

GP IN-SYNC

A monthly e-newsletter by
NUH GP Liaison Centre



**GP Appointment
Hotline +65 6772 2000**

Specialist in Focus

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Assistant Prof Rajeev Parameswaran is the Head and Consultant of the Division of General Surgery (Thyroid & Endocrine Surgery) at the National University Hospital. He obtained his medical degree from Mahatma Gandhi University, India (1994) and subsequently completed his surgical training in Manchester and Oxford, UK. He also obtained his FRCS in 2000 and M Phil from Oxford for his basic science research on aberrant glycoproteins in thyroid cancer. Following his surgical training, he completed his fellowship in Endocrine Surgery from Oxford and worked as a Consultant before moving to Singapore.

His clinical practice focuses mainly on the surgical management of thyroid, parathyroid and adrenal disorders. His other areas of interest are surgery for familial (inherited) endocrine and neuroendocrine diseases. He is an advocate for intraoperative neuromonitoring in thyroid and parathyroid surgery, to minimise nerve injuries and improve voice outcomes following surgery. He has extensive experience in day case endocrine surgery and is one of the very few surgeons in the world who has performed parathyroid surgery under local anaesthesia and sedation.

Assistant Prof Rajeev has been performing surgery for nearly 20 years and his expertise is mainly in the management of thyroid cancers, parathyroid tumours, adrenal tumours including cancers, and reoperative thyroid and parathyroid surgery. He has performed over 500 thyroids, 300 parathyroid and 70 adrenal surgeries over the past five years. Besides endocrine surgery, he also routinely performs surgery for hernia (open and laparoscopic), salivary gland surgery, and lumps and bumps. His research areas of interest include the investigation of glycans in endocrine cancers and epidemiology of thyroid cancer.

Clinical Highlights

Thyroid Cancer

Thyroid cancer is the most common endocrine cancer and the 8th most common cancer amongst women in Singapore. The incidence of thyroid cancer over the last four decades has risen by nearly 226%. The exact cause of this increase is unknown but evidence suggests that improved health screening is the most important causative factor, besides other factors like genetic, environmental and increased awareness.

What are the risk factors for thyroid cancer?

- Exposure to radiation in childhood
- Family history of thyroid cancer
- Inherited syndromes like MEN, Cowden's syndrome, familial polyposis (FAP)
- First degree relatives with thyroid cancer
- Women are at higher risks

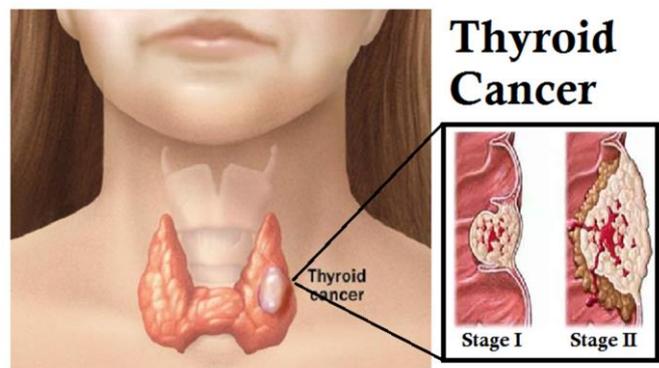
How does cancer of the thyroid present itself?

Patients may have any of the following symptoms:

- Lump in the thyroid gland or neck
- With or without difficulty swallowing, breathing or change in voice
- Incidentally picked up on scans for other conditions
- Rarely, patients may also have complications like pathological fracture, shortness of breath or confusion

Once the diagnosis is established by fine needle cytology, patients are advised to undergo surgery. Most thyroid cancers have excellent outcomes if treated early, even in the presence of lymph node disease, and go on to lead a normal life. The primary treatment is to offer a thyroidectomy but a minority of patients may be treated with a lobectomy if the cancers are small and patients fall into the low risk category.

The efficacy of robotic and endoscopic surgery in the treatment of thyroid cancer is less established and so are treatment modalities like ethanol and radiofrequency ablation. Whilst these may work for a particular group of patients, the general consensus is that they are not the accepted standard of care in thyroid cancer management.





GP Liaison Centre (GPLC)

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Specialist in Focus



Associate Professor Jimmy So

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Associate Professor Jimmy So is the Head and Senior Consultant of the Division of Surgical Oncology in National University Cancer Institute, Singapore (NCIS) and Head and Senior Consultant of the Division of Surgery (Upper Gastrointestinal Surgery) in National University Hospital. He is trained in upper gastrointestinal surgery, surgical oncology, bariatric (or obesity) surgery, therapeutic endoscopy and minimally invasive surgery. He received fellowship training at Massachusetts General Hospital, Harvard Medical School, USA. He was also appointed as visiting consultant surgeon in esophageal and gastric surgery at the Royal Infirmary in Edinburgh, UK.

Associate Professor Jimmy So special interests are in gastro-esophageal cancer, gastro-esophageal reflux disease, achalasia, endoscopy and obesity surgery. He established a multidisciplinary programme for upper gastrointestinal (GI) cancers in NUH in 2005. He also set up a Centre for Obesity Management and Surgery (COMS) to provide a holistic care for morbid obesity surgery. He is the pioneer in endoscopic surgery for early esophageal and gastric cancers, robotic surgery and Peroral Endoscopic Myotomy (POEM) for Achalasia in Singapore.

Clinical Updates

Bariatric Surgery for Morbid Obesity

In the Asian population, severe obesity is defined as a Body Mass Index (BMI) of 32.5 kg/m² or greater, while morbid obesity is defined as a BMI of 37.5 kg/m² or greater. In Singapore, 10.8% of the population is obese as of 2010. Bariatric (weight-loss) Surgery has taken off world-wide and is recognised by The National Institutes of Health as the only effective treatment to combat severe obesity and maintain weight loss in the long term.

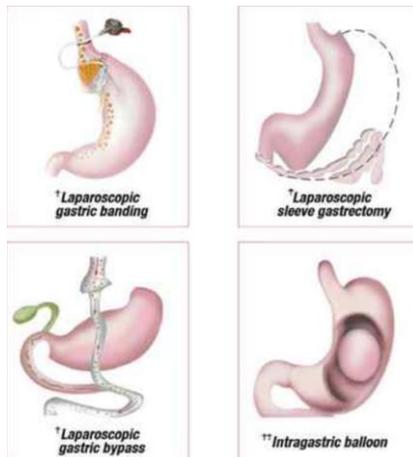
What are the types of Bariatric Surgery available?

It involves a modification of the digestive tract with the aim of reducing the size of gastric reservoir with or without reducing the ability of the gut to absorb food. Keyhole or minimally invasive surgery has become the standard of care in bariatric surgery.

Options include (see Figure 1) :

- Laparoscopic (keyhole) sleeve gastrectomy (LSG)
- Laparoscopic gastric bypass
- Laparoscopic gastric banding
- Intra-gastric balloon

Figure 1



+ Courtesy of Ethicon EndoSurgery and ++ Allergan Inc.

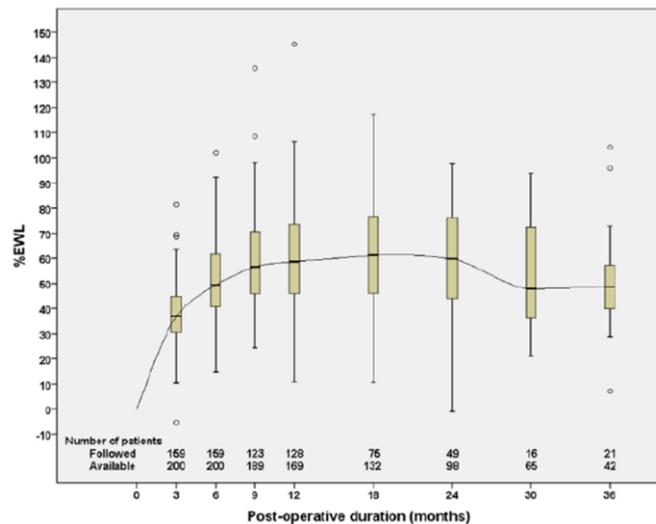
What are the benefits of Bariatric Surgery?

Excess weight is the difference between the preoperative weight and ideal weight at a BMI of 23.0 kg/m². The percentage of weight loss (%EWL) is then calculated by the percentage of postoperative weight loss over the preoperative weight.

In our published study from NUH, patients could expect to lose up to 60% of their excess weight after laparoscopic sleeve gastrectomy (see Figure 2).

Figure 2

Percentage of excess weight loss (% EWL) trend after laparoscopic sleeve gastrectomy



S. S.Ching, Jimmy So, Asim Shabbir et.al. Surgery for Obesity and Related Diseases (2015)

What are the other potential health benefits of LSG?

- Remission of Type 2 diabetes mellitus
- Remission of hypertension
- Remission of hyperlipidemia

One should consider Bariatric Surgery (Surgery for obesity) if:

- BMI is greater than 32.5 kg/m² with obesity-related health conditions including diabetes mellitus, hypertension, OSA, etc (Severe Obesity)
- BMI is greater than 37.5 kg/m² (Morbid obesity)



Shaping Medicine for the Future

CME Registration: <https://nuhcme.com.sg/>

News Updates

New NUH Sports Centre to meet Increasing Demand for Sports Medicine Services



The National University Hospital (NUH) has set up a new dedicated facility to provide integrated care for sports & exercise-related conditions for the western population of Singapore.

A dedicated facility at the National University Hospital (NUH) will now provide integrated care for sports and exercise-related conditions. The multi-disciplinary centre was officially opened today by Minister for Culture, Community and Youth, Ms Grace Fu.

Backed by an experienced team comprising sports physicians, orthopaedic surgeons, cardiologists, and allied health professionals like physiotherapists, dieticians, podiatrists, the NUH Sports Centre offers professional and amateur athletes as well as sports and exercise enthusiasts access to integrated services under one roof.

At the new Centre, patients can get to consult with different members from the team of specialists. Diagnostic tests, including magnetic resonance imaging (MRI) scan, can also be performed on the same day, if need be, offering quicker diagnosis and treatment. This is especially important for competitive athletes who would like to recover quickly and return to sports and training early.

With the push to encourage Singaporeans to be more active and take up sporting activities, the NUH Sports Centre is committed to promote sports and exercise for health.

“This is evident in our support and involvement in national and community sporting events such as the annual OCBC Cycle, to prepare participants for the event and to help them improve their performance and prevent injuries through workshops, screening and consultations.

We are also in close collaboration with the National University of Singapore (NUS) to provide team physician services for the various varsity teams under teamNUS,” says Dr Lingaraj Krishna, Director of the NUH Sports Centre.

Clinical care aside, the new Centre is looking to play an active role in education and research in sports medicine. It is the latest sports medicine training centre to be accredited by the Joint Committee on Specialist Training and will be training future generations of sports physicians.

On the research front, the Centre is undertaking clinical translational research, including a trial to look into the effectiveness of pulsed electromagnetic fields in enhancing muscle growth and strength.

This is particularly relevant for patients and athletes recovering from injury and surgical treatment as muscle weakness and atrophy often occur in these situations. There are also plans to collaborate with the DSO National Laboratories in assessing the potential of the technology in enhancing training and performance in the military setting.

The new Centre is expected to see more than 10,000 patients a year. According to the latest National Health Survey, 19% of the local population engaged in regular exercise, compared to 14% in 1992.

Facilities at NUH Sports Centre

- Orthopaedic Sports
- Surgery Clinic
- Sports Medicine Clinic
- Children’s Sports Clinic
- Sports Cardiology Service
- Sports Imaging Service (Full suite comprising X-ray, ultrasound and MRI)
- Sports Physiotherapy and Exercise Clinic
- Sports Podiatry Clinic
- Fully Equipped Sports Gym
- Sports Dietetics Service
- Sports Acupuncture Service
- ESWT (Extra-corporeal shock wave therapy) Service
- In-Clinic Pharmacy
- Retail Shop for Braces and Appliances

Source: TODAY (Published on 23 January 2016)