

INTRA ORAL CLASS III CHECK MODELS

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INTRODUCTION:

The treatment of Class III malocclusions consists mainly of repositioning the mandible posteriorly, advancing maxilla or both. ^[1] Since maxillary and mandibular surgical procedures are equally predictable and stable, a differential diagnosis and a corresponding treatment plan are most important. ^[2,3] Stability is dependent upon appropriate assessment of the patient in three planes of space- the anteroposterior, the vertical, and the transverse.

To check the accomplishment of Pre-surgical objectives, a check model is often needed. We have devised a fairly simple technique of checking the Maxillo-mandibular relation intraorally, which is difficult in Class III and open bite cases.

TECHNIQUE:

1. After initial leveling and alignment and depending on whether the case is either mandibular setback or maxillary advancement, take the impression of arch to be moved during surgery.
2. Trim the model, so that excess base is reduced (Figure 1).

3. The model can be easily inserted in patient's mouth to assess the interdigitation and transverse relation (Figure 2 & 3).
4. Thus, observing and assessing the presurgical objectives is simplified.

This technique reduces the chairside time as it eliminates the need of taking multiple impressions for assessment of maxillomandibular relation.

REFERENCES:

1. Carlotti AE, George R. Differential diagnosis and treatment planning of surgical orthodontic Class III malocclusion. *Am J Orthod Dentofacial Orthop* 1981;79:424-436.
2. Obwegeser H. The indications for surgical correction of mandibular deformity by the sagittal splitting technique. *Br J Oral Surg* 1964;1:157-166.
3. Epker BN, Fish LC, Paulus DJ. The surgical-orthodontic correction of maxillary deficiency. *J Oral Surg* 1978;46:171-205



FIGURE 1



FIGURE 2



FIGURE 3



Figure 1: Trimmed model of maxilla and mandible. Figure 2: Indicates the maxillary relation of check model. Figure 3 : Shows mandibular relation of check model.