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# Listen to Your Heart

*Heart disease can be stealthy and swift. Find out about a real-life patient's shock diagnosis, surgery and recovery.*

## The Unlikeliest Victim

Mdm Tan Bee Hua, a 71-year-old housewife, is a lively and active person who believed that she was healthy. For the past ten years, she has woken up at 5.30am every morning and gone to a nearby park to exercise at 6am. She has always paid attention to her diet and never had any bad habits.

A year ago, Mdm Tan started feeling overwhelmingly tired due to the constant pain in her right leg. She went to Mount Alvernia Hospital for a checkup and was shocked to discover that she had severe blockages in all three of her coronary arteries. Immediately, she was admitted to the hospital to undergo coronary angioplasty.

## Disbelief Turns to Gratitude

"The doctor told me that all three coronary arteries were blocked. I couldn't believe it. I could walk, I don't pant, and I have no difficulty breathing. How could I have heart disease?" said Mdm Tan, recalling her incredulity after the diagnosis. "I even asked Dr Ho to perform the surgery after my trip to Thailand."

It was not until her doctor, Dr Ho Kheng Thye, Senior Consultant Cardiologist of Heart Consultants Pte Ltd at Mount Alvernia Hospital, showed the heart scan to both she

and her daughter that Mdm Tan appreciated the full gravity of her condition. Shaken, she cancelled her trip and underwent the procedure right away.

## Don't Automatically Pin the Blame on 'Old Age'

Before the angioplasty, Mdm Tan said that she felt tired all day long. She had no energy even to carry groceries from the wet market, and nodded off as soon as she sat down. Mdm Tan had felt moderately fatigued for several years, but it began to worsen last year. The muscles in her right leg became so painful that it was difficult to even climb up the stairs. She would have to stop and rest after taking a few

steps, and would fall asleep quickly after taking a short bus ride.

Since Mdm Tan's parents and siblings had no family history of cardiovascular disease, she put her lack of energy to getting old. Never once did it occur to her that she might have a heart problem.

## Fast-forward to Today

After her coronary angioplasty, Mdm Tan was able to care for herself immediately upon being discharged from hospital. The surgery has had no ill-effects. While she made a quick recovery, she had a second angioplasty procedure performed two months later. With this, all three vessels were successfully treated. She now goes exercising or swimming everyday and is brimming with energy. She regularly socialises and walks long distances without feeling tired.

Many of Mdm Tan's close friends were as shocked as she was when they learned that she had a life-threatening heart condition. Several were jolted out of their composure and started going for regular health checkups. Mdm Tan continues to share her experience with her elderly neighbours and friends, urging them to go for regular checkups so that problems can be diagnosed and treated early.

"Maintaining good health isn't just about happiness for ourselves, it is also a blessing for our children and family," shared Mdm Tan. "I hope to stay healthy and happy for the rest of my days."

## A Cautionary Tale

As Mdm Tan discovered, heart disease is not necessarily accompanied by typical symptoms such as chest pain and tightness or difficulties breathing.

Had Mdm Tan not 'listened' to her chronic fatigue, and if she had only put that down to old age and put-off that checkup, she may not be around to tell her story today.

## CT Myocardial Perfusion Takes a Closer Look at the Heart

Mdm Tan's symptoms were not typical of coronary artery disease (CAD). She did not complain of chest pain or breathlessness, but overwhelming fatigue and low energy levels. In retrospect, this was all due to CAD.

Since CAD is more common in the elderly, a CT coronary angiogram was performed. The results showed that the blood vessels were heavily covered in calcium which made it difficult to be sure if the vessels were blocked. Traditionally, the next test would have been an invasive angiogram. However, she was reluctant to undergo an invasive test.

By performing the CT perfusion test at the same setting, without her getting off the scan table, a severe reduction in blood flow in a very large part of her heart was demonstrated which implied that all three vessels must have been severely blocked.

When Dr Ho showed both Mdm Tan and her daughter the scan images, they were convinced immediately that she needed urgent treatment.

Most patients are probably familiar with a CT coronary angiogram (CTA) to examine – the blood vessels of the heart. Adding CT Myocardial Perfusion to the imaging, doctors can get a lot more information pertaining to the blood vessels and blood flow which can be used to diagnose, plan for treatment, and predict whether an illness might occur. Perfusion refers to the blood flow to the heart. In myocardial perfusion testing, doctors measure the blood flow using the CT-scan machine. They can then tell if the flow is normal or reduced when the patient has CAD.

Using medications to dilate the vessels can create the same post-exercise effect without requiring physical stress and while the patient is resting on the scan table. If the flow is reduced, it indicates a significant block in the vessels. Patients can avoid going for more investigations and thus reducing further costs.

More so in the case of Mdm Tan, where the arteries could not be clearly seen with CTA. This might be the situation when the vessels are heavily calcified or if the patient has had stenting procedures done before. Moreover, Mdm Tan was already feeling very fatigued, and it might not have been possible for her to perform an exercise test.



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