Aiding better diabetes management

BARIATRIC surgery (or weight loss surgery) is a procedure to reduce the size of the stomach with a gastric band, through removing a portion of the stomach or resecting and re-routing the small intestine to a small stomach pouch.

It is often used to treat people with obesity. However, Dr Pok Eng Hong, consultant bariatric and upper gastrointestinal surgeon at Ara Damansara Medical Centre, says that after decades of research and tests, it is also considered a weapon against diseases that come with obesity, such as kidney failure, hypertension, dyslipidaemia, stroke, heart disease and diabetes.

Type 2 diabetes is a chronic progressive disease characterised by the deterioration of insulin production over time. As time passes, the need for medication increases, and persistent or worsening glycaemic control may increase the risk of complications.

However, glycaemic control is difficult, even more so if the person is obese. Dr Pok says, "Less than 50% of patients have optimal control of their diabetes in the long term."

He says diabetes occurs when an obese patient has developed insulin resistance. "Research suggests that weight loss will resolve insulin resistance."

With bariatric surgery, or more commonly known as gastrointestinal (GI) metabolic surgery when treating diabetic obese patients, both obesity and insulin resistance are dealt with at the same time.

Only carried out on patients with a body mass index of above 30, GI metabolic surgery utilises a minimally invasive keyhole technique. Dr Pok assures this procedure is low risk and has a faster recovery time but notes that patients will still need a nutrition plan and enact certain lifestyle changes to ensure long-term success of the procedure.

No advantage in delay

We often link diabetic treatment to medication, insulin injections or dietary adjustment. However, Dr Pok poses the question, "If you had the chance, will you treat your diabetes early to prevent future complications?"

He says GI metabolic surgeries are best done within eight years of a diabetes diagnosis, as the organs can still work to bring the body back to normal. When diabetes has been left untreated for too long, organs such as the pancreas may stop functioning, hindering the patient's chances to reverse the diabetes. Irreversible diabetic complications may also arise at this time, but it will be too late to carry out the surgery.

He says it is important to change the mindset of the public regarding diabetes. "If you consider diabetes to be similar to cancer, you would want to work towards getting treatment early. GI metabolic surgery does not just resolve your diabetes, but also many other obesity-related conditions as well."



Dr Pok Eng Hong.

Thus, he stresses that patients who struggle with obesity and diabetes can get another chance at a normal and healthy life with such a surgery.

■ For more information, call 03-5639 1212.



Gastrointestinal metabolic surgery can be the answer for people who struggle with obesity and the diseases associated with it.

Growing knowledge field

Dr Pok Eng Hong, consultant bariatric and upper gastrointestinal (GI) surgeon at Ara Damansara Medical Centre, says doctors still do not fully understand why patients who have diabetes can bounce back after GI metabolic surgery. The original intent of the surgery is to help people lose weight, but doctors soon realised that insulin resistance in patients who have undergone this surgery has disappeared.

New studies suggest that the surgery can change a patient's GI anatomy to directly influence blood sugar regulation.

Dr Pok adds that over the past decade, efforts have been made to explain the link between GI metabolic surgery and diabetes. Currently, some potential theories have been identified:

• The alteration of the amount and timing of the secretion of gut hormones, which in turn influences

insulin production.

- The increase in production of certain bile acids that make cells more sensitive to insulin, or increase the uptake of glucose by the gut cells themselves, thereby lowering blood glucose levels
- Changes in the composition of gut microbiota.
- Increased efficiency of intestinal nutrient sensing to regulate glucose metabolism in the body.

Spiralling out of control

AMONG South-East Asian countries, Malaysia ranks as the most obese country with the highest percentage of obese people. It is no surprise then that childhood obesity rates have also increased tremendously over the years.

"In the National Health and Morbidity Survey 2015, it was discovered that obesity in children below 18 years old was 11.9%," says Dr Wu Loo Ling, consultant paediatrician and paediatric endocrinologist at Subang Jaya Medical Centre.

Although a risk factor of childhood obesity is genetics, that alone doesn't guarantee childhood obesity. Dr Wu says the main factor is the environment and lifestyle of the child. For example, some parents would rather let the television "babysit" their children instead of bringing them outdoors, and letting their children eat whatever they want.

"Vending machines should be removed from schools. Most of the time, with both parents working, it could be easier to give the children money so they can get food for themselves, but most children would gravitate towards unhealthy food options," says Dr Wu.



Dr Wu Loo Ling.

Overweight and obesity in childhood are known to significantly impact both the physical and psychological health of a child.

Dr Wu shares that childhood obesity is just a preliminary condition that increases the chances of leading to other, more serious complications. These complications may range from psychological issues such as low self-esteem to physical issues like respiratory problems (including asthma, abnormal breathing rhythm and obstructive sleep apnoea), joint problems, type 2

diabetes and a high chance of developing heart disease earlier on.

Lies you may believe

When it comes to overweight and obese children, there are a few misconceptions that are prevalent in our society. One of these is the belief that obesity is solely about looks. Dr Wu emphasises that obesity is a disease, saying, "Most people don't think so and perceive it as a family trait, so there is no motivation to lose weight," she

Another misconception Dr Wu address is that parents think their child has time to lose the weight. Although some children may lose weight as they grow, this isn't so for many children. Losing weight isn't easy, and she adds that statistically, an obese child has a 50% chance of tracking that obesity into adulthood.

Besides that, people don't see themselves as being overweight. The National Health and Morbidity 2017 study has found that out of the total percentage of overweight adolescents, only 44% perceive themselves as overweight. In this instance, there is much to be concerned about as ignorance isn't bliss and being overweight is a



It is crucial for parents to control their children's diet as they tend to gravitate towards unhealthy food options.

stepping stone to other health

Too late?

"Don't wait until your child is obese to take action," says Dr Wu. Ensuring your child leads a healthy lifestyle from the start requires a specific kind of discipline that parents need to learn. A child's upbringing is important as it instils habits she will carry with her throughout her life.

Children learn from observation; hence, the family must practise a healthy lifestyle themselves. "You may say urbanisation has killed our parks, but that is only an excuse," says Dr Wu, who suggests taking your child out to do activities that enable him to run around, play and exercise instead.

■ For more information, call 03-5639 1212.