

ALF ADVANCED LIGHTWIRE FUNCTIONAL APPLIANCES

presented by
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ALF HISTORY

The ALF appliance was originally designed in 1983 by Dr. Darick Nordstrom to be a vehicle in a comprehensive dental orthopedic/orthodontic treatment approach.

What Dr. Nordstrom initially discovered and later a handful of his disciples is that the ALF proved to be the best instrument to unravel the structural distortions of the skull bones and stabilize the cranial/dental complex.

IMPACT ON GLOBAL HEALTH

The ALF System represents the missing link between conventional orthodontics and the more progressive functional orthopedic/orthodontic concepts. In reality, the ALF concept goes beyond the dental realm and supplies many answers to solving the age old problems of chronic somatic pain and generalized ill health.

70% OF ALL MEDICAL PROBLEMS HAVE A DENTAL ORIGIN

**Dental Factors Provide a Major Influence in the Rise of
Degenerative Diseases, Structural Problems, Chronic
Pain and Cancer.**

CRANIAL ANATOMY



Since the maxillae represents the anterior $\frac{2}{3}$ cranial base and functions as the balancing mechanism for the entire skull, foramen magnum and atlas, it must be corrected first. By aligning the maxillae, it provides the foundation or template to build into.



Principles of ALF treatment

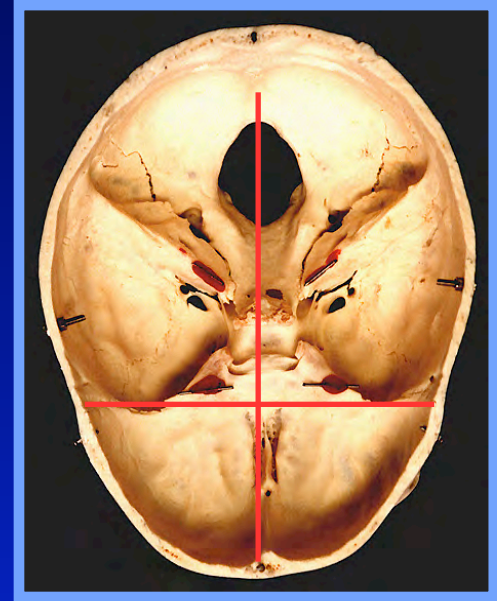
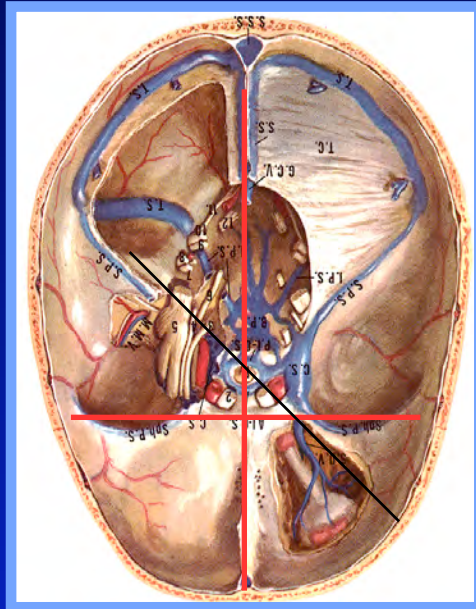
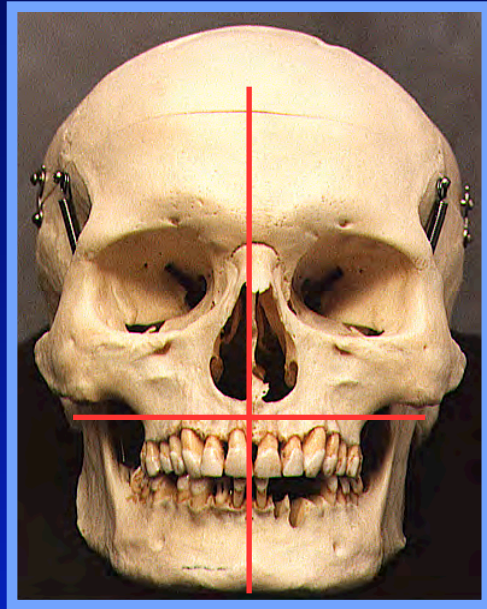
- **Correct Cranial Bone Distortions**
- **Correct Maxillary Cant**
- **Align Teeth To Stabilize Cranium**

CLINICAL IMPLICATIONS

From a clinical perspective, if the maxillae is distorted so goes the rest of the body. Since 46% of the motor and sensory neurons of the cerebral cortex of the brain relate to the face and mouth, maxillary distortions have the potential of disrupting the central nervous system and changing neurological function throughout the entire body. When used properly, the ALF appliance enables orthodontists to correct cranial base abnormalities, which in turn corrects bodily function. Unfortunately 99.9% of the dentists now using the ALF are NOT correcting the cranial faults. Instead they are using it as just another expanding device without knowledge of their potential for creating cranial distortions.

Dental Orthogonality

The body functions best when it's structures are aligned at right angles.



Balance of the maxillae is critical for maintaining total structural integrity of the entire craniosacral mechanism. The dental complex via the occlusion provides the self-correcting mechanism for balancing the skull bones.

CLINICAL IMPLICATIONS

When the maxillae is crooked and teeth alignment is faulty the entire body goes into a compensation mode. This fact is exemplified by patient feedback that their structural manipulations do not hold. Invariably a dental component exists when there is structural instability. No amount of symptomatic treatment will correct the underlying dental problem. It is for this reason that patient problems linger.

CLINICAL IMPLICATIONS

The following case study drives home the importance of employing ALF Principles in orthodontic treatment.

BEVERLY MARSH



Age: 27-years-old

Date: 2004

Occupation: School teacher

Chief Complaints:

1. Severe facial pain. Had to applied hot compresses on face to ease the pain before bedtime.
2. Difficulty talking
3. Neck and shoulder pain
4. TMJ pain

5. Headaches

6. Unable to sleep through the night because of pain

7. Fatigue

Dental History: All symptoms started after conventional orthodontics were completed at age 17 (1994). Fifty doctors were seen during the 10 year period.

BEVERLY MARSH



Pre-Tx

ALF placed and adjusted to balance the four cranial indicators. Pain greatly reduced within 24 hours.



24 hours post ALF insertion

ALF PRINCIPLE

BALANCE DENTAL PLANES

**VERTICAL
TRANSVERSE
SAGITTAL**

ALF PRINCIPLE

**THE KEY TO MAKING THE ALF
APPLIANCE WORK IS TO
ADJUST THE APPLIANCE SO
THAT IT BALANCES FOUR
CRANIAL INDICATORS. ONLY
BY CORRECTING CRANIAL
BONE ALIGNMENT WILL THE
PATIENT EXPERIENCE A CURE.**

FOUR CRANIAL INDICATORS

They provide a baseline for determining:

- **Patient's 3-dimensional skull position at each visit.**
- **How to adjust the ALF appliance.**
- **If the ALF was adjusted correctly.**
- **When treatment is completed.**

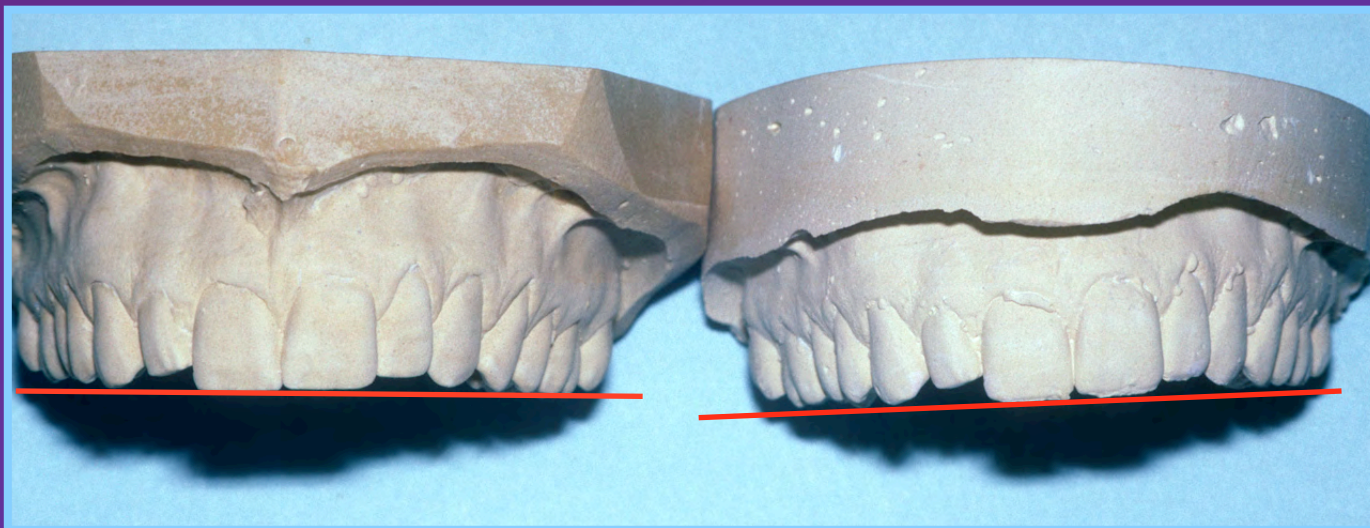
What you feel is what you have. Do not have to memorize patterns. There are too many variables that can influence cranial bone positions.

BEVERLY MARSH



Pre-Tx model exhibits canted maxillary transverse plane. The cranial base was distorted and the mandible over closed on the left setting up compression of the left TM joint and a structural domino effect.

Post-Tx



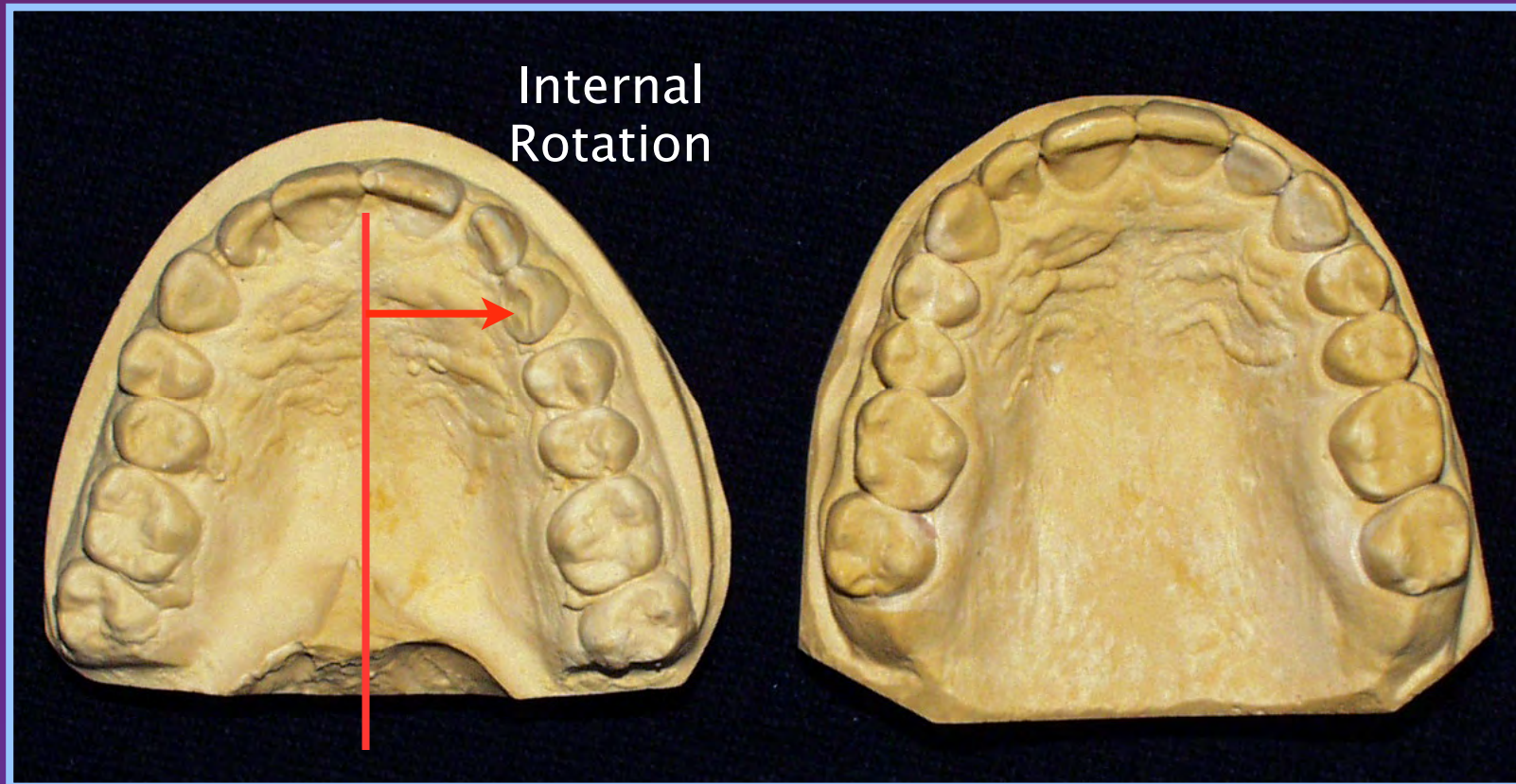
Pre-Tx

BEVERLY MARSH



The ALF appliance is designed to correct the maxillary horizontal plane as well as help realign the teeth. The foundation must be corrected first before the lower teeth are moved. The four cranial indicators guide all corrections.

BEVERLY MARSH



Pre-Tx

Post-Tx

Cranial base was expanded and corrected 3-dimensionally.

BEVERLY MARSH



Pre-Tx

Post-Tx

Mandibular arch was expanded to fit the maxillary template.

BEVERLY MARSH



Pre-Tx

Post-Tx

The patient's ten years of pain were resolved when the distorted planes were corrected.

CLINICAL IMPLICATIONS

The ALF System represents the most technologically advanced paradigm in orthodontic treatment today. Treatment has been simplified so that the practitioner's orthodontic skills can be easily integrated into the ALF System.

A series of on-line ALF seminars are being developed to prepare dentists for the hands-on workshops that must be attended.