

五角钱大小钛制圆盘 让颈椎病人少挨一刀

国立脑
神经医
学院完
成本地

第一起人造颈椎间
盘替代手术，利用
一种新的、更具伸
缩性的植人体，取
代传统手术用的骨
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为急性颈椎病人带
来更好的疗效。

林慧慧 ● 报道

只要一个大约五角钱大小的钛制小圆盘，就能让急性颈椎病人避免多挨一刀取出替代骨骼，也能避免他们日后被其他椎间盘遭磨损的问题所困扰。

国立脑神经医学院完成本地第一起人造颈椎间盘替代手术，利用一种新的、更具伸缩性的植入体，取代传统手术用的骨骼移植组织，它可为急性颈椎病人带来更好的疗效。

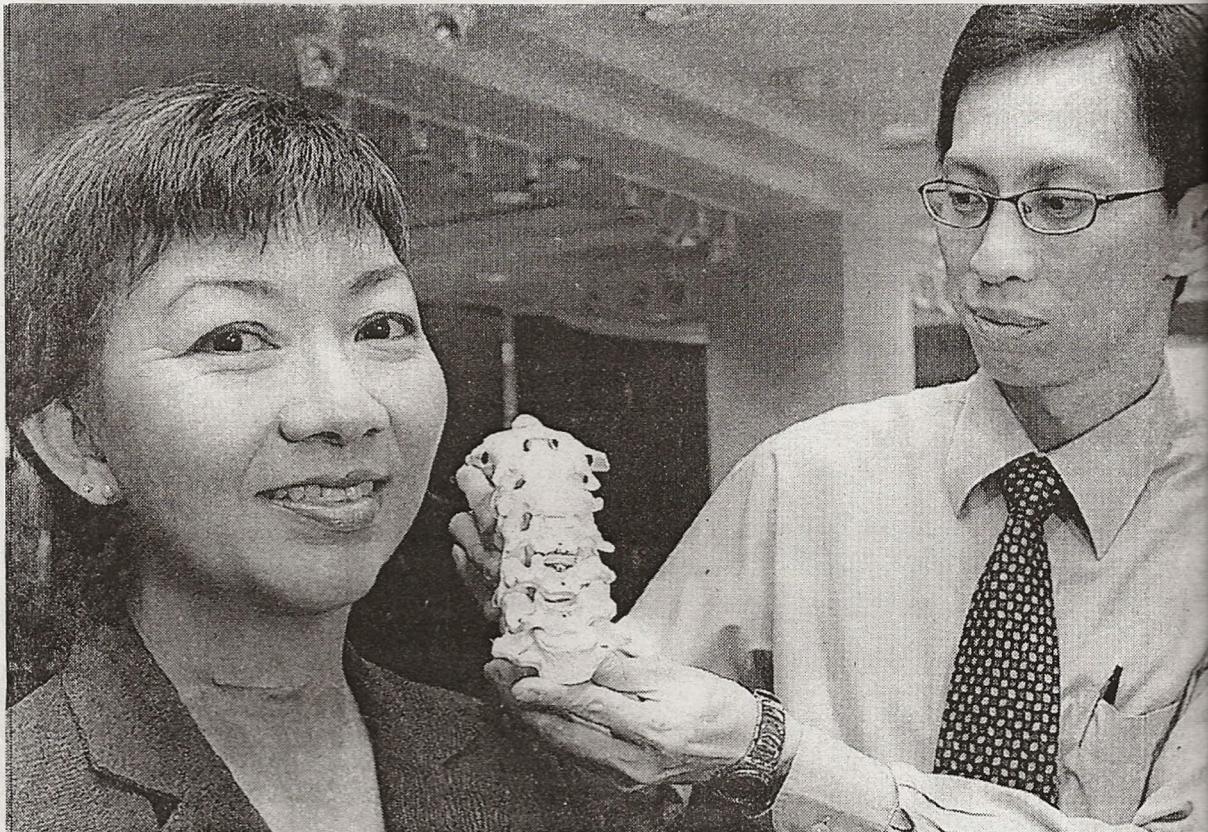
国大医院刚在今年成功为慢性背痛病人进行了本地首起人造椎间盘替代手术，这次则是把手术转移到治疗颈椎病人。

颈椎是人体活动中，关节中旋转活动次数最频繁的脊柱节段。

40岁以上的人常投诉颈项、肩膀疼痛麻痹，而很多时候是因为人体老化，每节脊椎骨之间那个有缓冲压力作用的椎间盘含水量降低。所以当磨擦增加，椎间盘很容易受损。

国立脑神经医学院颈椎和神经外科顾问陈声兴医生透露，每100名因颈椎疼痛而求医的病人中，至少5到10人需要手术治疗。

传统手术的做法是从靠近髋骨的部位开刀取出骨骼，来填补受损



国立脑神经医学院颈椎和神经外科顾问陈声兴医生（右）为张慧娟进行了人造颈椎间盘替代手术，让她能重新挥动右手。

的椎间盘，以便能融合固定上下两节脊椎骨。

新手术复原时间 比传统手术减半

陈声兴医生指出，有大约20%病人投诉开刀伤口引起不适，而且需要一段时间才会消肿、复原。此外，传统手术还有一个缺点，长期下来，其他正常的椎间盘容易因为承受更大压力而提早退化，引发更多疼痛问题。

在颈项下颌部位开刀，植入人造颈椎间盘就没有这样的问题，这个运转幅度有9至11度的小圆盘，能够分担其他椎间盘所承受的重量，减少磨损。病人可在手术后第4天出院，所需复原时间比传统手术少了一半。

48岁的张慧娟在本月5日完成这项人造颈椎间盘手术。这名托儿

所主管透露，她过去三年一直被颈椎疼痛的问题困扰，尤其到了今年，几乎每天都感觉疼痛，那种痛是从头部、蔓延到右手、肩膀，甚至右腿。

她说，有时走在平坦的路上也会因腿部抽痛而跌倒。如今手术成功后，她又能重新恢复独立。

一个人造间盘 费用需约8000元

这种名为Bryan人造颈椎间盘的植入体，主要由两片钛、钴和铬的合金体铸成，中间夹有纤维环。它备有14到18毫米的5种不同尺码，以让医生选择适合病人体型的圆盘。这类人造椎间盘的使用寿命大约为30年。

陈声兴医生也指出：“现在唯一的缺点是费用问题，需要植入体的病人无法享有津贴，所以必须自

掏腰包，而一个人造间盘需要大约8000元。”

他的另一名病人将在两三个星期后接受同样手术。

全球首个人造颈椎间盘手术是在前年在欧洲完成。目前，欧洲已完成多达100起这项手术。

早报由英对照

人造颈椎间盘替代手术：artificial cervical disc replacement surgery

钛：titanium

植入体：implants

骨骼移植组织：bone graft

椎间盘：intervertebral disc

髋骨：hip bone

The StraitsTimes | INTERACTIVE

NOV 28, 2002

Artificial disc eases pain in the neck

SUFFERING from neck pain due to a damaged spinal disc? Relief is at hand now, through an operation which replaces the damaged disc with an artificial one.

A neurosurgeon at the National Neuroscience Institute (NNI) has become the first in Asia to do this, allowing patients with problems in the upper spine to regain movement to their head and neck.

When the discs - shock absorbers - between the top seven bones of the spine wear out through ageing, people experience pain in their neck, shoulders and arms.

Ms June Teo, 48, a supervisor at a childcare centre, had suffered excruciating neck pain for the last three years.

"I couldn't even carry my handbag," she told reporters yesterday. "At times, the entire right side of my body would go numb."

After countless visits to acupuncturists and physiotherapists, she finally approached NNI neurosurgeon Tan Siah Heng.

One of two neurosurgeons here to be trained in artificial cervical disc-replacement surgery, Dr Tan practised the operation on a cadaver first.

Then, on Nov 5, he made a small incision in the front of Ms Teo's neck and separated the soft tissues to remove the damaged disc.

He then inserted an artificial disc, made from titanium and cobalt chromium, in the same spot.

The operation took less than three hours.

The new method is an improvement on the conventional one, whereby a piece of bone from the patient's hip is grafted to replace the damaged disc.

As the graft fuses two pieces of bone together, it often results in stress on the bones above and below the fused segment.

The artificial disc, however, allows the spine to move freely.

Ms Teo was out of hospital within five days.

The whole procedure costs \$8,500 for subsidised patients.

"I can now move my arm freely, do housework and wear high-heeled shoes - all the things I could never do when I was in such pain before," she said.

The NNI performs 150 cervical spine operations a year using the bone-fusion method.

With the success of Ms Teo's operation, Dr Tan hopes to use the new method on more patients

here.

Then a decision can be taken as to whether or not it can be used as a standard treatment in such cases.

Artificial disc replaces bone in the neck

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