

الآية الكريمة

(الَّذِينَ آمَنُوا وَلَمْ يَلْبِسُوا إِيمَانَهُمْ بِظُلْمٍ أُولَٰئِكَ لَهُمُ الْأَمْنُ وَهُمْ مُهْتَدُونَ)

سورة الأنعام (الآية 82)

DEDICATION

To my father, my mother , my brothers , my wife

And

to all colleagues& teachers

ACKNOWLEDGMENT

I thank Allah who supported me to exert efforts & time for learning to achieve this simple research.

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ABSTRACT

This is a scientific and practical study which aimed to measure normal diameter of lumbar spinal canal in Sudanese population and was carried out in Sudan-Khartoum(Royal Care hospital using Toshiba Aquilion 64 slice).

A total of “52” normal patients come to the CT department and were selected randomly; all those patients have age between fifteen to fifty five years.

Diagnosis as normal, they were 27 males percentage (51.9%) and they were 25 females percentage (48.1%). The CT measurement done to 5th lumbar vertebra canal in an Antero Posterior & lateral projection , and the measurement done from L1 to L5.

This study found that there was less variation between the diameter of spinal canal& age greater than 0.05 and the main variation found between gender diameter of the canal that means the female was (48.1%) and male was (51.9%). The study concluded that lumbar vertebra canal diameter was more in males than females.

This study recommended a number of recommendations for further studies such as Keeping the ideal weight, constructing number of Slimming Centers, using of medical belt so as to keep intervertebral series of natural form, the technologist should know the normal range of lumbar canal measurements to correct image interpretation and another research with more sample.

المستخلص

هذه الدراسة علمية وعملية وهدفت هذه الدراسة لقياس ابعاد قناة العمود الفقري القطني للفقرات البطنية لعينة عشوائية من المواطنين السودانيين. ونفذت بالسودان في الخرطوم (بمستشفى رويال كير باستخدام توشيبا Aquilion 64 شريحة). حجم العينة "52" مريض عادي، أتوا إلى قسم CT وتم اختيارهم بشكل عشوائي . كل هؤلاء المرضى والذين تتراوح أعمارهم بين 15-45 عاما. تم التشخيص كالمعتاد، لعدد 27 من الذكور نسبة (51.9%) و25 من الإناث نسبة (48.1%). قام جهاز CT بقياس الفقرة 5 لقناة العمود الفقري الخلفي والجانبى، وقياس ذلك من L1 إلى L5.

توصلت هذه الدراسة الي أن الاختلاف أقل بين قطر قناة العمود الفقري وعمر أكبر من 0.05، ووجدت أن الاختلاف الرئيسي للقطر بين الجنسين من القناة. وهذا يعني أن الإناث كن (48.1%) والذكور كانوا (51.9%). وخلصت الدراسة إلى أن قطر قناة العمود فقري كان أكثر في الذكور من الإناث.

وأوصت هذه الدراسة عددا من التوصيات لمزيد من الدراسات مثل الحفاظ على الوزن المثالي، وبناء عدد من مراكز التخسيس، وذلك باستخدام حزام طبي ذلك للحفاظ على السلسلة الفقرية بشكلها الطبيعي، ويجب معرفة تقنية المعدل الطبيعي للقياسات قناة العمود الفقري لتصحيح تفسير الصور والبحوث الأخرى مع المزيد من العينات.

