

Craniofacial Fellowship at the Chang Gung Memorial Hospital: Review of an 8-month Fellowship Experience

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Sir:

Chang Gung Memorial Hospital (CGMH) in Taiwan was established in 1976. CGMH has 3,707 beds in the main branch at Linkou near Taipei. Linkou branch had 3,528,000 outpatients 1,067,000 hospitalized patients, and 91,000 surgical cases in 2014. CGMH has 7 branches in Taiwan and 2 branches in China. A craniofacial center was opened at Linkou in 1978 by Professor Noordhoff from the United States, expanded by Professor Y. R. Chen since 1997, and moved to Taoyuan branch newly completed in 2003 with 691 beds. The center consists of plastic surgeons and orthodontists, and approximately 600 orthognathic surgeries (OGSs) have been performed in 1 year that include surgery-first OGS,¹ maxilomandibular advancement for obstructive sleep apnea (OSA),² and computer-assisted surgery³ as the characterized feature.

In this article, to share the author's experience with surgeons wanting to learn OGS, the author reviewed the craniofacial fellowship in CGMH for approximately 8 months from August 2014 to April 2015. This review was written by referring to a personal notebook, which recorded details of all attended surgical cases, including diagnosis and surgical technique.

The author observed 26 surgeries and assisted 82 surgeries and published 2 technical notes regarding his fellowship experience.^{4,5} However, 3 manuscripts including a technical note, a case report, and an e-book chapter were still unpublished at 20 months after the end of the fellowship. Surgery was performed on every Monday, Tuesday, and Thursday. On every Monday morning, 2 scientific meetings were held, a meeting with Professor Y. R. Chen and international fellows and a research meeting with researchers. Moreover, on every Tuesday morning, another scientific meeting with residents was held. Craniofacial fellows had to present topics regarding OGS on Monday morning meeting, and every long-term craniofacial fellow had to present a review of fellowship at CGMH at the end of the fellowship on Tuesday morning meeting. At the Monday

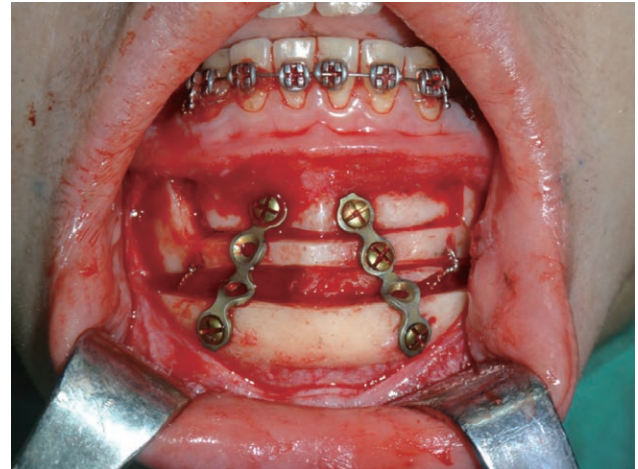


Fig. 1. A surgical picture of the case assisted by the author. Le Fort I osteotomy, BSSO, anterior segmental maxillary osteotomy (Wassmund procedure), anterior segmental mandibular osteotomy (Köle procedure), and genioplasty with bone grafting were performed by Professor Y. R. Chen in bimaxillary protrusion.

Table 1. Details of Diagnosis and Surgical Procedure in the Assisted Surgery (n = 82)

	No. Cases (%)
Diagnosis	
Mandibular protrusion	39 (47.6)
Facial asymmetry	17 (20.7)
Mandibular retrusion	8 (9.8)
Bimaxillary protrusion	5 (6.1)
OSA	6 (7.3)
Others	7 (8.5)
Procedures	
Le Fort I and BSSO	28 (34.1)
Le Fort I, BSSO, and genioplasty	20 (24.4)
Le Fort I, Wassmund, and BSSO	3 (3.7)
Le Fort I, Wassmund, BSSO, and genioplasty	2 (2.4)
Le Fort I (3 pieces), BSSO, and genioplasty	3 (3.7)
Le Fort I (3 pieces) and BSSO	2 (2.4)
Le Fort I (3 pieces, subapical) and BSSO	1 (1.2)
Le Fort I, BSSO, genioplasty, and shaving	2 (2.4)
Le Fort I, Wassmund, Köle, and BSSO	1 (1.2)
Le Fort I, Wassmund, Köle, BSSO, and genioplasty	1 (1.2)
Le Fort I, Köle, BSSO, and genioplasty	1 (1.2)
Le Fort I, BSSO, and gonial angle reduction	1 (1.2)
Le Fort I, BSSO, genioplasty, and gonial angle reduction	1 (1.2)
Le Fort I, BSSO, genioplasty, and fat grafting	1 (1.2)
Wassmund, Köle, and BSSO	1 (1.2)
Genioplasty	1 (1.2)
Alloplastic genioplasty	1 (1.2)
Genioplasty and shaving	1 (1.2)
Mandibular contouring	1 (1.2)
BSSO, mandibular distal segment osteotomy, and bone grafting	1 (1.2)
SMMRA and genioplasty	2 (2.4)
Maxillomandibular advancement	1 (1.2)
Le Fort I, BSSO, genioplasty, and turbinoplasty	1 (1.2)
Others	5 (6.1)

Köle, anterior segmental mandibular osteotomy; Le Fort I, Le Fort I osteotomy; SMMRA, segmental maxillomandibular rotational advancement²; Wassmund, anterior segmental maxillary osteotomy.

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meeting, the author presented 3 topics, which were (1) a review of genioplasty, (2) his previous scientific research, and (3) a review and a surgical technique of third molar removal during bilateral sagittal split ramus osteotomy (BSSO). On every Wednesday and Friday, by attending Professor Y. R. Chen's clinic or Professor Lin's clinic for OSA, the author was able to understand the details of examinations because medical charts were written in English. Craniofacial fellows have an opportunity to learn surgical planning from orthodontists and can attend with other teams including microsurgery or trauma teams. The surgery cases assisted by the author were mainly mandibular protrusion with maxillary hypoplasia (50%), followed by facial asymmetry (20%). And then, mainly bimaxillary surgery with or without genioplasty (60%) was performed, whereas 25% of the cases were complex combination osteotomies including bimaxillary surgery with segmental osteotomy (Fig. 1) or gonial angle reduction, and 3-piece Le Fort I osteotomy with BSSO (Table 1). In conclusion, the author was able to learn facial examination and surgical planning, surgical technique, and surgical approaches for OSA from specialists during the fellowship period. The most important achievement was the fact that the author could have mentoring for OGS.

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