The AAO is the only organization solely dedicated to orthodontic specialists. Membership leaders work to develop tools and support needed to succeed in practice.

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Clinical Associate Prof. Dr. Somchai Satravaha
D.D.S. (Hons) from Chulalongkorn University, Bangkok Thailand
Diplomate, Thai Board of Orthodontics
Zahnärztin für Kieferorthopädie, Baden-Württemberg, Germany
Dr.med.dent. (Magna Cum Laude) from Munich, Germany

Executive committee member, World Federation of Orthodontists (WFO) 2005-2015
Past president, Thai Association of Orthodontists (ThaAO)
Past president of Asian Pacific Orthodontic Society (APOS)
Lifetime Achievement Award, Thai Association of Orthodontists 2013
Outstanding Alums Award, Chulalongkorn University Dent Alumni Association 2014
Honorary member: Association of Philippine Orthodontists
Indian Orthodontic Society
Ho Chi Minh Association of Orthodontists
Honorary Fellow, Asian Pacific Orthodontic Society (APOS)
President, Advisory Board of Thai Association of Orthodontists (ThaAO)
President, ThaAO’s Mobile Orthodontic Unit for Cleft Lip/Palate Patients

CONFLICT OF INTEREST DECLARATION

I, the undersigned, declare that neither I nor any member of my family have a financial arrangement or affiliation with any corporate organization offering financial support or grant monies for this continuing education presentation, nor do I have a financial interest in any commercial product(s) or services I will discuss in this presentation.

Non-Aggressive Approach in CLP Treatment

They really need Tender Love and Care (TLC)

Like all Orthodontic Treatment, objectives are:

Function, Esthetics and Stability

And Before anything else, we must:

“Begin with the end in mind”

Comprehensive

Diagnosis, Treatment Planning, Treatment procedure and Retention
All CLP cases are unique, difficult and may take long treatment time.

Patients and parents can get burnt out.

Problems are both skeletal and dental.

Most cleft cases exhibit:

Sagittal Discrepancy between Maxilla and the Mandible

Orthognathic surgery
Distraction Osteogenesis

Non-Aggressive Approach in CLP Treatment

How can we avoid major surgeries in CLP treatment?

I would like to propose the use of Class III activator to correct sagittal discrepancy, in CLPs who still have active growth.

Goals for using Class III Activator

- Posterior positioning of the Mandible
- Maxillary protraction
- Positive Overjet
- Positive Overbite

To use upper incisors as a Brake as the Mandible continues to grow.

For me, I feel that:
It is easier to treat Bi-maxillary protrusion than Skeletal Class III malocclusions.
**Class III activator of Thomas Rakosi is a Bi-maxillary appliance**

- It is composed of Acrylic part and Wire components, more on their functions:
  1. Upper labial pads to stimulate bone formation or enhance growth of the maxilla
  2. Lower labial bow, to stabilize the appliance
  3. Stop loops located mesial to all the 6-year molars, to stabilize the appliance
  4. Tongue guard, to prevent force from a flat and low tongue position

**By push back the Mandible to a new position**

**New position of the Mandible is designated by:**

*Construction Bite*

Must be done on a patient

**Thickness of a construction bite > Free way space**

To activate

**Lat. Pterygoid Muscle**

Activator works on Natural Force

**TMJ**

- When the Mandible is push backward

Rabie et al

**Check list:**

- Lips closed without muscle strain
- Mandibular and Facial Midlines should coincide
- Parental approval
Horizontal Growth Pattern has good prognosis, contradict to Vertical Growth Pattern

Mandible can not be push back too much in Vertical Growth Pattern

With a Construction Bite in the mouth, Look at the Profile Change

Both pictures were taken on the same day

Patient Instruction

Patient Compliance

Is very important!

Wearing Time

- 12 Hours/Day
- Mostly Night

Appointment: every 4-5 weeks

Appliance Activation

Adjust should be kept away from labial surface of lower anterior teeth

Add self curing acrylic

Appliance Adjustment

Selective grinding and controlling of tooth eruption
Cases treated at the ThaAO’s Mobile Orthodontic Unit for CLPs

ThaAO’s Mobile Orthodontic Unit
Started November 15, 2010

A 9-year-old boy
March 29, 2011

Lateral Profile

A 9-year-old boy

Obtuse Nasolabial Angle and Protruding lower lip, which esthetically not good

March 29, 2011

At Start

Missing #12, 22

Cleft site

Class III Activator in situ

At Start

Large -ve Overjet and -ve Overbite

Positive lip step

Less protrusion of lower lip

Class III Activator
Lower: 2x4 fixed appliance

Class III Activator with a 2x4 FA

Attempt to achieve +ve Overjet and +ve Overbite

Class III Activator to push the Mandible backward

Age 15

February 22, 2017
Approx. 6 years since the treatment started

From here, Only Orthodontic tooth movement is required
No major surgery to correct Skeletal Discrepancy was needed or done in this case

Age 15

February 22, 2017
Approx. 6 years since the treatment started

A 10-year-old
Begin 26-4-2011

At Start
A 10-year-old
At Start
Mixed Dentition
Cleft site

Ant.
X-bite

At Finish
Lower lip became less protrusive

Protrude
Cleft site

Class III Activator in situ
Class III Activator

Lower lip became less protrusive

At Finish
Age 16

At Start
Cleft site
As for Orthodontic treatment, only 1 minor surgery (alveolar bone graft) was done.

No major surgery was performed on her

Approximately 6 years of Treatment time

Conclusion:

From the cases presented, it can be concluded that Class III Activator can successfully help correct skeletal discrepancies.

Class III Activator might be a viable appliance in 1st phase of treatment to correct skeletal discrepancy in CLP in conjunction with the use of Removable and/or Fixed appliances in later phase.
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