

ABSTRACT

Acupuncture is a technique for inserting needles into the body to introduce anesthesia or reduce pain. In detail, acupuncture basically is a procedure involved with stimulation of anatomical locations on or in the skin by using different types of techniques. Acupuncture is used for maintaining condition of body or treats human diseases for thousands of years. This thesis concerns the bioimpedance parameters (BI) and body composition parameters of people before and after undergoing acupuncture therapy. To measure bioimpedance (BI) parameters of normal subject and patients before and after acupuncture therapy I need to calculate the body composition parameters using Quadscan 4000. Also I need to make an analysis and comparison between BI parameters before and after acupuncture therapy. The main purpose of this study is to investigate the effect of acupuncture before and after acupuncture in term of resistance (R); reactance (X); impedance (Z); Phase angle; and capacitance (C) of female and male subjects that can be measured as bioimpedance (BI) parameters. The body composition parameters included with Fat Free Mass (FFM); Intracellular Water (ICW) Fat Mass (FM); Total Body Water (TBW); Extracellular Water (ECW) Basal Metabolic Rate (BMR) and are calculated based on bioimpedance (BI) parameters. All these parameters analyzes by using statistical analysis program called SPSS.

ABSTRAK

Akupunktur adalah satu teknik memasukkan jarum ke dalam badan untuk memperkenalkan anestesia atau mengurangkan kesakitan. Secara terperinci, akupunktur pada asanya adalah satu prosedur yang terlibat dengan rangsangan lokasi anatomi pada atau dalam kulit dengan menggunakan pelbagai jenis teknik. Akupunktur digunakan untuk mengekalkan keadaan badan atau merawat penyakit-penyakit manusia selama beribu-ribu tahun. Tesis ini melibatkan parameter bioimpedance (BI) dan parameter komposisi badan orang sebelum dan selepas menjalani terapi akupunktur. Untuk mengukur bioimpedance (BI) parameter subjek normal dan pesakit sebelum dan selepas terapi akupunktur, parameter komposisi badan akan dikira yang menggunakan Quadsan 4000. Analisis perbandingan antara parameter BI sebelum dan selepas terapi akupunktur akan dilakukan. Tujuan utama kajian ini adalah untuk menyiasat kesan akupunktur sebelum dan selepas akupunktur dalam bentuk rintangan (R); regangan (X); galangan (Z); sudut Fasa; dan kekuatan (C) untuk subjek lelaki dan wanita yang boleh diukur sebagai parameter bioimpedance (BI). Parameter komposisi badan termasuk dengan Massa Lemak Bebas (FFM); Air intraselular (Komanwel) Lemak Massa (FM); Jumlah air dalam Badan (TBW); Air Extracellular (ECW), Kadar Metabolik pangkal (BMR) dan dikira berdasarkan bioimpedance (BI) parameter. Kesemua parameter dianalisis dengan menggunakan program analisis statistik yang dipanggil SPSS.

UNIVERSITI MALAYA

ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: **KAMRUN NAHAR** (I.C/Passport No:

Registration/Matric No: **KGL 100015**

Name of Degree: **Master of Engineering (Biomedical)**

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**EFFECT OF ACUPUNCTURE THERAPY ON BODY COMPOSITION
PARAMETERS**

Field of Study: **HEALTH AND BIOIMPEDANCE**

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Author

Kamrun Nahar

KGL 100015

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