بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

Zagazig University
Benha Faculty of Medicine

SURGICAL MANAGEMENT OF OBESITY

ESSAY

Submitted in Partial Fulfillment of the Master Degree of General Surgery)

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بسم اللـــه الرحمن الرحيم

وقل ربِ زدني علماً

صدق الله العظيم

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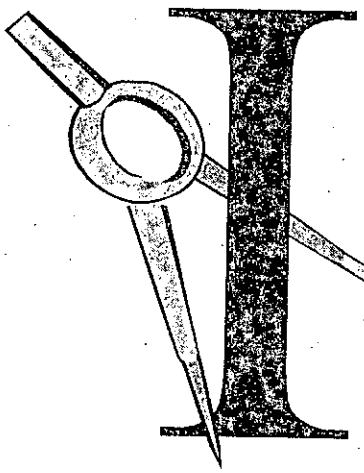


Introduction

INTRODUCTION

Obesity is simply defined as the ***Accumulation of Excess Adipose Tissue*** and implies an optimum weight for any individual but weight is a variable in which there is a continuous fluctuation between excessive low and excessive high weight within a normal range ***(Gazet, 1996)***.

The management of obesity is difficult and surgical intervention is controversial. ***Garrow (1994)***, in noting the adverse disabilities associated with obesity such as decreased longevity, increased risk of cardiovascular disease, hypertension, diabetes, osteoartheritis, and some forms of cancer sensitive to sex hormones, had asked two crucial questions:

First, is it physiologically possible for a severely obese patient to achieve normal weight and health? and

Secondly, is cure less distressing to the patient than the disease?

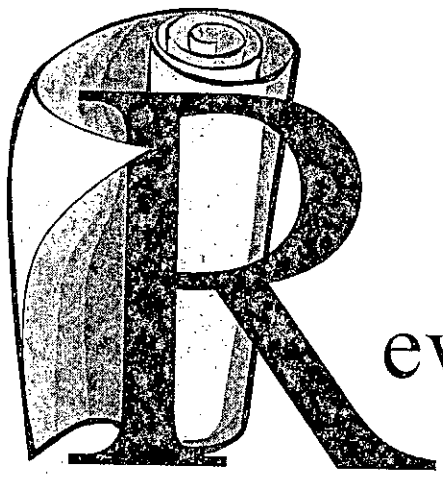
Unless the answer is yes to both questions, he believes one should not treat obesity. It is possible for the obese people to achieve normal weight and the ideal is a loss of 1 Kgm / week.

Surgical procedures include *(Harrison, 1989)*:

* Digestive bypass procedures.
* Digestive non-bypass procedures.
* Combined malabsorption and restrictive procedures.
* Body contouring surgery of the abdomen.

Aim of the Essay

The aim of this work is to discuss the different causes, pathology, types, risk factors, and management of obesity, including recent procedures with particular stress on the plastic surgical procedures.



eview of literature

ANATOMICAL AND HISTOLOGICAL CONCEPTS OF ADIPOSE TISSUE

General consideration

Fat cells are normal constituent of loose connective tissue. It is also known as adipocytes. It is found singly or in-groups in all connective tissue. Adipose tissue is widely distributed comprising 15% to 25% of body weight in adult. It plays an important role in metabolism due to its content of high-energy material. It also has the ability to bind large amount of fluid, and therefore influence the water balance ***(Smahel, 1986)***.

Structure of adipose tissue

Adipose tissue consists of fat cells that are organized into group called lobules. The lobules of fat cells are separated from each other and supported by partition of thin loose connective tissue. Septa consist of delicate reticular fibers that extend between them and support them. Those connective tissue septa also conduct blood vessels and nerves into the adipose tissue. Within the lobules, the individual fat cells are supported by stroma that consists of basket-like network of delicate reticular and collagenous fibers, stromal cells [macrophages, fibroblasts, pericytes, and mast cells]. The stroma contains abundant capillaries in their meshes and by this means capillaries are brought into intimate contact with fat cells ***(Ham, 1974)***.

Blood supply of adipose tissue

The vascularization of the subcutaneous fat layer that consists of the adipose tissue is based on the following vascular system from the fascial network. Arteries pass through the subcutaneous fat as far as the border of the dermis where they form a wide meshed subdermal plexus. Branches rise

or descend from the plexus; ascending branches are destined from the dermis. They branch again near the skin surface to form a second subcapillary plexus ***(Smahel, 1986)***.

The descending branches from subdermal plexus supply the fat lobules in the subcutaneous tissue with one branch usually serving a number of lobules. Each branch divides to supply individual lobules where they enter axillary through a vascular pedicle. Those branches then subdivide to form the capillary reticulate which surround and enclose each fat cell. This contradicts the earlier view that adipose tissue was not well vascularized ***(Smahel, 1986)***.

Regional distribution of adipose tissue

Fat mass is distributed differently in men and women. The android or male pattern is characterized by fat distributed predominantly in the upper body above the waist. Whereas, the gynaecoid or female pattern show fat predominantly in the lower body that is lower abdomen, buttocks, hips, and thighs. Upper body fat has a significantly worse prognosis for morbidity and mortality than lower body fat. The regional distribution can be measured in a variety of ways. The easiest most common and very useful way is measuring body circumference at the waist and at the hips and calculating a waist: hip ratio. A ratio of greater than 0.85 in women and greater than 1.00 in men can be considered abnormally high ***(Pi-sunyer, 1996)***.

Surgical anatomy of abdominal wall

Skin

The layers of anterior abdominal wall are skin, subcutaneous fat (made up of Camper's fascia on to deeper layer of Scarpa's fascia), muscles and their apponeurosis, peritoneal fat, transversalis fascia, and peritoneum.