

中文題目：

安格氏三級咬合不正合併阻塞性睡眠呼吸中止症之正顎手術治療

Orthognathic Surgery for Angle's Class III Malocclusion with  
Obstructive Sleep Apnea

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**Objective:** A narrowed upper airway with sleep-disordered breathing is common in patients with dentoskeletal deformities. However, it needs to be emphasized in clinical scenarios of surgical orthodontic treatment for patients with Class III malocclusion. This study aimed to elucidate the surgical and polysomnographic outcomes of this type of patient.

**Methods:**

A retrospective review was conducted on 104 patients with Class III malocclusion. Clinical symptoms and signs of sleep-disordered breathing, cephalometric measurements, and polysomnographic indices were recorded before, three months, and one year after surgery. The paired t-test was used to compare data at different times.

**Results:**

Among the 104 patients (58 females), 29 (10 females) showed symptoms and signs of sleep-disordered breathing. Polysomnographic results revealed that 19 patients (15M, 4F) had obstructive sleep apnea. By cephalometry, the overjet averages  $-2.4 \pm 3.0$ mm. The SNB angle (Sella-Nasion-B point) measured  $84.2^\circ \pm 4.5$ . Epworth sleepiness scale was improved from  $7.1 \pm 2.8$  to  $3.8 \pm 1.5$ . The Apnea-Hypopnea Index was decreased from  $15.6 \pm 8.7$  to  $9.8 \pm 4.9$ .

**Conclusion:**

Patients with Class III dentoskeletal deformity are still predisposed to upper airway narrowing and sleep-disordered breathing. Meticulous clinical evaluation, including history taking, craniofacial examination, and polysomnography, may help the surgeon find potential patients and properly plan surgery accordingly.