



Figure 22 - Difference in occlusal plane inclination in relation to the mandibular basal plane. **Figure 23**: Mandibular cant correction. **Figure 24**: Mandibular yaw correction. **Figure 25**: Required amount of osteotomy of mandibular inferior border. **Figure 26**: Maxilla segmentation planning: between canines and lateral incisors. **Figure 27**: Chin asymmetry correction.

Surgical simulation allowed for the conclusion that mandibular cant correction (Fig 23) led to mandibular plane rotation, thus decreasing mandibular ramus height on the right side (mandibular segment in blue). After cant and yaw correction (Fig 24), we concluded the amount of mandibular resection needed was smaller than before (Fig 19), since there was a decrease in mandibular body height on the right side in the distal mandibular segment (in blue). Note a decrease of around 6mm in measures relative to the difference between right and left sides after correction (Fig 25). As a result, the need for orthodontic intrusion in the posterior region on the right side was eliminated. Thus, orthodontic procedures in preparation for surgery were naturally followed with alignment and leveling of arches with a rectangular wire sequence reaching stainless steel 0.019x0.025-in wire. Additionally, inferior alveolar nerve (IAN) lateralization was avoided (although it is often a feasible alternative). Due care must be given to assessment

of skeletal asymmetry in frontal view while analyzing mandibular ramus remnant after osteotomy of the mandibular inferior border.³⁷

Subsequently, orthodontic decompensation was carried out. Restorative and periodontal treatment planning was carried out to disguise transposition of teeth #13 and #14 (Figs 16 and 28).

At surgical step, the following was carried out:

1. Joint surgery for high condylectomy on the right side.
2. Sagittal osteotomy of mandible.
3. 6-mm resection of mandibular inferior border on the right side.
4. Autograft in mandibular body on the left side with mandibular inferior border fragment.
5. Le Fort I osteotomy with segmentation between lateral incisor and canine on both sides.
6. Genioplasty.

Using CT scan, it was possible to evaluate the four-week postoperative period (Figs 29 and 30).