

## **Sleeve Gastrectomy**

The sleeve gastrectomy is a relatively new surgical procedure for weight loss and is permanent and irreversible. It involves permanently removing approximately two-thirds of the stomach, which is performed laparoscopically using surgical staplers. Because the size of the stomach is significantly reduced, patients feel full quickly or are satisfied by smaller meals. Normally a stomach can hold about 1.5 litres of food or liquid, however after the gastric sleeve; this volume is reduced to between 200-300mls. This allows a person to feel a sense of fullness with a meal size approximately equivalent to a cup of food. The remaining stomach still functions normally allowing food and nutrients to enter and exit the stomach sleeve in the normal way, and essential vitamins and minerals such as B12, calcium and iron can continue to be absorbed normally.

### **Risks**

Since the stomach has to be divided, there are additional risks over gastric banding in the early post-operative period. One significant risk is that gastric fluid may leak through the staple line if healing along the staple line is not perfect. This leakage can cause infection, and another operation is usually required. The risk of this complication is between 1-2%, and is the main risk after the sleeve gastrectomy. And, as with any surgical procedure, other possible complications include internal bleeding, blood clots in the leg veins or lungs, and wound infection. Some patients who achieve a rapid weight loss may develop gall bladder disease and/or gall stones which may require another surgery to remove the gall bladder.

Also, because the procedure is still relatively new, long term data beyond 6 years has not yet become available. Whilst the majority of patients with a sleeve gastrectomy achieve significant weight loss in the short and medium term, there is a chance that the stomach sleeve could eventually stretch over time which could lead to weight being regained in the long term if dietary and lifestyle modification is not adhered to.

The sleeve gastrectomy procedure is permanent and irreversible.

### **Advantages**

An advantage of the sleeve gastrectomy is that the long term problems associated with the gastric band such as slippage, erosion or port issues are totally avoided, and as there is no need for adjustments. Even though follow-up appointments do not need to be as frequent it is recommended that all patients come in every 3 months in the first year then annually thereafter.

The sleeve gastrectomy is well suited to patients who live far away or have very busy lifestyle which restricts them to adhere to the follow up of the gastric band. Another advantage is that there are generally fewer dietary restrictions as the entrance to the stomach is not narrow like a gastric band. Generally all types of food, including breads and steak, can be comfortably eaten once the sleeve has settled in. (Generally around 3-6 months after surgery).

Although the average weight loss overall is similar between the band and the sleeve, weight is usually lost quickly after the sleeve gastrectomy (typically the goal weight is reached within 9-12 months with a sleeve gastrectomy instead of 12-18 months with a gastric band). The sleeve gastrectomy is more powerful, as it restricts the quantity of both liquid and solid calories, where as the band can easily be 'cheated' with liquid calories, although this cannot be completely avoided if meals that are consumed are poorly balanced, eating processed carbohydrates and drinking sweetened beverages. Whilst the gastric band is very good at reducing hunger and allowing small meals to be satisfying, it relies more heavily on patients improving their dietary habits and lifestyle in order to achieve best results.

### **Nutrition long term**

When the entire stomach has been removed, it is common to give regular vitamin B12 injections and oral iron replacement. However when the antrum part of the stomach is preserved (as is the case with the sleeve gastrectomy), then simple monitoring of these levels is sufficient. The thing to remember is that, because you will be eating less, it is important to focus on good quality nutritious meals to ensure your body gets all the nutrients it needs. Regular follow up with your dietitian can assist with this.