

Holding health in our palms

Hand injuries such as CTS, trigger finger and deQuervain's tenosynovitis cause much pain but they can be treated, says **EMILYN YAP**

WRING our hands when we are anxious, lend a hand when we are helpful and try our hand at something new when we are feeling bold. That hands have become such a common feature in idioms reflects how indispensable they are to our daily lives. Hands perform the critical mechanical functions of pinching and gripping, allowing us to physically manipulate the environment. But because hands are in constant contact with the surroundings, they are susceptible to injury.

"The hands are the most commonly injured parts of the body," says Lim Beng Hai, director and senior consultant at the Centre for Hand and Reconstructive MicroSurgery at Mount Elizabeth Medical Centre. Dr Lim also runs a similar clinic at Novena Medical Centre.

Among his patients, a common condition today is Carpal Tunnel Syndrome (CTS), caused by compression of the median nerve at the wrist. This nerve, with the tendons that bend the fingers, travel through a passage-way called the carpal tunnel, which is bound by bones and ligament. Sometimes, swelling of tendon linings narrows the carpal tunnel and squeezes the median nerve, leading to pain and dysfunction.

CTS sufferers usually feel "pins and needles" on their fingers, particularly the thumb, index and middle fingers. There may be a sensation of tightness at the wrists. Repetitive activities such as typing, driving and using chopsticks can sometimes cause pain and numbness. Symptoms can also appear at night and disrupt sleep.

As the condition worsens, patients may experience weakness in their hands, making it difficult to hold objects or perform tasks such as buttoning. In severe cases, some people lose sensation in their fingers and even burn themselves without knowing it. Patients tend to be women in their mid-40s, says Dr Lim, but "we're beginning to see younger patients mainly because their work is very computer-related".

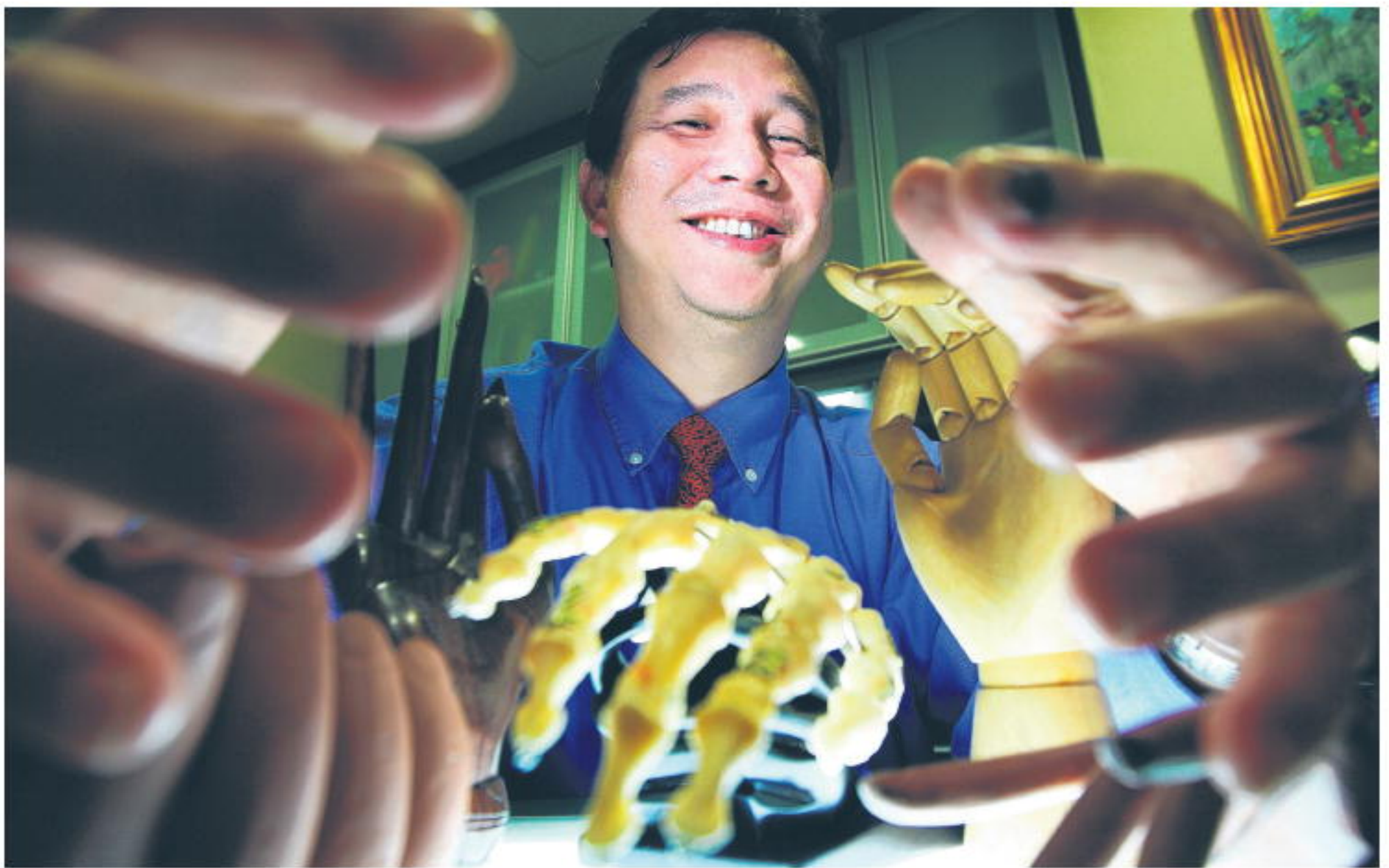
Therapy and medication can treat CTS in the early stages, but surgery may be needed for serious cases. Options include open carpal tunnel release, where an incision is made in the palm to cut the ligament and enlarge the carpal tunnel. This relieves pressure on the median nerve. "Over here we do the limited open carpal tunnel release," says Dr Lim. This requires a much smaller incision for the same procedure, reducing or preventing the appearance of a scar.

Apart from CTS, many of Dr Lim's patients suffer from trigger finger. This is a condition where fingers or the thumb are locked in a bent position. Patients can straighten them - but with a snap that causes pain. In severe cases, patients may not be able to straighten them at all.

Trigger finger is typically associated with inflammation of the tendon lining. Tendons that bend fingers and the thumb slide through snug tunnels called the sheath. When inflammation causes the sheath to become too tight, tendons can no longer glide through easily and trigger finger occurs.

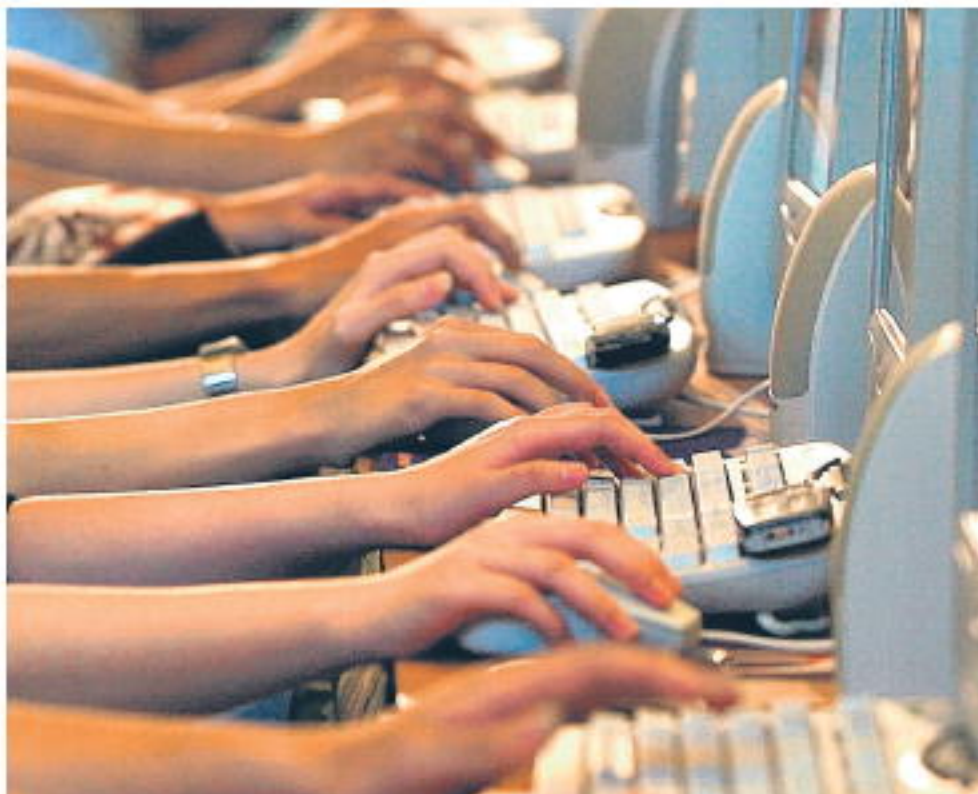
An injection of steroid medication into the area around the tendon and the sheath reduces swelling and is often effective in relieving trigger finger. But for serious conditions, surgery may be needed to open up the sheath for the tendon to glide smoothly.

The thumb can suffer from a similar condition known as deQuervain's tenosynovitis.



Dr Lim: On emphasising the importance of hands, "They are also the eye to the blind, a communication tool for the hearing or speech-impaired and an expression too"

YEN MENG JIIN



FILE PHOTO

United we play: Lifestyle changes such as adopting a better posture also help, and avid gamers should pay attention to the stress on their hands when they grip the controller

This arises from inflammation of tendons of the thumb, which restricts movement through the sheath. Patients usually feel an ache around the wrist, which can sometimes radiate up the forearm. Wrist and thumb movements can aggravate the pain.

Women in the pregnancy or post-partum periods are prone to this condition, says Dr Lim. And because carrying babies can involve awkward hand positions that may lead to this condition, husbands also need to be careful. "Every time we see a young patient coming in with this problem, we always ask - how old is the baby?" says Dr Lim with a smile.

Repetitive movements of the thumb in typing and other activities are also associated with deQuervain's tenosynovitis. In mild cases, patients can ease the symptoms by avoiding repetitive thumb movements whenever possible. They can also put on a splint to immobilise and rest the thumb. For serious cases, however, surgery may be needed to release or reconstruct the tendon sheath.

Hand injuries such as the CTS, trigger finger and deQuervain's tenosynovitis cause much pain and inconvenience, but all it really takes to keep them at bay is some simple stretching of the wrists and fingers. "Stretching is one of the best things to do whether there are problems or not," Dr Lim advises.

Lifestyle changes such as adopting a better posture also help. And avid gamers should

pay attention to the stress on their hands when they grip the game controller. "Computer games involve a lot of squeezing (of the fingers and thumbs)," says Dr Lim.

Beyond day-to-day hand injuries, he also handles critical cases that require microsurgical reconstruction. Such surgery makes use of a microscope to magnify the surgical field, allowing surgeons to carry out more complex procedures such as tissue transfer.

For someone who loses a thumb in an accident, for instance, microsurgical reconstruction can be used to transfer a toe to the hand. Because the thumb is needed for about 50 per cent of hand functions, the replacement will help the victim cope with daily tasks.

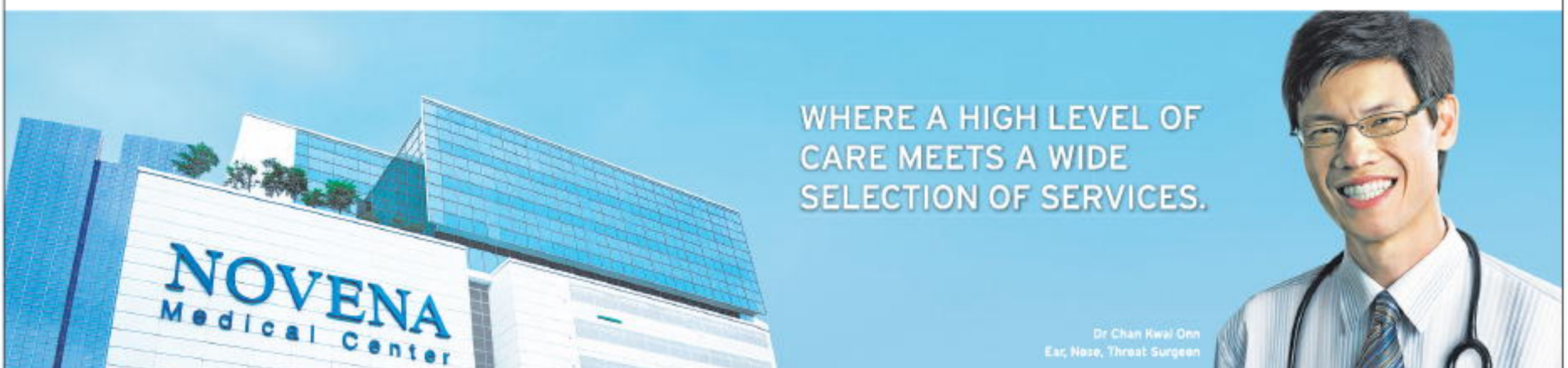
Dr Lim emphasises the importance of hands again: "They are also the eye to the blind, a communication tool for the hearing or speech-impaired and an expression tool... That's why hands are so important."

For all his work in helping patients recover the use of their hands, it looks like we should all give Dr Lim a big thumbs-up.

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