

Preoperative Treatment with Very Low Calorie Diet

Adelaide Circle of Care, Flinders Private Hospital/Flinders University of South Australia, South Australia, Australia
Lilian Kow

Obesity is the most significant risk factor for the development of non-alcoholic fatty liver disease (NAFLD), a term that encompasses a spectrum of liver pathology ranging from fatty liver alone

(hepatic steatosis) to concomitant hepatic inflammation (non-alcoholic steatohepatitis or NASH).

NAFLD is estimated to occur in 30 to 100% of obese adults and is associated with hepatic enlargement (hepatomegaly), elevated serum aminotransferase levels and insulin resistance.

In morbidly obese patients, any abdominal surgery is difficult because of reduced intraabdominal space due to an enlarged liver and an increased amount of intraabdominal fat. The enlarged left liver lobe obscures the gastro-esophageal junction and makes the dissection at the gastroesophageal junction and proximal stomach difficult. Furthermore, traction to a fatty liver may cause trauma with increased risk for bleeding. Technical difficulties due to an enlarged liver are one of the most common reasons for abandonment of the laparoscopic procedure and often leads to conversion to an open procedure. The successful laparoscopic bariatric procedure is associated with less postoperative pain, reduced risk of incisional hernia, better postoperative pain, reduced risk of incisional hernia, better postoperative pulmonary function, as well as shorter postoperative care when compared to open bariatric procedures.

There are different preoperative dietary regimens recommended to reduce liver size. Most studies support that a preoperative very low calorie diet induces moderate weight loss resulting in a significant reduction of intrahepatic fat content and liver volume. This moderate weight loss and reduction in liver volume facilitates the laparoscopic bariatric procedure by improving the exposure of the gastroesophageal and proximal stomach region.

Optimizing Nutrition After Bariatric Surgery

Nicholas Wray
Adelaide Circle of Care
Flinders Private Hospital
South Australia
Australia

Bariatric surgery is an extremely effective weight loss tool which can result in significant and sustained weight loss. Implementing a structured post-surgical dietary protocol and managing the nutritional deficiencies that can result from such surgery, are essential to any bariatric surgical practice.

There are 4 critical stages after bariatric surgery where dietary manipulation and intervention are essential for weight loss success.

1. Post-surgical healing phase (liquid diet) - enables healing to occur from the surgery and minimizes patient discomfort whilst lessening the risk of stretching the new stomach pouch.
2. Progression of diet back to solids - semi-solid meals are introduced then gradual progression back to solid diet. The soft texture diet enables the stomach to get used to foods again, and the patient begins the learning process of how much they can safely eat.
3. Normal diet - dietary intervention during the longer time period from post-surgical period right through to target weight. Dietary guidance and regular contact with the patient is essential to continue a steady but adequate rate of weight loss and minimize nutritional deficiencies.
4. Maintenance of target weight - ongoing dietary review to ensure weight lost is maintained.

An experienced bariatric dietitian is a critical team member in each of these stages. The nutritional consequences of bariatric surgery must be considered on an individual basis, as both macronutrient and micronutrient deficiencies can occur. Deficiencies must be screened for and appropriate supplementation provided.

Multidisciplinary Approach in Adolescent Bariatric Surgery

A/Prof Wendy Brown
Centre for Obesity Research and Education
Monash University
Melbourne, Australia

Bariatric surgery has been shown to be an effective, and cost-efficient, tool in the management of adolescent obesity. However, adolescence is a unique period in an individual's life, whereby identity is established and risk taking behaviour is common. They are not children, nor "little adults". Patient selection, perioperative and postoperative management of the adolescent patient requires that their special needs are acknowledged, and a multidisciplinary team is required to maximise outcomes.

Taiwan's Experience of Multidisciplinary Approach in Bariatric Surgery

Kong Han Ser, M.D., WeiJei Lee, M.D.,PhD.

MinSheng General Hospital, Taoyuan county, Taiwan.

Morbid obesity is a serious disease as it is accompanied by substantial co-morbidity and mortality. The prevalence is increasing to an alarming extent. In the past few decades, bariatric surgery has developed and gained importance. Bariatric surgery is proved to be the only treatment permitting significant and long lasting results for patients suffering from morbid obesity with indications of BMI>40 kg/m² or BMI >35 kg/m² associated with one or multiples comorbidities. Bariatric care should be delivered within credentialed multidisciplinary systems. Roux-en-Y gastric bypass (RGB), adjustable gastric banding (AGB), and biliopancreatic diversion with duodenal switch (BPD + DS) are validated procedures that may be performed laparoscopically. Laparoscopic sleeve gastrectomy (LSG) also is a promising procedure proved in recent literatures. We would like to report our experience in multidisplinary approach in Taiwanese morbidly obese patients.

Obesity Conference; Understanding of psychological aspects of obese patients are essential for good follow-up after bariatric surgery

Atsuhito Saiki

Center of Diabetes, Endocrine and Metabolism, Toho University Sakura Medical Center

The pre- and post-operative management of bariatric surgery patients is multidisciplinary. Especially, physician should be responsible for the treatment of obesity, nutrition, risk factors and complications for the long-term follow-up together with nutritionist and nurse. On the other hand, it is also essential to understand the psychological aspects for good follow-up after bariatric surgery. Because bariatric surgery requires a considerable change in eating behaviors and patients will experience psychosocial change post-operatively.

Our institution holds a monthly “Obesity Conference” for more than 15 years. It is the multidisciplinary case conference and consists of not only physicians, nutritionists, nurse and physiotherapists, but also psychiatrist and clinical psychologists. Since 2010, our team has invited surgeons and has become a bariatric surgery multidisciplinary one. A highlight of the conference is to discuss the findings from interview, intelligence test and psychological test such as Rorschach Test (Comprehensive System) and Egogram performed by Mental-health professionals. We first understand and sympathize with the patient’s familial social background, past history, psychological stress and psychic reality as much as possible. Subsequently, we evaluate the personality traits and whether the patient has mental disorder and/or eating disorder. Then, the comprehensive strategy for follow-up after bariatric surgery is discussed and consented. In our team, physician mainly coordinates the conference and pre- and post-operative management including mental-health.

Our conference established a “high lambda” personality (Rorschach Test), which was highly detected in Japanese severe obese patients. High lambda is characterized as avoidance of complexity and the patients are often resistant against their behavior modification. To understand this personality is helpful to predict their “dropout” after bariatric surgery.

Understanding of “patient” with psychological aspects is essential to success in bariatric surgery. Obesity Conference must improve to popularize such an excellent bariatric surgery in Japan and to make more obese patients happy with the surgery!

The Role of the Dietitian in Bariatric Surgery Team

Yotsuya Medical Cube

Eri Kikkawa

The basic principle of treatment for obesity is that the consumption of energy overcomes the intake of energy. However, the obesity cannot be treated only by negative balance of energy. There are a number of problems with obese patients, such as eating habits, living conditions and social lives. Therefore, the multidisciplinary team approach with sufficient expertise to manage the interplay of these behavioral, nutritional, psychological, medical and surgical issues would seem imperative.

Our institution has performed nearly 200 bariatric cases since 2006. Our team consists of bariatric surgeons, nurses, social worker, and national registered dietitian for the management of bariatric patients. The main role of dietitian is nutritional management before and after surgery for the purpose of bettering the outcome of surgery. For example, the preoperative nutritional assessment and education of the patients plays an important role in reducing the risks of surgery and the postoperative instructions from the dietitian are provided for weight loss induced effectively and prevention of nutritional deficiency and malnutrition.

The postoperative excess weight loss was 22.9% at 1 month, 41.5% at 3 months, 58.5% at 6 months, 70.4% at 12 months, and 73.6% at 24 months. The dietitian has given the patients the details about nutrition and guided them properly. Therefore, there was no patient suffering from nutritional deficiency and malnutrition after surgery. In addition to that, our result shows that our multidisciplinary approach was successful for morbidly obese patients in Japan.

Psycho-Social approach by the social worker for bariatric patients in Japan. / A model to ensure the success of bariatric surgery

Tetsuya Nakazato

Yotsuya Medical Cube

Morbid obesity is a new but rapidly increasing social problem in Japan. More than 200 patients have underwent bariatric surgery since 2006 at Yotsuya Medical Cube.

We have organized the multidisciplinary Team which consists of surgeons, a nutritionist, a pharmacist, nurses, and a social worker. The team approach plays an important role in the success of treatment for bariatric patients. In this approach, the social worker is in charge of the psycho-social support for patients. For example, there are two kinds of psycho-educational groups organized by the social worker: 1) Pre-surgery orientation group with post-surgery patients as supporters every Wednesday and Thursday; 2) Post-surgery patient group meeting every December, the counseling has also been provided on individual basis as well as in group settings for pre-surgery and post-surgery patients.

As social work is a profession for those with a strong desire to help improve people's lives,, social workers are in an important position to help bariatric patients by helping them cope with and solve issues in their everyday lives, such as family and personal problems, relationships, and social problems. Therefore, as the patients can focus on their physical problems and treatment, this intervention has lead to the success of bariatric surgery in our hospital.

I will speak about effects of the social worker intervention for bariatric patients with my experiences and research.

A multidisciplinary approach to obesity treatment

Takashi Oshiro

Department of Surgery, Toho University Sakura Medical Center, Chiba, Japan

Open and laparoscopic bariatric surgeries have been performed in Japan since 1981 and 2000, respectively. But because of the low rate of obesity in the population (the percentage of the population with a BMI over 30 is 3.2%), and even medical personnel have little interest in trying to understand weight loss surgery. Although more than 90% of bariatric surgery is performed laparoscopically in the world, health insurance coverage is applied only for open surgery in Japan at this time. With regard to gastric bypass for Japanese obese patients, no consensus has yet been reached among domestic societies for the treatment of obesity due to the high risk of gastric cancer. For these complex reasons, only a few hospitals perform bariatric surgery routinely in Japan. However, considering that there has been an increase in obesity-related diseases in Japan, and since obesity continues to increase, it appears that there are many patients who would be candidates for bariatric surgery.

It is well known that the implementation of a presurgical patient assessment and diet programs by a multidisciplinary team can lead to optimal results after bariatric surgery. Our multidisciplinary team, including physicians, psychologists, nurses, psychotherapists, dietitians and physical therapists has worked for years on obesity treatment. Surgeons joined this team in 2010, and we started performing both open and laparoscopic bariatric surgeries. We herein present our multidisciplinary approach to pre-, peri- and postoperative care.