Scientific Treatment Goals for Oral and Facial Harmony

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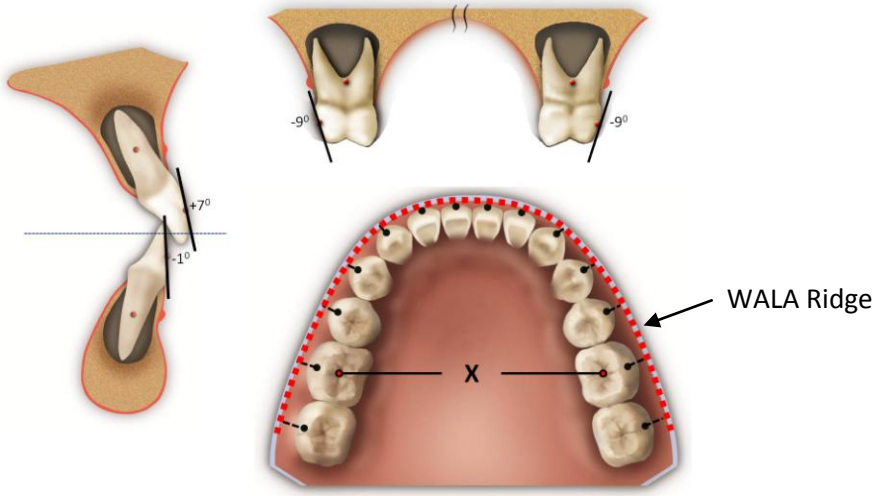
Optimal oral and facial harmony implies a state of maximum health, function and appearance of components of the orofacial complex for an individual. The ***Six Elements of Orofacial Harmony*** are the tooth, arch, and jaw characteristics found to be shared by individuals with naturally optimal occlusions and balanced faces[1]. The ***Six Elements*** are optimal treatment goals for the six areas for which orthodontists have diagnostic responsibility. The six areas are: **1)** The arch: teeth individually (morphology and positions) and the teeth collectively (arch width, depth, shape, and length), **2)** AP jaw positions, **3)** Jaw widths, **4)** Jaw heights, **5)** Chin prominence and, **6)** Occlusion.

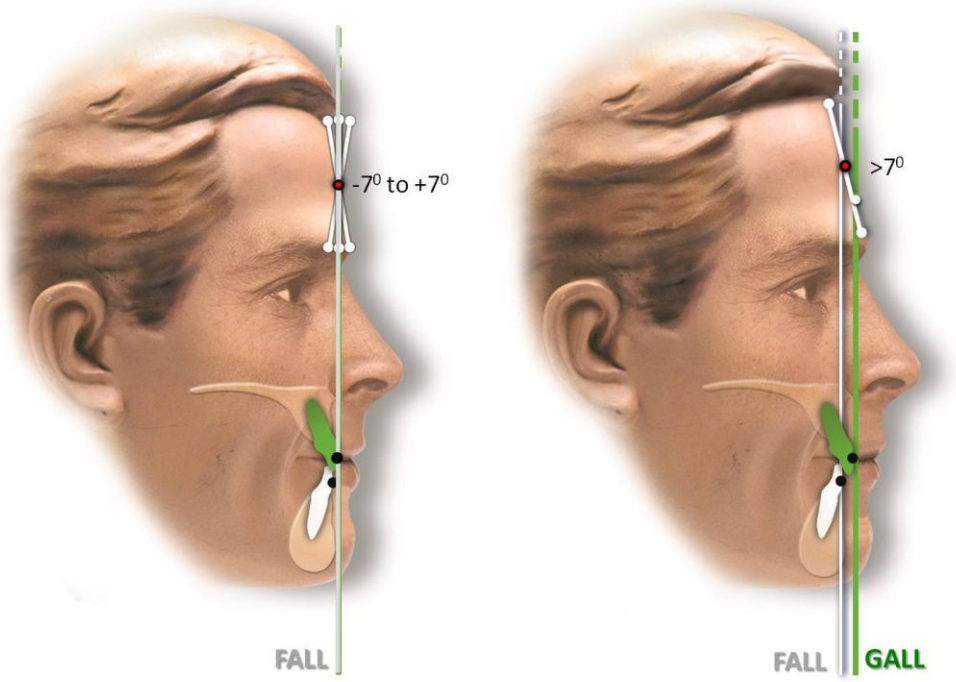
ELEMENT I– Optimal Arch: teeth individually (morphology and positions), teeth collectively (arch width, depth, shape, and length) [1-8]

An arch is optimal when the tooth sizes are normal, the root of each tooth is centered over basal bone, each crown is inclined so that its occlusal surface can interface and function optimally with the teeth in the opposing arch, the Core Line depth is between 0 and 2.5 mm deep, the Core Line length equals the sum of the mesiodistal diameters of the teeth in the arch, the skeletal width of the maxilla is in harmony with the skeletal width of the mandible (see Element III) and shapes of the maxillary and mandibular arches are compatible.



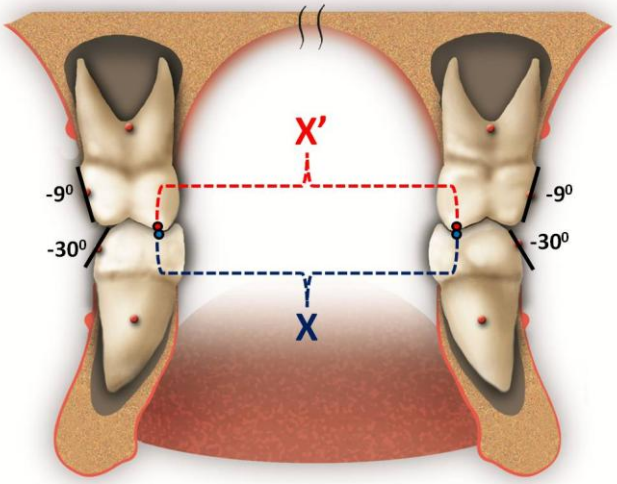
ELEMENT II – Optimal Anterior/Posterior (AP) Jaw Positions[9-13]

The AP position of the maxilla is optimal when the Facial Axis points (FA pts) of Element I maxillary incisors are on the Goal Anterior Limit Line (GALL). The best method for assessing this relationship is clinical judgment. The AP position of the mandible is optimal when it is in *centric relation*, the incisors are Element I and they interface optimally with Element I incisors in an optimal maxilla.



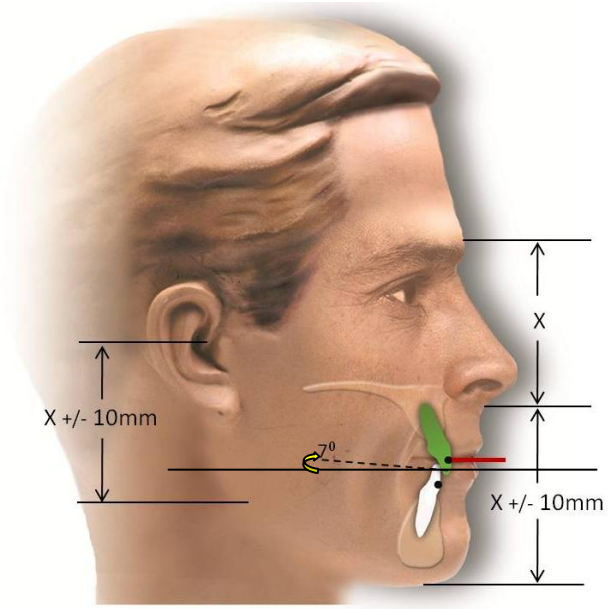
ELEMENT III – Optimal Jaw Widths[14]

The width of the mandible is naturally optimal for most individuals. The width of the maxilla is optimal when the distance X' mm (measured between the mesio-lingual cusp tips of Element I maxillary first molars) is equal to the distance X mm (measured between the central fossae of the Element I mandibular first molars).



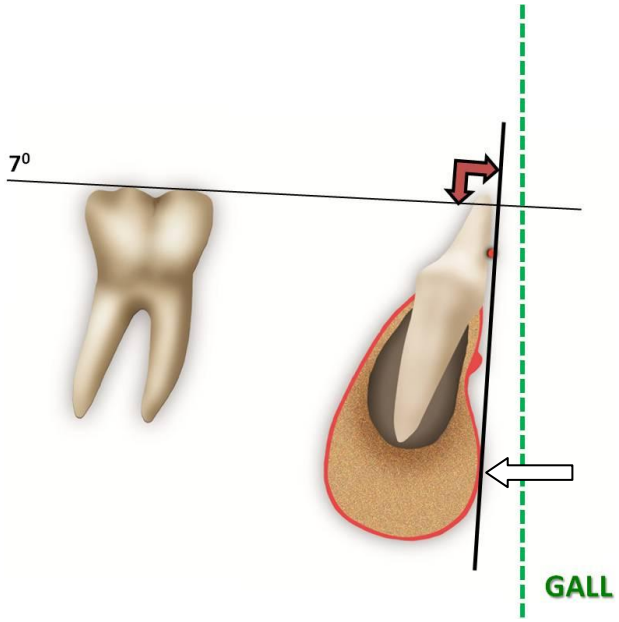
ELEMENT IV – Optimal Jaw Heights[15-25]

Jaw heights are optimal when: the tooth positions are Element I, the middle anterior, lower anterior, and posterior face heights are in harmony with each other, the maxillary incisors' FA pts are level with the lower border of the upper lip in repose, and the occlusal plane is in harmony with function and esthetics.



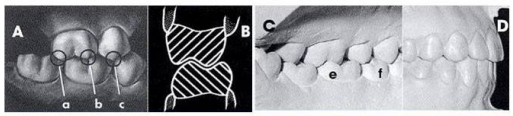
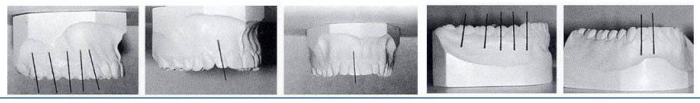
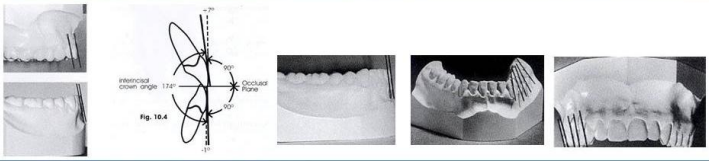
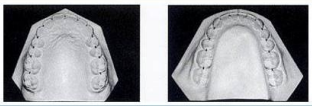
ELEMENT V – Optimal Chin Prominence[26-28]

Chin prominence is measured independently of the mandible's AP position. Assuming normal soft tissue thickness, chin prominence is optimal when pogonion matches the prominence of the FA points of Element I mandibular central incisors.



ELEMENT VI – Optimal Occlusion[29-31]

The requirements for an optimal occlusion include: Element I teeth and arches, the Element II, III, and IV jaw characteristics, and the Six Keys to Optimal Occlusion©. Collectively, Elements I through IV create the environment within which an esthetic, functional, and healthy occlusion can exist. The Six Keys to Optimal Occlusion are:

Key I (interarch relationships)	
Key II (angulations)	
Key III (inclinations)	
Key IV (rotations)	
Key V (tight contacts)	
Key VI (curve of Spee)	

SUMMARY

Orofacial harmony exists when the Six Elements are present. Even though people differ in size, shape, gender, age, and race, those variables have seem to have little influence on the optimal positions and relationships of the teeth, arches, and jaws when measured relative to the Six Elements.

Each Element is diagnosed using landmarks and referents that are, tangible, unique, and universal. They make possible a new three-dimensional and positionally-correct classification system called the Six Elements Classification System. This system provides orthodontics with the much needed ability to accurately communicate a patient's condition relative to the intended post-treatment plan.

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