التكنشوم 99ة المخطوطه بالمادة الصيدلانية الميثالين داى وسونيت فى المسح لإرى للعظام كمعلم تشويحي مع الود 131المشع فى مسح تقييم انتشار سرطان الغدة الوقية المتمايز .

## المادة والطرق

خمسة وعشرون وبيض (16 أنثى و9 ذكور، عُمر متوسط + الانحراف المعيولى = 52 ±13 سؤات) مع انتشار سرطان الغدة الوقية (17 حُلُمي، 8 حويصلي) اشتمل على المسح لإرى للعظام بعد 48ساعة من اعطاء حوكة الود بالفم بطاقة 185-370 ميقيبوكيل وساعتين من اعطاء حوكة وريدية من التكنشوم 99م المخطوطه بالمادة الصيدلانية ميثالين داى وسونيت بطاقة 185-370ميقيبوكيل.بالإضافة الى ذلك تم دمج الصورتين المستخلصتين من القاما كموا المسطحه مع القاما كموا ثلاثية الابعاد.عملية

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## Table of Contents

Acknowledgment	i
Dedication	ii
List of the figures	iii
Abstract	v
أخلاصه	vi
Table of contents	vii

## List of Contents

Chapter One Introduction	
1.1. Introduction	1
1.2. Problem	2
1.3. Objectives	2
Chapter Two Literature Review	

2.1. Anatomy	<b>3</b>
2.2. Blood supply	<b>3</b>
2.3. Nerves supply	<b>4</b>
2.4. Histology	<b>4</b>
2.5. Physiology	<b>5</b>
2.5.1. Triiodothyronine	<b>6</b>
2.5.2. Effects of thyroid hormones	<b>8</b>
2.5.6. Pathology	<b>10</b>
2.6.1. Features of benign thyroid nodule.....	10
2.6.2. Features increase the suspicion of a malignant nodule.....	10
2.6.3. Thyroid cancers	<b>11</b>
2.6.4. Papillary carcinoma	<b>11</b>
2.6.5. Follicular carcinoma	11
2.7. Stages of the thyroid cancer	11
2.7.1.1. Papillary and follicular	11
2.7.2.1. Medullary	12
2.7.2.1. Anaplastic	12
2.8. Symptoms of thyroid cancer	13
2.9. Complete history and physical examination	13
2.10. Thyroid Scintigraphy.....	14
2.11. Radionuclides for Thyroid Imaging and Measurements.....	14
2.12. MDP (Methylene-diphosphonate) in-vivo kit for preparation of radiopharmaceutical product (Tc-IK-10)	15
2.13. Field of indication	15
2.13.1. Recommended mode of examination	15

2.13.2. Contraindications	15
2.13.2.1. Relative contraindications	15
2.13.2.2. Absolute contraindications	16
2.14. Radio-physical properties of the radionuclide and the absorbed dose values	.16
2.15. Pharmaceutical particulars	17
2.16. Incompatibilities	17
2.16.1. Shelf life	18
2.16.2. Special precautions for storage	18
2.16.3. Instructions for use and handling	18
2.16.4. Sodium Iodide I 131	19
Chapter Three material & Methods	
3.1. Material and Methods	25
3.1.1.Scintigraphy procedures	26
3.1.3.Fused 99mTc-MDP / 1311- WBS scanning	26
3.1.4. Data processing and image fusion	26
<b>Chapter Four Results</b>	
4.1. Results	29



4.2. <sup>131</sup> I whole body scintigraphy (131I-WBS)	29
4.3. <sup>131</sup> I-WBS and <sup>99m</sup> Tc-MDP bone scan fusion scintigraphy	31
<b>Chapter Five Discussion</b>	
4.4. Discussion	34
5.2. Conclusion	39
5.3. Recommendations	40
References.....	41

### List of figure

Figure 2.1 shows the anatomical lobes of the thyroid gland.....	3
Figure 2.3 shows the Arterial blood supply from the aortic arch for the thyroid gland .....	4
Figure 2.4 shows the anatomical structure for thyroid gland.....	5

Figure 2.5. Shows the chemical structure of thyroid hormones with iodine attachment.....6

Figure 2.6. Shows the chemical structure of thyroid hormones with iodine attachment.....7

Figure 2.6. Shows TSH release.....7

Figure 2.6. Shows thyroid hormone response elements (TRE) in target genes.....8

Figure3.1: The difference in intensity scales and count per pixel for 99mTc-MDP and 1322 scans. A. Figure shows the difference in count intensity between bone for iodine and bone scale. Image manipulation entails the use of variable multiplication factor (K) for 1-131 image followed by summation of iodine and bone scan images producing fused image with single intensity scale AB.

3-5 Images analysis and interpretation:.....27

Figure 3-2: 1311 WBS and bone performed for 48-year-old male patient with metastatic disease before fusion FCT. Out of the three who demonstrated hot foci in 1311, two were indeterminately localized, one was located in the thoracic region and the other was located in the pelvic region. ....28

Figure 3-3: shows multi-spot anterior and posterior planar views before and after fusion. The used planar images clearly identify the location of hot foci in left ribs posteriorly as well as left ala close to tip of sacro-iliac region.  
.....28

Figure 4-1: 99mTc-MDP bone scan (left column), standard 1311 WBS (middle column) and fused scans (right column) in a female patient with multiple.

Metastatic hot foci. The planar used image can not clarify totally the indicated  
intra-thoracic lesion because of overlapping structures. ....37

Figure 4-2: Reconstructed transverse, sagittal and coronal slices for thoracic  
region for the same patient showing the hot foci to be nodal mediastinal lesion.  
.....38

## List of table

Table 2.1 showing the thyroid hormones levels in percentage.....	5
Table 2.2.shows the properties of the Tc-99m.....	17
Table 2.3 shows a single dose of a patient.....	17
Table 2.4 shows the list of Recipients.....	17
Table 2.4. Shows side effects or problems in older people.....	20
Table 3.1. shows the Patients' disease characteristics and frequency.....	25
Table 4.1. shows the sites of metastases from DTC.....	30
Table 4.2. shows the distribution of metastases by region.....	31
Table 4.4. Shows the findings of standard 1-131 and fused 1-131 /MDP bone scan.....	32
Table 4.5. Shows the Effect fused planner I-131/MDP scans in identification of indeterminate lesions.....	33

