

الأية

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صِرَاطَ الَّذِیْنَ اَنْعَمْتَ عَلَیْهِمْ غَیْرِ الْمَغْضُوْبِ عَلَیْهِمْ

* وَلَا الضَّالِّیْنَ

سُورَةُ الْفَاتِحَةِ

(الآية 1-7)

Dedication

To my father's sole

To my mother

To my beloved small

family

Acknowledgement

At the first great thanks to Allah for all bestowments and blessedness and for completing all my starts and actualizes all my dreams, alhamdlelah.

I would like to acknowledge Dr. Caroline Ayad for choosing and encouraging me to research on this topic and tolerate me and my questions.

Thanks to my co-supervisor Dr. Hussain Ahmed Hassan.

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Abstract

This was a descriptive cross sectional study, for measurements of craniofacial bones and nasal parameters, carried out to establish normal Sudanese craniofacial measurements; by using computerized tomography.

The study was done in Royal care hospital and Antalya Medical center, Diagnostic Departments, during the period from 2013 up to 2016.

A total of 110 craniofacial images were obtained including both gender (34 Males and 76 Females) with mean age 40.80 and 38.9years respectively their ages were classified with an interval of 5 years. The measurements mean of bieurion (cranial width) in males and females were 126.38mm and 123.2177mm respectively, glabila opsthion (cranial length) 181.3274mm in males and 172.07 mm in female. The study found that Bi zygomatic breadth (facial width) in male and female were 130.5mm and 123.5mm respectively, and Zygomatic arch length (RT<) in males 55.3mm , 55.1mm respectively and in female were 52.9mm , 52.79mm respectively . In male orbits, the mean of height was measured as 38.7103mm and 38.7mm, right and left respectively, whereas in female orbits it was 37.5mm and 37.46mm right and left respectively . The range of breadth was observed right and left as 34.95mm and 34.89mm respectively in male orbits, whereas in female orbits it was 33.7mm and 33.69mm right and left respectively.

The study revealed that the cranial breadth and length were significantly associated with bi-zygomatic breadth and bi-orbital roof; however cranial length was significantly associated with right and left zygomatic arch length. It inferred that cranial dimensions may be freely associated with facial structure. And revealed that adult males had higher values than adult females, in spite of that the researcher found that Sudanese

had Platyrrhine nose, Megaseme orbit, and Dolichocephalic head.

The study concluded that the Sudanese population is belonging to African origin and may be considered as a special ethnic group as the measurements were larger than the other groups. And the computed tomography is modality of choice in Anthropometry because it visualized and facilitated the measurements of the internal structures.

ملخص الدراسة

هذه الدراسة اجريت كدراسة توضيحية عرضية لقياس عظام الوجه القحفية وتوصيف

معايير الانف عند السودانين باستعمال الأشعة المقطعية، بهدف تحديد قياسات مرجعية

. طبيعية للسودانيين .

اجريت الدراسة في كل من مستشفى رويال كير ، ومركز انطاليا الطبي في الفترة من 2013 الى 2015 .

تمت الدراسة على 110 حالة تقسم الى 34 من الذكور و 76 من الاناث بمتوسط أعمار 40,8 و 38.9 سنة على التوالي قسمت الأعمار على مراحل بطول 5 سنوات للمرحلة. كانت المتغيرات مقاسات الرأس لكل من متوسطات العرض والطوال للرأس للرجال والنساء على التوالي. ومقاسات الوجه لكل من المسافة بين عظمتي الوجنتين (عرض الوجه) وطول قوس عظم الوجنه الأيمن والأيسر في الرجال والنساء كانت المتوسطات 126.38 ملم, 123.2 2 ملم, 3, 181.3 ملم , 8 172.0 ملم , 130.5 ملم, و 123.50 ملم , 55.3 ملم , 55.1 ملم , 52.9 ملم, و 52.8 ملم على التوالي و مقاسات فتحة محجر العين اليمنى واليسرى للرجال 38.71 ملم , و 38.74 ملم وعند النساء 37.54 ملم, و 37.46 ملم على التوالي , اما العرض كان 34.96 ملم, و 34.90 ملم عند الرجال , اما النساء كان المتوسط 33.72 ملم و 33.67 ملم لليمين واليسار على التوالي .

وجدت الدراسة علاقة مهمة بين عرض الوجه والمسافة بين منتصف محجر العينين وعرض الرأس. ووجدت ان طول الرأس يرتبط بعلاقة مهمة مع طول قوس عظم الوجنتين . خلصت هذه الدراسة أن ابعاد الرأس لها علاقة اصيلة بمكونات الوجه, وأن قيم مقاسات الرجال البالغين أكبر من قيم مقاسات النساء البالغات , بالإضافة ألى أنه تم تصنيف أنوف السودانيين حسب القياس الى فئة الأنف العريض والعيون من فئة العيون الواسعة والرأس من فئة الرأس الطويل.

وتوصلت الى أن ملامح السودانين تنتمي إلى الأصل الأفريقي ويمكن أن يعتبر كمجموعة

عرقية خاصة.

وأيضا خلصت الدراسة الى انه يمكن أن يستعمل التصوير المقطعي في علم الأجناس لأنه

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List of Abbreviations

Abbreviations	Meaning
A	Alveolar

ANS	Anterior nasal spine
Brd	Broad
CD-ROM	Compact disc read- only memory
CI	Cephalic index
Co	Condoyle
CT	Computerize Tomography
DICOM	Digital imaging and communications
	in medicine
Eu	Euryon
Fm	First molar
FOV	Field of view
G	Glabella
Go	Gonthion
H	Height
In	Incisor
KVp	Kilo-volt peak
M	Menton
mA	Milli-Amber
mm	Millimeter
Mo	Midial border of the orbit
N	Nasion
NI	Nasal index
OI	Orbital index
Op	Opsthorion
Or	Orbit
Po	porion
W	Width
ZAL	Zygomatic arch length
Zy	Zigon