

# **Systematic Review on Bimaxillary Protrusion**

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Bimaxillary protrusion is prevalent among Asians. Typical features including extreme flaring of the anterior teeth, lip incompetence, mentalis muscle strain and thick looking lips with an everted vermilion border. It is routinely treated by extraction of first premolars in both jaws followed by retraction of anterior incisors. In severe cases, anterior subapical osteotomies (ASO) are indicated. To understand treatment outcome that can be achieved by surgical correction in patients with bimaxillary protrusion, a systematic review was performed. There were total of 144 of papers related to bimaxillary protrusion were published since 1948 to 2015. Excluded those duplicated and unrelated articles after screening titles and abstracts and eligibility articles, there were only 6 articles left. Discussion will be presented in 2017 Chang Gung Forum.

In conclusion, (1) surgical correction of bimaxillary protrusion can lead to a successful reduction of the labial prominence with a concomitant increase in the nasolabial angle; (2) The soft tissue changes were primarily confined to the oro-labial region with minimal changes in the nasal landmarks; (3) It seems that seems no much difference for the amount of upper lip retraction either by orthodontic treatment or by ASO surgical correction; (4) Comparing with traditional extraction therapy, patients with gummy smile, basal bone discrepancy, relatively normal incisor inclination, and underdeveloped chin position can benefit more from surgical correction.