

# Case Report :

## Protraction of mandibular first molars in a patient congenitally missing a second premolars

YANG-HO PARK , DDS, MS.D, Ph.D  
Park's Dental Clinic



### Patient Information

- Age / Sex : 23 / Female
  - CC : Upper and lower teeth spaced. Microdontia in #12,#22
  - PI : Congenital missing teeth of #35,#45.
- Prolonged retention of lower second primary molars.
- Dx :Extract lower second primary molars, use miniscrew and MP tubes for space resolution.

### Treatment Plan

- 1) Intrusion of the maxillary central incisors and improvement in teeth axis.
- 2) Solving the extraction space by bonding the MP tubes to the lower first molars.

#### Before



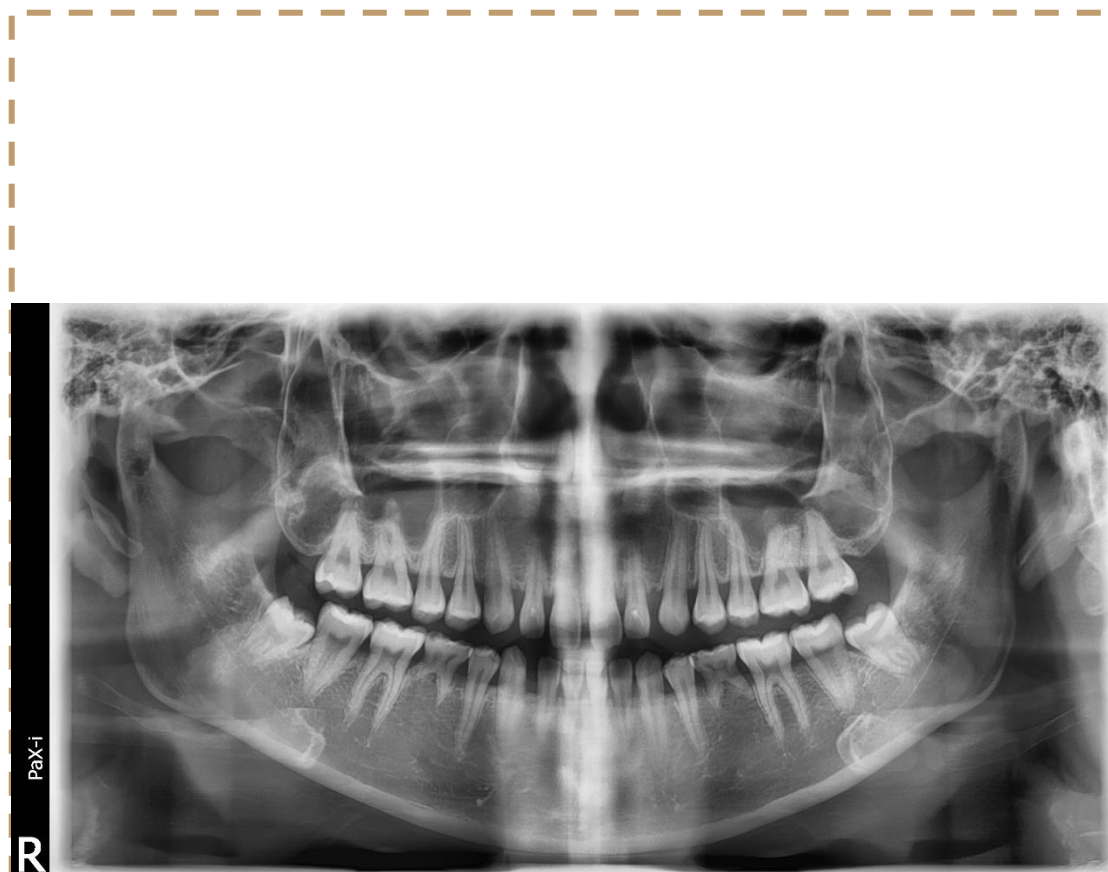
Spacing of the upper and lower teeth and deviation of the dental midline

#### After

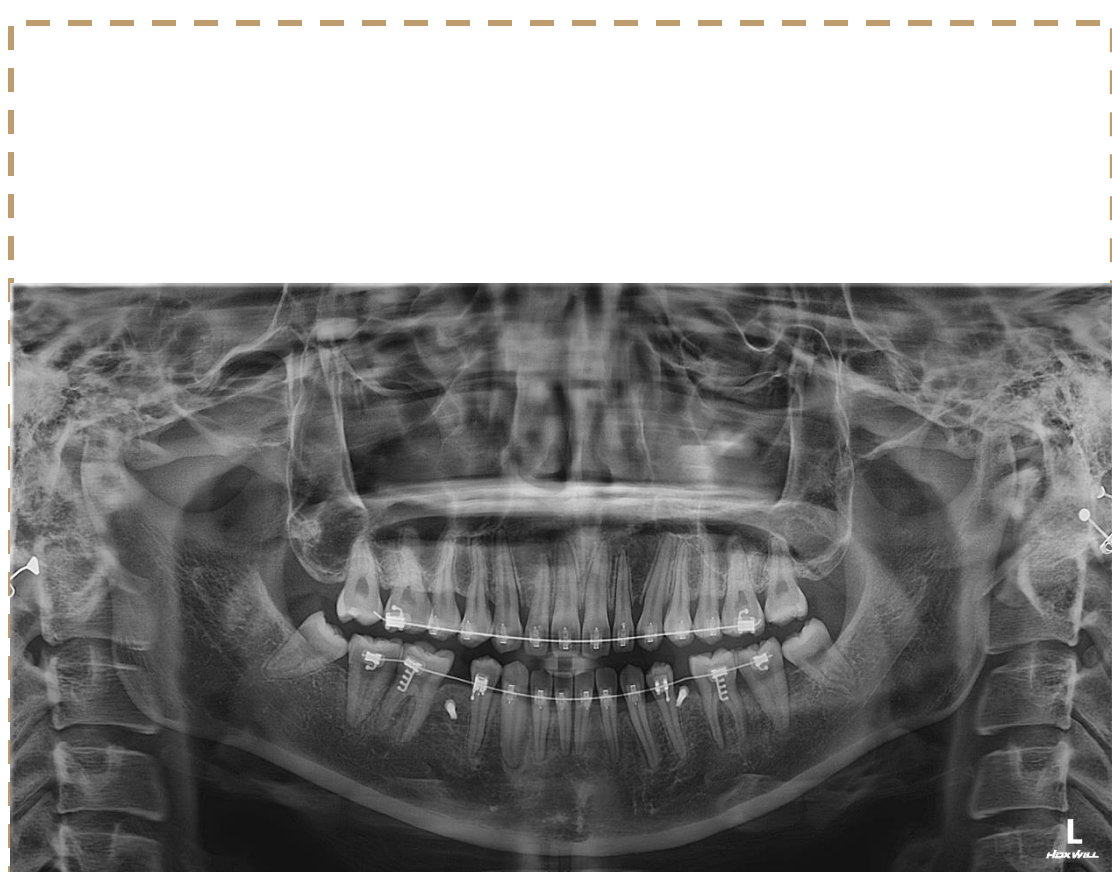


Proper spacing & dental midline

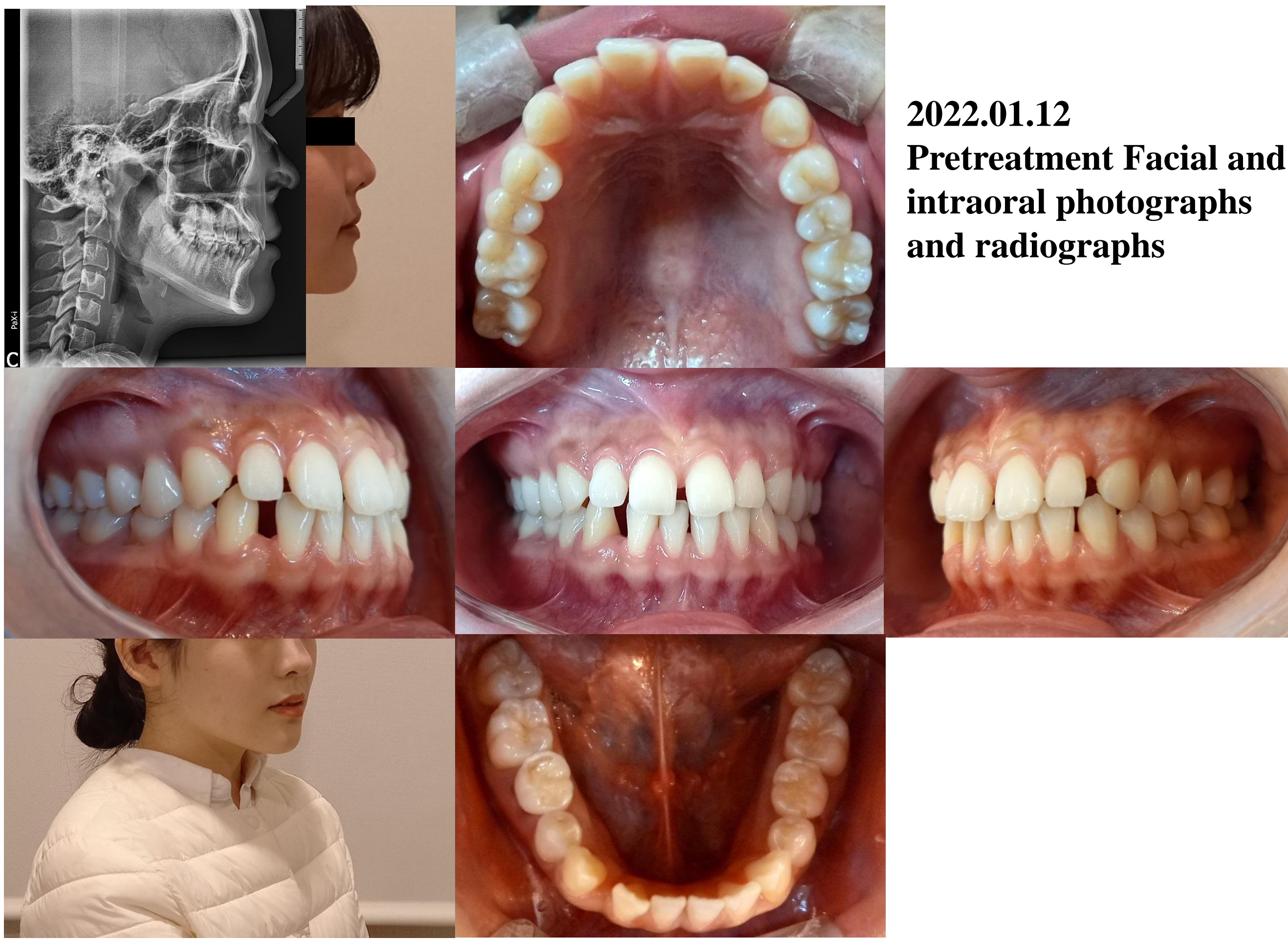
#### Before



#### After



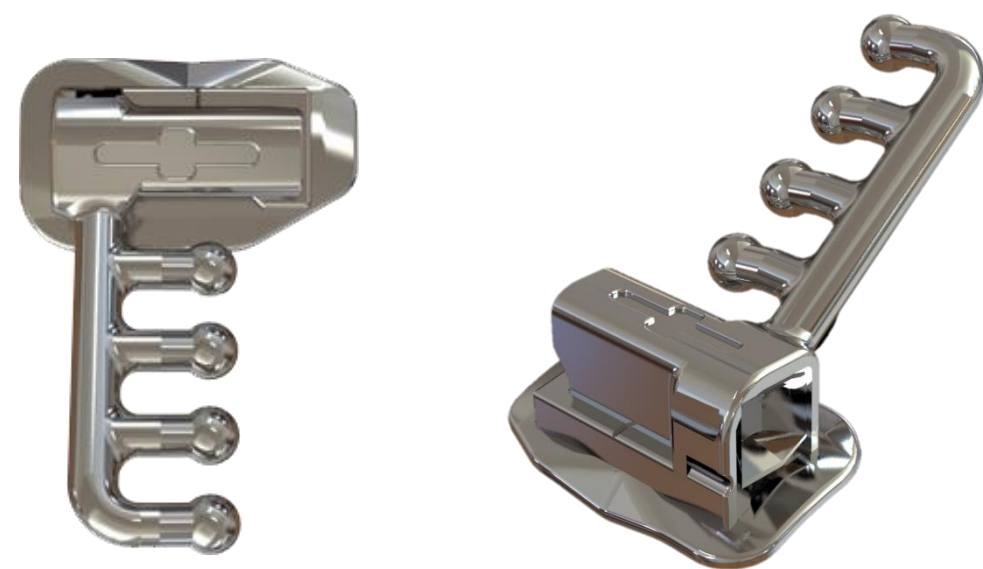
### Clinical Procedures



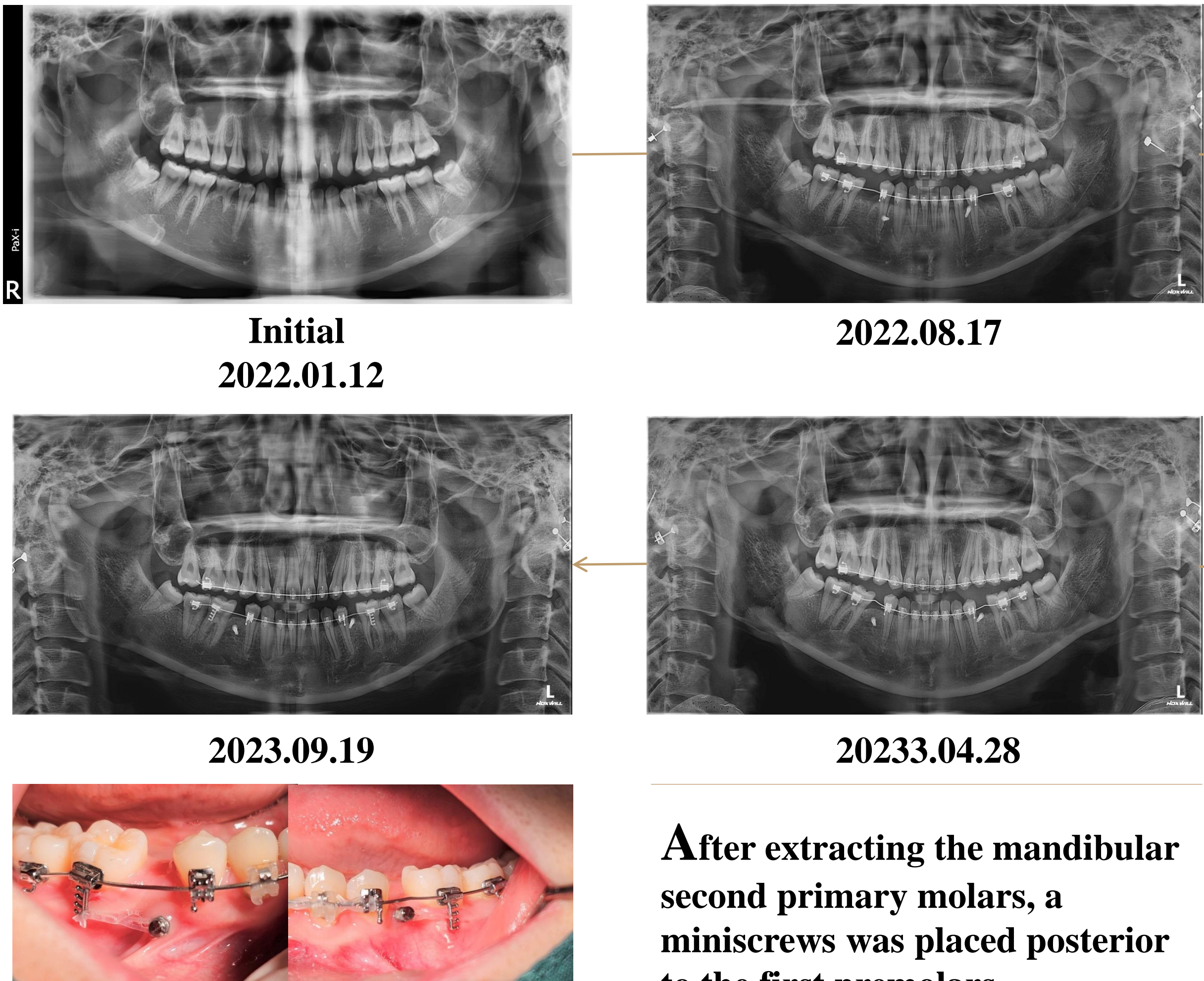
The appearance from the front and side was in good condition, but intrusion of the maxillary central incisors and improvement of the teeth axis were needed. Additionally, extraction of the retained mandibular second primary molars was necessary. Before closing the maxillary central incisor space, a frenectomy was performed utilizing a laser on the labial frenulum to close the space.



Bracket were bonded to all teeth except the mandibular Second primary molars, and the mandibular second primary molars was extracted once the spacing and axis of the maxillary anterior teeth were somewhat corrected.



M-P Tube for reducing space of premolar  
M-P Tube (585-010)



And then, after bonding M-P tubes to the mandibular first molars, the center of resistance was designed to address the extraction space.



### Conclusion

- Maxillary central incisors and improvements to the tooth axis.
- The goal of treatment is to improve midline deviation with correction.
- Extraction of lower 2nd molars and placement of miniscrews in posterior 1st premolars and M-P Tube bonded to the mandibular left and right first molars to solve the extraction space considering the center of resistance.