

## Fixing jutting jaws, weak chins

Mind Your Body (Thursday, 14 May 2009)

## Orthognathic surgery fixes receding chins and disproportionate jaws. JUNE CHEONG reports



Miss Li Weixin's protruding lower jaw (left) gave her a bad overbite and speech problems which were corrected with jaw surgery (Picture 2). -- PHOTOS: NATIONAL UNIVERSITY HOSPITAL

Miss Li Weixin, 23, can now pronounce her 'th's' with ease.

The recent graduate had a protruding lower jaw - which gave her a bad overbite and speech problems - until last May, when she had orthognathic surgery at the National University Hospital (NUH).

Orthognathic surgery is corrective jaw surgery that fixes problems like disproportionate jaws and receding chins.

Dr Raymond Wong, an associate consultant at the department of oral and maxillofacial surgery at the National Dental Centre of Singapore (NDC), said: 'There have been many cases where the patient had to change their identity cards after surgery because they looked so different.'

Indeed, Miss Li's surgery dramatically improved her appearance, not to mention her bite and speech problems.

She said: 'Because of the change in my jaw alignment, I look better. It has also helped my speech in terms of articulation. My surgeon says I now have a more feminine look.'

The NDC performed 90 such surgeries last year. Orthognathic surgery is performed mainly to correct chewing or speech problems although patients often benefit from an improved appearance too.

The surgery is suitable for those with an improper bite due to disproportionate jaw sizes and badly aligned teeth as well as those with obstructive sleep apnoea, a protruding lower jaw or a crooked face.

While braces can correct a messy row of teeth, orthognathic surgery will correct underlying jaw problems. Surgery can be done when facial growth stops, which is at age 16 for females and at age 18 for males.



Conditions like disproportionate jaws or imbalanced teeth are usually due to genetics. Excessive jaw growth resulting in an uneven bite may be due to metabolic disorders.

Assistant professor Victor Fan, a consultant at the department of oral and maxillofacial surgery in NUH's university dental cluster, said more girls seek treatment as they tend to be more concerned about their looks.

He said: 'Having a strong jaw line or protruding jaw is often considered a masculine feature which many boys may not find objectionable but which most girls would.'

Orthognathic surgery is done under general anaesthesia and involves moving one or both jaws forward, backward, up, down or rotating them.

Incisions are made on the inside of the patient's mouth to expose the bones for cutting and repositioning.

For example, to correct a protruding lower jaw, the bone at the back of the lower jaw is separated from the front portion and reshaped or partially removed so that the lower jaw can be moved back for proper alignment.

Surgical plates, screws, wires and rubber bands may be used to hold the jaws in their new positions.

Patients opting for such surgery often have to get braces first to align their teeth. The surgery is performed one year into the braces treatment and can take between two and seven hours.

The patient's braces are left in place during the surgery and they help to stabilise the teeth and jaw bones after.

The cost ranges between \$1,500 and \$15,000, depending on the complexity of the surgery and the patient's payment class.

Although the surgery is generally safe and predictable, the recovery process is less pretty. Swelling may occur for up to three months although recovery usually takes two weeks.

Dr Fan said most patients will have their jaws wired shut for four to five weeks and are limited to a soft diet for that period.

The first month after her five-hour surgery, Miss Li was restricted to a liquid diet.

She said: 'I talked through gritted teeth and I used notes to communicate in the first two weeks. But I was pleased with the results after my jaws were untied.'