## الاية

## قال تعالي:

﴿لَقَدْ جَاءَكُمْ رَسُولٌ مِنْ أَنْفُسِكُمْ عَزِينٌ عَلَيْهِ مَا عَنِتُمْ حَرِيصٌ عَلَيْكُمْ عَزِينٌ عَلَيْهِ مَا عَنِتُمْ حَرِيصٌ عَلَيْكُمْ بِالْمُؤْمِنِينَ رَءُوفٌ رَحِيمٌ ﴾.

(سورة التوبة الآية: 128)

## **Dedication**

To;

My parents...

My wife...

And my daughters...

# To my kind sons...

## Acknowledgment

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#### **Abstract**

Spleen ultrasound is one of the modality of choice to assess and evaluate the pathological condition of this organ and together with its measurement. This was an analytical study aimed to assess the spleen volume in western region of UAE using ultrasound measurement in order to provide the reference marker of its volume. A 50 patients (50 men; mean age, 35years [range, 20-57years]; mean body-surface area, 1.8 m² [range 1.27-2.25m²]) who presented with normal spleen although may have

any abnormality rather than the spleen itself, underwent abdominal US scan and the measurement was performed in both transvers and longitudinal section, using a high resolution General Electric US unit with 3-5 MHz curved array transducer.; this study was conducted in Madinat Zayed Hospital in period from august 2015-till January 2016, and patient demographic data was measured for all study population which include (Height, Weight, BAS, and BMI) having mean 169.5±7.6, 73.1±11.4, 1.8±0.196 and 25.39±3.036, respectively, the result showed that the mean ± SD of the spleen volume equal to 162.2±30.5. Directly proportional to the BSA, BMI, and patient weight.

### ملخص الدراسة

يعتبر التصوير بالموجات الصوتية من احدي التقنيات التي تساعد في تقييم الحالات المرضية لهذا العضو وكذلك القيام بمختف القياسات فية. هذة الدراسة هي دراسة تحليلية الهدف منها تقدير احجام الطحال لدي مواطني الامرات العربية المتحدة باستخدام تقنية الموجات الصوتية لدي الاشخاص السليمين وتقدير الحجم الطبيعي حسب خصائص اولئك الفئة. اجريت الدراسة في خمسين شخص متوسط اعمارهم 35عاما ما بين 20-57عام كمدي عمري, وكان متوسط مساحة سطح الجسم 1.8 متر مربع ومداه ما بين. 1.27-2.25مترا مربعا. وكانت جميع العينات هي لاشخاص سليمين او لامراض لا علاقة لها باطحال. تمت هذه القياسات باستخدام جهاز موجات صوتية تابع ل (GE) عالى الكفاءة واجريت القياسات في المقطعين الطولي والعرضي- باستخدام ماسح بقوة 3-5 ميقاهيرتز. واخذت هه العينات من مستشفى مدينة زايد في المنطقة الغربية في الإمارات العربية المتحدة في الفترة من اغسطس 2015 وحتى ياناير 2016. تم قياس الطول, الوزن, مساحة سطح الجسم وعوامل كثافة الجسم بمتوسط 7.6±169.5, 11.4±73.1, 11.4± 0.197 و 25.39±3.036 على التوالي. واظهرت النتايج ان متوسط حجم الطحال يساوي 30.5±162.2 ويتناسب طرديا مع مساحة سطح الجسم, الوزن وعوامل كثافة الجسم.

### **List of abbreviations**

UAE United Arab Emirate

LUQ Left Upper Quadrant

St Stomach

DM Dorsal ministry

CEUS Contrast Enhanced Ultrasound

CT Computed Tomography

RLD Right Lateral Decubitus

2D Two Dimensional

3D Three Dimensional

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