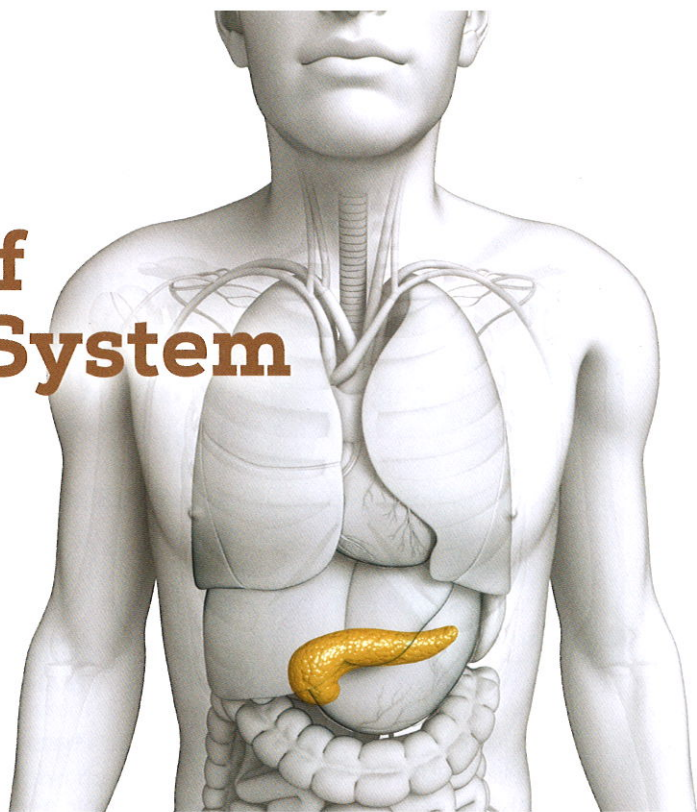


The harmony of Hepatobiliary System

Hepatobiliary (HPB) system is essential to our digestive system and includes the liver, pancreas, bile ducts and the gallbladder. We continue in this issue to learn more about HPB, the diseases that can affect them and the treatment options. Dr Ho Choon Kiat, Senior Consultant Surgeon of Nexus Surgical Associates shines the spotlight on the hepatobiliary system.



Know your HPB

When you think of HPB, think of them as the cogs and wheels working seamlessly like clockwork to make sure that the fats in your food are properly broken down and waste is transported away from your system. In addition, the pancreas is a critical controller of blood sugar levels. It makes insulin, which lowers blood sugar when it is too high, and glucagon, which raises blood sugar when you need energy.

As they are not seen or felt in our day-to-day lives, it is not surprising that most people don't know as much about the system as they do about other parts of their bodies.

Many of Dr Ho's patients are Singaporeans, mostly referrals for a deeper examination. Contrary to what we understand about HPB being age-linked, Dr Ho clarified it is not always the case.

"The youngest patient was an 11-year old boy and the oldest was in his late 80s. Take for example colorectal cancer, whilst this disease usually afflicts the elderly, I have seen someone in the 30s with this disease."

Being the central processing unit of the digestive system, many of the diseases are due to diet and lifestyle. "Observational studies have suggested that gallstone disease is partly a lifestyle disease, in part due to the rich food people consume with increasing affluence. And Singapore is no different," Dr Ho said.

Cancer happens

It is also possible for cancer to develop in the pancreas. Fortunately, according to the Singapore Cancer Registry 2010 to 2014, pancreatic cancer is still quite uncommon in Singapore. It is not listed amongst the ten most frequent cancers for both males and females.

"However, the incidence of pancreatic cancer increases with age, and men are slightly more likely to develop pancreatic cancer than women. This could be related to the risk factors: in particular smoking and chronic alcohol consumption, which are more prevalent amongst men," Dr Ho explained.

Dr Ho said that although it is common knowledge that pancreatic cancer is an aggressive disease, there are treatments for the disease.

"For the appropriate patient, if the tumour is removed completely, there is still a chance for reasonable survival beyond five years. If the tumour is not removed, the usual survival is about one year," he added.

The surgical options would depend on the location of the cancer. If it arises in the head of the pancreas, the procedure, also known as the "Whipple" procedure, would be to remove part of the pancreas, part of the small intestine and the gallbladder, he explained.

"If the tumour arises in the body or the tail of the pancreas, he would need a distal pancreatectomy. The spleen is usually also removed in this operation," he further explained.



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Dr Ho Choon Kiat,
Senior Consultant Surgeon,
Nexus Surgical Associates

Steve Jobs died from a rare form of pancreatic cancer at age 56 in 2011. According to Dr Ho, "Steve Jobs had a neuroendocrine tumour, an uncommon form of pancreatic tumour. It is also a less aggressive form, and if treated early, complete cure is a possibility."

Minimally invasive

Hepatobiliary and pancreatic surgery can be high risk and sometimes patients are apprehensive about consulting with specialist doctors. Dr Ho said, "This type of surgery can be complex and therefore, it is important to seek out a surgeon whose sub-specialty is HPB surgery."

Laparoscopic or keyhole surgery is a minimally invasive approach, and is an alternative to open surgery. If a patient is physically fit to undergo surgery under general anaesthesia, this patient should be suitable for laparoscopic surgery.

"In fact, due to the minimally invasive nature of laparoscopic surgery, the stress on the patient's cardiovascular system is less, and hence makes it a better choice for elderly patients," he added.

The benefits of minimally invasive or laparoscopic procedures include less post-operative discomfort since the incisions are much smaller, quicker recovery times, shorter hospital stays, earlier return to full activities and smaller scars.

This reduces the incidence of post-operative complications like pneumonia, which is more prevalent in elderly patients.

Dr Ho added, "This is not to say that there is no role for open surgery. For some complex procedures

like major liver resection or removal of the pancreatic head, open surgery is faster and safer. With better equipment and training, the scope of laparoscopic surgery will only expand. Previously bile duct surgery, pancreatic surgery and colorectal surgery were only done by the 'open technique'. Now, doctors are able to apply laparoscopic surgery to selected bile duct

diseases, pancreatic tumours and colorectal cancers."

Helping patients decide

To help patients decide on the best course of treatment, Dr Ho would usually assist his patient in weighing the benefits and the risks of each approach so as to allow them to make an informed choice.

"Many times, my patients would have already done some research online. I would usually walk them through their diagnosis and the proposed treatment strategy. I would also take time to address any queries they have, in particular clarify certain information they pick up from the internet. For diseases requiring major operations like liver resections or pancreatic resections, I would also give them some time to think it over at home. I would also assist them in coming to a decision by directing them to certain reliable websites such as the American Cancer Society to learn more," he added.

A sub-specialty in Hepatobiliary

"I was tasked to develop laparoscopic surgery in the realm of HPB surgery, not just for gall bladder removal but for more complex work such as liver, bile duct and pancreatic surgery." That was 20 years ago when he started his practice at Tan Tock Seng Hospital. Dr Ho was inspired by his mentor Prof Low Cheng Hock to take up Hepatobiliary (HPB), a sub-specialty of gastroenterology. He has not looked back since. Outside of work, to unwind and relax, the surgeon enjoys movies, particularly thrillers and comedies.