

الآية

إِنَّا عَرَضْنَا الْأَمَانَةَ عَلَى السَّمَاوَاتِ وَالْأَرْضِ وَالْجِبَالِ فَأَبَيْنَ أَنْ يَحْمِلْنَهَا وَأَشْفَقْنَ مِنْهَا
(وَحَمَلَهَا الْإِنْسَانُ إِنَّهُ كَانَ ظَلُومًا جَهُولًا)

صدق الله العظيم

﴿سورة الأحزاب﴾ ٧٢

Dedication

To my family for their understanding and patience.

To my colleague Khalid and Shyma for their moral support.

To all whom aid me to complete this work.

Acknowledgement

My gratitude and thanks to my supervisor **Dr. Caroline Edward Ayad.**

My gratitude and thanks extended to all colleagues in Soba hospital -Yastabshiroon

medical centers- Bugaa specialized hospital- Imperial hospital.

List of Abbreviations

T	thoracic vertebra
L	lumbar vertebra
CT	Computerized Tomography
GE	general electric
KV	kilo volt
mA	mille ampere
SD	standard deviation
BMI	body mass index

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Abstract

This study was done to identify the normal end plate angle from T12 to L4 for Sudanese patients using Cobb method as well as to assess the relation of these angles in both gender with age.

The study was done in the period from November 2010 to July 2011. In Soba hospital, Yastabshiroon medical centers, Bugaa specialized hospital, Imperial hospital.

130 Sudanese patients (65 male and 65 female) with different ages; they had CT examination for abdomen, pelvic or lumbar spine. Lateral scout was done and all the cases were diagnosed as normal. Exclusion criteria were major trauma; any disease of the vertebral column, spinal canal, para-vertebral soft tissues.

The measurement was done by drawing a perpendicular line to a line drawn from the superior end plate of the upper-end Of T12,L1,L2,L3,L4 vertebrae and the inferior end plate of the lower-end of T12,L1,L2,L3,L4 vertebrae; the angle formed by the intersection of the two perpendicular lines as Cobb angle which had been evaluated. .

The study showed that for Male; the mean end plate angle was found to be 7.4 ± 3.5 for T12, 6.6 ± 3.3 for L1, 4.7 ± 2.9 for L2, 5.3 ± 3.8 for L3, 18.8 ± 7.6 for L4.

For -Female ; the mean end plate angle was 9.2 ± 4.5 for T12, 9.9 ± 4.5 For L1, 9.8 ± 4.3 for L2, 6.8 ± 4.3 for L3, 5.9 ± 4.6 for L4.

The mean end plate of T12 was found to be increased significantly with age in male and female but no significant relation were found in L1,L2,L3,L4.

مستخلص البحث

اجريت هذه الدراسة لتحديد زاوية الصفيحة النهائية للفقرات من الفقرة الصدرية الثانية عشر الى القطنية الرابعة للمرضى السودانيين باستخدام طريقة ال(كوب) وكذلك لتقييم العلاقة بين تلك الزوايا الفقارية بالنسبة للجنسين حسب العمر.

اجريت الدراسة فى الفترة من نوفمبر 2010 الى يوليو 2011 فى المستشفيات سوبا الجامعي ومركز يستبشرون الطبى والبقعة وامبريل فى ولاية الخرطوم.

شملت الدراسة عدد 130 مريضا من السودانيين (65 ذكور و 65 اناث) باعمار مختلفة. خضع المرضى للتصوير بالاشعه المقطعية للبطن والحوض او العمود الفقرى تم عمل صور استكشافية جانبية لجميع المرضى وتم تشخيص الصور على انها طبيعية.

تم استثناء مرضى الاصابات العظمى وای امراض اخرى للعمود الفقري والقناة الشوكية والانسجة الرخوة المجاورة للفقرات من الدراسة.

تم اجراء القياسات عن طريق رسم خط عمودي علي خط اخر تم رسمة من الجزء العلوى للصفحة النهائية للفقرات الصدرية الثانية عشر والقطنية الاولى والثانية والثالثة والرابعة والجزء السفلي للصفحة النهائية للفقرات الصدرية الثانية عشر والقطنية الاولى والثانية والثالثة والرابعة بحيث يتقابل الخطان ليكونا زاوية ال(كوب) التى تم تقييمها من خلال الدراسة.

اوضحت الدراسة ان متوسط زاوية الصفحة النهائية للذكور في الصدرية الثانية عشر 7.4 ± 3.5 والقطنية الاولى 6.6 ± 3.3 والثانية 4.7 ± 2.9 والثالثة 5.3 ± 3.8 والرابعة 18.8 ± 7.6 .

وللانات فى الصدرية الثانية عشر 9.2 ± 4.5 والقطنية الاولى 9.9 ± 4.5 والثانية 9.8 ± 4.3 والثالثة 6.8 ± 4.3 والرابعة 5.9 ± 4.6 .

واوضحت الدراسة كذلك ان متوسط الصفحة النهائية للفقرة الصدرية الثانية عشر يزداد بطريقة ملحوظة بالنسبة للعمر في كلا الجنسين.

الا انه لا توجد علاقة معينة يمكن اخذها في الاعتبار بالنسبة للفقرات القطنية الاولى والثانية والثالثة والرابعة فى كلا الجنسين.

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