PATIENT CARE AFTER BARIATRIC SURGERY

ESSAY

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رعاية مريض جراحة السنة المفرطة بعد العملية

رساله تمهيديه مقدمه من

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بكالوريوس الطب و الجراحه

توطئة للحصول على درجة الماجستيرفي الجراحة العامة

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Morbid obesity is the degree of overweight that is clearly associated with increased disability and mortality. Obesity can be defined using the body mass index (BMI), which is the weight in kilograms divided by the height in meters squared; a BMI of 35 kg/m 2 or more is considered morbidly obese. The causes of morbid obesity are unknown but probably include genetic factors, abnormalities of neural or humoral transmitters to the hypothalamic hunger or satiety centers, dysfunction of the hypothalamic centers themselves and psychologically induced oral dependency drives**. (Lazar J., et al. 1997)**

Severely obese individuals have a greater risk of coronary artery disease, hypertension, type II diabetes mellitus, sleep apnea, pulmonary embolism. The difficulty in recognizing the signs and symptoms of peritonitis puts the obese patient at a greater risk of intra-abdominal sepsis. Premature death is, therefore, more common in severely obese individuals. **(ZUIDEMA GD, et al. 2010)**

The primary treatment for obesity is nonsurgical, with surgical treatment indicated only in morbidly obese patients or very obese patients with comorbid conditions. **(DEBAS H.T.,2004)**

The history of bariatric surgery is relatively short. During last 50 years, over 50 variations of operations have been proposed to manage morbid obesity. These procedures have involved inducing malabsorption, restricting consumption, combinations of malabsorption and restriction, gastric balloons, and extra-gastrointestinal innovations**. (Pitombo C., et al. 2008)**

Every method of weight loss other than surgery is generally followed by weight regain. Bariatric surgery induces permanent weight loss, with regain typically occurring only at the same rate as the background weight gain of the general population. **(Haslam D,2010)**

Nursing care for the morbidly obese patient poses a significant challenge. Careful planning for the emergency admission, elective admission and discharge of a morbidly obese patient using a multidisciplinary approach and policy and protocols as guidelines, giving appropriate training and equipment will prevent litigation and injury costs. A morbidly obese patient should expect dignity and respect during a hospital stay. A morbidly obese patient should expect appropriateness, technical excellence, accessibility and acceptability. **Horn (2002).**

بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا إنك أنت العليم الحكيم.

صدق الله العظيم

سورة البقرة الآية ٣٢

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List of Abbreviations

ACEI	angiotensin-converting enzyme inhibitors
ADL's	activities of daily living
ASMBS	The American Society of Metabolism and Bariatric Surgery
BMI	body mass index
BPD	biliopancreatic diversion
DVT	deep venous thrombosis
EWL	excess weight loss
FRC	Functional residual capacity
LAGB	laparoscopic Adjustable band gastroplasty
PAP	pulmonary artery pressure
RGB	Roux-en-Y gastric bypass
RTP	reversed Trendelenburg Position
SWL	Safe Working Load
TP	Trendelenburg Position
VBG	vertical band gastroplasty
VTE	venous thromboembolism

Introduction

Morbid obesity is the degree of overweight that is clearly associated with increased disability and mortality. Obesity can be defined using the body mass index (BMI), which is the weight in kilograms divided by the height in meters squared; a BMI of 35 kg/m 2 or more is considered morbidly obese. The causes of morbid obesity are unknown but probably include genetic factors, abnormalities of neural or humoral transmitters to the hypothalamic hunger or satiety centers, dysfunction of the hypothalamic centers themselves and psychologically induced oral dependency drives**. (Lazar J., et al. 1997)**

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costs. A morbidly obese patient should expect dignity and respect during a hospital stay. A morbidly obese patient should expect appropriateness, technical excellence, accessibility and acceptability. **(Horn ,2002).**

As a trust, the need is to be proactive rather than reactive to the rise in obesity and caring for the bariatric patient. All our patients have a right to expect nondiscriminatory and appropriate healthcare and treatment. This includes providing the ability within healthcare facilities to deal with basic, easily anticipated requirements of mobilization and care**. (Rundle, 2002).**

Obese patients may not present until late in the course of their illness due to mobility and transportation problems, sedentary life-styles and depression. It often takes a great deal of effort to present with a problem as they may feel embarrassed and sometimes they are aware of a resentment from medical staff because of their size and the problems that surround the issue.Assessment is the first step, it identifies goals, equipment needs and care packages that meet both the individual and the staff involved which improves functional capability. Assessing a morbidly obese patients care needs should include detailed information on independence, mobility, activities of daily living (ADL'S) which includes Airway, Breathing, circulation, dignity and the equipment requirement. Also Risk assessments should be calculated. How to resuscitate a bariatric patient and how to weigh a bariatric patient should be in mind. The psychological needs should never be neglected**. (**Dartford, et al.: **American Society of Metabolism and Bariatric Surgery (ASMBS) Guidelines for the Care of Bariatic Patient, June 2006)**

Aim of Work

The aim of this work is to through some lights on the perioperative care of bariatric surgery patients and evaluation and management of their risks.

Definition & Pathophysiology of morbid Obesity

- ***Definition:***

Obesity can be defined using the body mass index (BMI), which is the weight in kilograms divided by the height in meters squared. BMI is the most common internationally accepted standards use to measure weight and the height of the people. **Volker (2004)**

BMI = Weight (Kg) / Height (M2)

TABLE 1-A

BMI	interpretation
< 20	Underweight
20 - 24.9	Healthy Weight
25 - 29.9	Overweight
30 – 34.9	Obese (Class 1)
35 - 40	Obese (Class 2)
40+	Morbid Obesity

(**National Audit Office – Tackling Obesity in England 2001, WHO**)

Morbid obesity is the degree of overweight that is clearly associated with increased disability and mortality. **(Lazar et al. 1997)**

Morbid obesity is defined as 100 lb above the ideal body weight **or** 50-100 percent above one's ideal body weight.

(The United States National Institutes of Health (NIH), 2001)

- ***Pathophysiology of morbid obesity*:**

Causes:

The real causes of morbid obesity are still unknown but sedentary lifestyle may be a major cause. Obesity Results from Greater Energy Intake than Energy Expenditure. Environmental, social, and psychological factors contribute to abnormal feeding. Childhood overnutrition is a possible Cause of Obesity. The number of fat cells in obese children is often as much as three times that in normal children. Neurogenic abnormalities are also a cause of Obesity. People with hypophysial tumors that encroach on the ventromedial nuclei of the hypothalamus often develop progressive obesity. **(Guyton and Hall 2006)**