

## Can surgery be avoided?

In growing patients, timely orthodontic intervention can sometimes correct jaw disharmonies. Special braces can be used to modify bone growth, eliminating the need for surgery. However, for patients whose facial bones are no longer growing, certain corrections cannot be achieved with braces alone. A combined approach of braces and surgery is the appropriate form of treatment for them.

## Are there any risks?

Jaw surgery is performed under general anaesthesia. It usually requires hospitalization of about 3 - 5 days. Patients who undergo orthognathic surgery are generally healthy and therefore able to recover more easily. To set your mind at ease, simply ask your dental surgeons about the risks.

## What are the benefits?

Oral hygiene is easy to maintain without bad bite and crooked teeth. Speech or masticatory problems due to jaw disharmonies may be resolved. The relationship of the jaw bones is harmonized, thus improving facial appearance. The lasting reward is a healthier and happier you.

Orthognathic surgery is a predictable treatment option for complex dental/facial problems. It ensures the best possible results, functionally and aesthetically.

## Appointments & Enquiries

Tel: 6324 8802

Email: [appointments@ndcs.com.sg](mailto:appointments@ndcs.com.sg)



National Dental  
Centre Singapore  
SingHealth

Like us on  @ [ndcs.sg](https://www.facebook.com/ndcs.sg)

5 Second Hospital Avenue Singapore 168938 • Tel: (65) 6324 8802 • Fax: (65) 6324 8810  
Email: [enquiries@ndcs.com.sg](mailto:enquiries@ndcs.com.sg) • [www.ndcs.com.sg](http://www.ndcs.com.sg) Reg. No. 199505641

Information in this brochure is designed for educational purposes only. It is not to be used to make any diagnosis or treatment of a health problem or disease. Always consult a qualified dentist or dental specialist if you suspect you may have a problem. All rights reserved © National Dental Centre of Singapore. Not to be reproduced or distributed without the written permission of the National Dental Centre of Singapore.

Printed September 2018



National Dental  
Centre Singapore  
SingHealth

Multidisciplinary Programme

## Orthognathic Surgery



# Orthognathic Surgery

## A combined orthodontic and surgical approach.

### What is Orthognathic Surgery?

Orthognathic surgery is a combined orthodontic and surgical treatment approach for the correction of dental and jaw abnormalities.

### Why is Orthognathic Surgery necessary?

The upper and lower jaws are bases upon which teeth are aligned. Braces correct dental abnormalities, like crooked teeth and poor bite (malocclusion). However, disharmonies of jaw size or position can only be corrected surgically.

### What are the possible causes of jaw abnormalities?

There are many causes of jaw discrepancies. They may be inherited or acquired from developmental or traumatic causes. Jaw discrepancies may affect not only your facial appearance but also your bite, speech and chewing.

### What problems are best dealt with Orthognathic Surgery?

Common problems that can be dealt with are:

- A protruded or retruded chin
- Excessive show of gums ie. Gummy smiles
- Overall elongation of face
- Facial asymmetry

### What is the sequence of treatment?

Treatment is carried out in 4 phases:



### Phase 1: Treatment Planning

Treatment planning is carried out jointly by an orthodontist and an oral and maxillofacial surgeon. The orthodontist determines how braces will align your teeth in preparation for surgery. The oral and maxillofacial surgeon studies your jaw deformity and decides on the type of surgery most appropriate for your case. The initial phase of treatment will include consultation, record-taking and discussion of the treatment plan with you.

### Phase 2: Pre-surgical Orthodontic Phase

Many patients undergo an initial period of presurgical orthodontic treatment which may take 9 to 18 months. The actual time taken will depend on the condition, the patient's age, cooperation and other factors. During this time, patients are seen at 4 to 6 weekly intervals. At the end of this phase, the teeth are aligned so that they will fit into a good bite after surgery.

### Phase 3: Surgical Phase

Surgery is scheduled when the presurgical orthodontic phase is completed. Braces used to align teeth prior to surgery are left in place during the surgical procedure. They help in stabilizing the teeth and jaw bones after surgery.

### Phase 4: Post-surgical Orthodontic Phase

After surgery, post-surgical orthodontics is continued to achieve final alignment of the teeth and to retain them in their new position.