Neuromuscular Functional Orthodontics Session I

Course Preparation Materials

9501 Hillwood Dr. • Las Vegas, NV 89134 • (888) 584-3237 • Fax (702) 341-8510
www.lvilive.com

Congratulations! Welcome to the exclusive LVI Family.

Dear Colleague:

Thank you for confirming your attendance at the LVI "Neuromuscular Orthodontics Course". This course is held in two locations. The Nevada course will be held at the Las Vegas Institute for Advanced Dental Studies in Las Vegas, Nevada. The West Virginia course will be held at the Center for Occlusal Studies at the Straight Wire Orthodontic Studies, Inc.-6 Rosemar Circle- Parkersburg, WV 26104. You have made a decision that will change your life. By attending the LVI Neuromuscular Functional Orthodontics program, you will dramatically increase your knowledge and expertise in orthodontic diagnosis and treatment planning. With this new understanding, you will be able to plan your aesthetic restorative cases with confidence and competence as never before.

LVI Global, Travel will be able to help with your travel accommodation. Contact Jeri Laughlin at 1-877-805-3388 and/ or at your earliest convenience and she will help you with travel and hotel accommodations.

Contained in this registration packet you will find the proposed course agenda for Session 1. There is also a list of supplies and materials you will need for the hands on portion of this course. Additionally there is attached a required reading. I suggest that you study the NFO diagnosis before the course.

To give you time to plan ahead, I am mentioning that there will be a special session for your staff during Session 2 of the Orthodontic Series.

If you have questions and are attending the course in Las Vegas please call LVI at 1-888-584-3237 extension 220 or contact Ann Seals at aseals@lviglobal.com. If you have questions and are attending the course in Parkersburg, WV call Jodi Keller, Senior Coordinator at The Center for Occlusal Studies in West Virginia. 1-888-369-0312 or email jodi@orthodonticstudies.com

With Regards,

Jay Gerber, DDS

Jay Gerber, DDS

A MESSAGE FROM LVI

Our mission at LVI is to train general dentists and orthodontists in the diagnosis and treatment planning based upon the neuromuscular approach. The principle objective of this series is: through a course of study that includes lectures, and interactive hands-on participation projects, each participant will learn the diagnosis and neuromuscular functional orthodontic treatment of various malocclusions. Additionally the participant will develop the clinical didactic skills necessary to provide treatment as a phase II stabilization treatment.

The Educational Objectives for this three session program are for the participant to:

1. *Learn treatment philosophies and modality options to complete stabilization of occlusion through neuromuscular orthodontics*
2. *Discover orthodontic techniques and procedures comparable with neuromuscular dentistry and neuromuscular functional orthodontics.*
3. *Utilize specific training through didactic applications that the student-doctor will need to learn the correct clinical protocols for treatment*
4. *Define diagnostic protocols as they relate to radiology, physical examination , instrumentation scans, and data interpretation for Myotronics K7*
5. *Understand how to design , select and use the orthodontic appliances required for specific neuromuscular occlusal treatment*
6. *Understand how to develop specific treatment plans and present cases*
7. *Motivate the dental team to institute clinical applications that improve patient care*

As you will soon discover, the rewards you will obtain during and after completion of this course will be immeasurable. We have taken every effort to adopt a program that is as enjoyable as well as educational. To optimize your learning experience, there are a few things that you need to know before coming to this course. Please read the following pages carefully and call us if you have questions. 702-341-7978

Reading List
For
Neuromuscular Orthodontics Session I

Session NM Ortho I
NEUROMUSCULAR FUNCTIONAL ORTHODONTICS Gerber Technique™

Reading List & Project & Course Preparation
In order to fully participate in our program it will be necessary to do some preparatory reading and assembly of project materials. If you wish Dr. Gerber to review your cases at the course you will need to obtain a NFO Gerber Cephalometric tracing from Five Star Orthodontic Lab 800-521-2351 or from Frozen Tundra Diagnostics 612-803-5137.

The following is a list for you to follow. We hope you will enjoy the learning program.

REQUIRED READINGS –
You will need to read and study the attached Diagnostic article. It is absolutely imperative that you become familiar with our diagnostic system before coming to the course. This is the basis for Dr. Gerber's diagnosis, and some understanding before the course will facilitate your learning. Also, previous experience in scan interpretation will be helpful but not required as Dr. Gerber will cover all aspects of the orthodontic diagnosis in this first session.

SUGGESTED READINGS –
By reading the below you will be much better prepared to participate in our course. *Some texts are very difficult to obtain and may only be available for resale.*

TEXT: *The Clinical Management of Basic Maxillofacial Orthopedic Appliances*, Volume I by Witzig/Spahl. The following recommended chapters will assist you in preparing for our class: Chapter 2 ~ "*The Bionator*", Chapter 5 ~ "*The Transverse Appliance*" pages 279-418, Chapter 6 ~ "*The Bionator II and III*", Chapter 7 ~ "*The Straight Wire Appliances*" pages 453-569.

TEXT: ***Orthodontics and Dentofacial Orthopedics***, McNamara and Brudon. Dr. Gerber suggests you read this entire text before the completion of the 3- session program for it covers a wide subject area that will be very useful when understanding the various orthodontic appliances and treatment techniques. 2004

TEXT: *Neuromuscular Dental Diagnosis and Treatment*, Jankelson (Myotronics)

Books available through:

5-Star Laboratory	800-521-2351
Myotronics, Inc.	800-436-0316
TMData Resources	800-533-5121

Not required additional readings: *Color Atlas of Dental Medicine, TMJ Disorders and Orofacial Pain*, by: Bumann & Lotzmann, and *Systemized Orthodontic Treatment Mechanics* by: McLaughlin, Bennett, & Trevesi

Dr. Gerber can be reached at jay@orthodonticstudies.com or on the LVI Forum.

Introduction to Session I

This three day course will enlighten doctors to the possibilities of integrating orthodontics into the dental practice and serve as an adjunct to aesthetic dentistry not previously experienced. Through diagnostic instrumentation and modern orthodontic appliances participants will discover the use of braces and appliances for the occlusal stabilization only found by the application of the principles of neuromuscular dentistry.

Goal of Session #1 is to discover the possibilities of orthodontic stabilization using neuromuscular principles of occlusion and by defining these principles through the application of bio-electrical modalities and orthodontic diagnosis.

There will be lecture and interactive hands–on participation projects where each participant will learn the diagnosis and neuromuscular functional orthodontic treatment of various malocclusions. Additionally clinical didactic skills will be developed in order to be able to provide treatment as a phase II stabilization treatment.

Preparation for the course

REQUIRED INSTRUMENT LIST

Below is a list of supplies and instruments needed for the course. It is necessary to have these in order to fully participate in our exercises.

For cephalometric x-ray tracing exercise and study model analysis

__ *One set of trimmed study models – all teeth present with any degree of crowding*
(Maybe a case you are planning to treat orthodontically)
__ *Boley Gauge or Digital Caliper and mm ruler (for arch analysis)*
__ *Gerber-Beistle (G-B) Cephalometric Tracing Kit* – Ortho Organizers # 633-012
__ *C-thru ruler (mm) – provided at the course*
__ *Compass w/extension* – drafting or office supply store is best the cheap ones won't work
__ *Symmetroscope (will be available at the course)*

Because you will be working during the hands on with handpieces, please bring protective eyewear.

NFO Diagnostics: a Modified Sassouni Cephalometric Analysis

By – Jay W. Gerber, D.D.S. & Mr. Thomas Magill

Modern orthodontic diagnostics requires an extensive knowledge of not only occlusion but of craniofacial growth. The study of Cephalometrics is an age old concept advanced by hundreds of orthodontic experts, societies and associations for the purposes of nomenclature, diagnostic and therapeutic treatment planning. The authors have advanced and improved upon the original Sassouni Cephalometrics to allow for a more neuromuscular functional occlusal evaluation of the patient presenting for orthodontic and or occlusal therapy.

Understanding Sassouni

The following information will allow the treating dentist to better interpret the diagnostic data available in the analysis.

OK, you've got the completed analysis in your hands. Now what do you do with it? If you use it well, you're well on your way to a successful case diagnosis. So how do you use this information in diagnosis, treatment sequencing and in appliance selection?

First we will go down the bottom line, item by item, to see how you can make the most use of the advanced Sassouni Plus. (figure 2) The bottom-line first proposed by Dr. Richard Beistle allows one a quick look at the important points of the evaluation.

NFO CEPHALOMETRIC "BOTTOM LINE"

SKELETAL A – P …… I II III II T III T

SKELETAL VERTICAL …… N OB DB OBT DBT
DAC …… _____ MM
UPPER INCISOR …… N P R
LOWER INCISOR …… N P R
GROWTH DIRECTION …… N CW CCW CWT CCWT
ELP …… _____MM
MAXILLA LENGTH …… N L S - P A
MAXILLA POSITION …… N P A
UPPER 6 POSITION …… N P A
MANDIBLE LENGTH …… N L S - P A
MANDIBLE POSITION ……N P A
UPPER LIP ANGLE …… N P F R
UPPER INCISOR ANGULATION …… L LN N N NH H
<110 110 111 112 113 > 113

Fig. 1

SKELETAL A-P CLASSIFICATION – By comparing the dimensionally corrected 'A' arc of Sassouni the clinician can determine the relative horizontal relationship of 'A' to 'B'. This illustrates the relative positions of the maxilla and mandible as they relate to one another. Class I is considered normal or the relations of the maxilla to the mandible are normal or balanced. Class II skeletal means the mandible is too retruded or behind the maxilla, while Class III means the mandible is protruded or too far in front of the

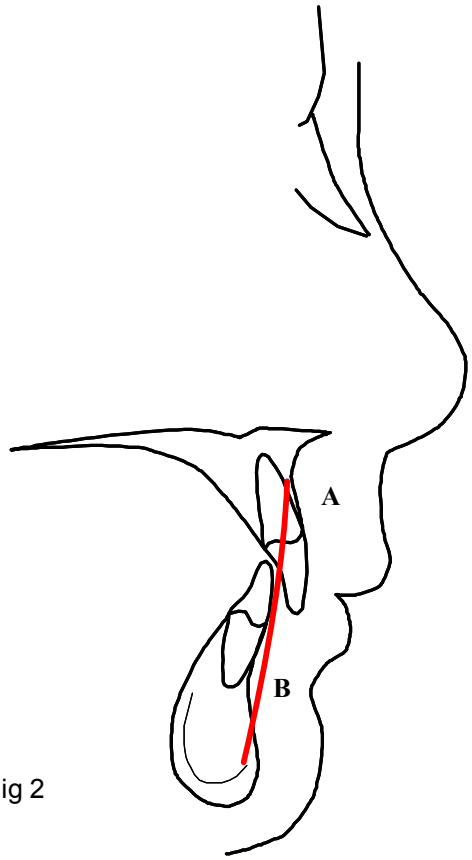


Fig 2

maxilla, or that the maxilla is deficient and makes the mandible appear prognathic when in fact it may be in a normal relation with the cranial base.. The notation 'T' found in the "Bottom Line" after the notations indicates a tendency towards a Class II or III. Generally we consider this variance from one millimeter to be mild, while a difference to three millimeters to be of strong tendency toward the skeletal classification. When the discrepancy between the maxilla and mandible (+ or -) reaches seven millimeters, the situation becomes serious, and orthopedic correction will require more time and greater cooperation from your patient. The face will often begin to show obvious distortion from normal proportion at seven millimeters of discrepancy.

When evaluating a patient for treatment it is important to remember that the maxillary-mandibular relationship can be Class I, II, or III with either or both maxilla and mandible being poorly related to cranial base.

SKELETAL VERTICAL **–** is an age sensitive measurement of skeletal anterior facial height by relating upper to lower facial height. This measurement is critical since vertical skeletal development is essential to stability following treatment. The evaluation is derived by measuring the Supra Orbitale (SOr) to the Anterior Nasal Spine (ANS). This measurement establishes the Upper Facial Height. The arc is completed to evaluate the Lower Facial height to Menton, the lowest point on the mandibular symphysis. This point should be on the upper arc at age four, moving downward at an average of .75 millimeter per year until it rests on the lower arc at age seventeen. Movement will be more rapid during growth spurts, which will occur at about six, eight,

and twelve years, and earlier in females. Development of full vertical dimension should be a primary goal in treatment.

ANTERIOR SKELETAL VERTICAL

Using your RED pencil, place the tip of the compass at ANS, extend to SOr and draw a small arc. By rotating the compass, transfer this dimension to the area of (ME) Menton and draw another short arc. Increase the compass 10 mm and draw a third small arc. The latter two arcs give you the range of vertical normality of the individual patient. *Reprinted with permission from Gerber Orthodontic Manual*

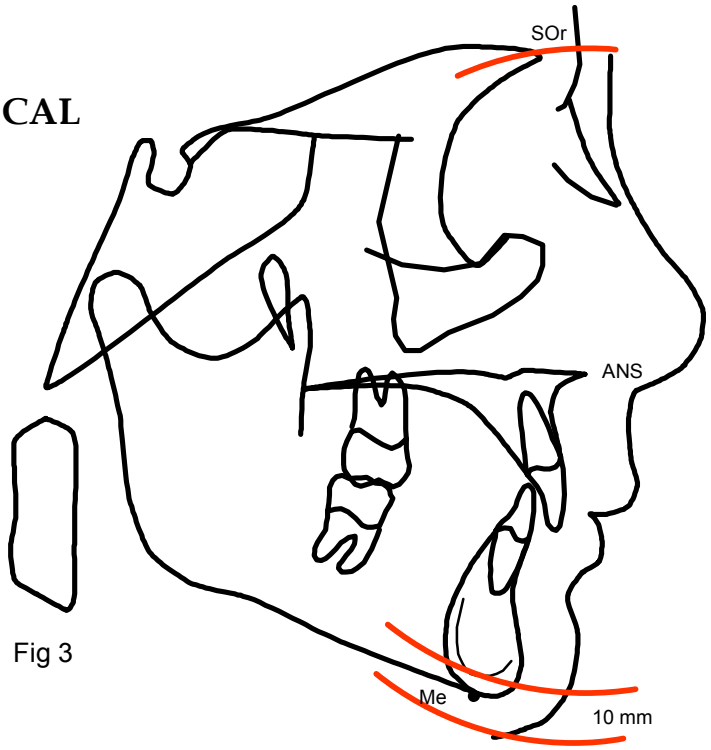


Fig 3

UPPER INCISORS - This horizontal measurement is an indication of the position of the upper incisor tip relative to the arc from anterior nasal spine. For this to be accurately assessed, the effective length of the Premaxilla must be measured and, if short or long, adjusted using the Palatal Division compensation (below) . The position of the incisor tip will be influenced by labial torque of the incisor and by its dentoalveolar compensation (eruption). In an ideal case, the anterior arc from Nasion will fall on the arc from anterior nasal spine. The tip of the incisor should lie on the arc to three millimeters forward of

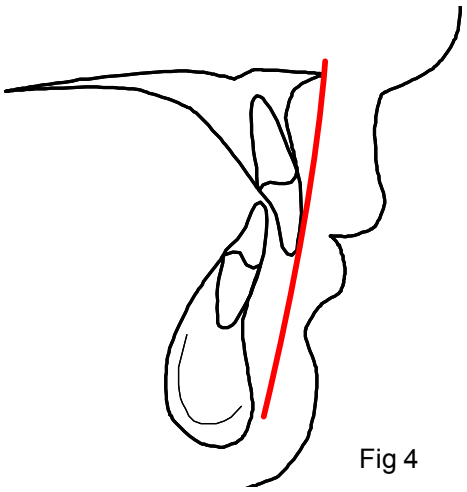


Fig 4

the arc formed from ANS. The most desirable facial profiles have a +2 or +3 measurement anterior to the arc.

Dentoalveolar Compensation - DAC is measured from the point where the long axis of the maxillary incisor crosses palatal plane (Palatal Division), continuing along the long axis to the central incisor tip. In an ideal case, the average length is 32.5mm. This incisor length allows you to better understand if intrusive or extrusive mechanics are indicated, and whether retruded or protruded teeth require a change in torque. As a rule: the more extrusion the more the tooth moves labial.

The **Palatal Division** provides a logical separation of the Premaxilla from the Maxilla. This is located at the intersection of the Palatal Plane and the Long Axis of the Upper Incisor the distance between the Palatal Division and ANS is the Effective Length of the Premaxilla (ELP).
The Dental Alveolar Compensation (DAC)
is measured from the Palatal Division to the
Incisal Edge along the Long Axis of the
Upper Incisor. Normally around 32.5 MM.
Reprinted with permission from Gerber Orthodontic Manual

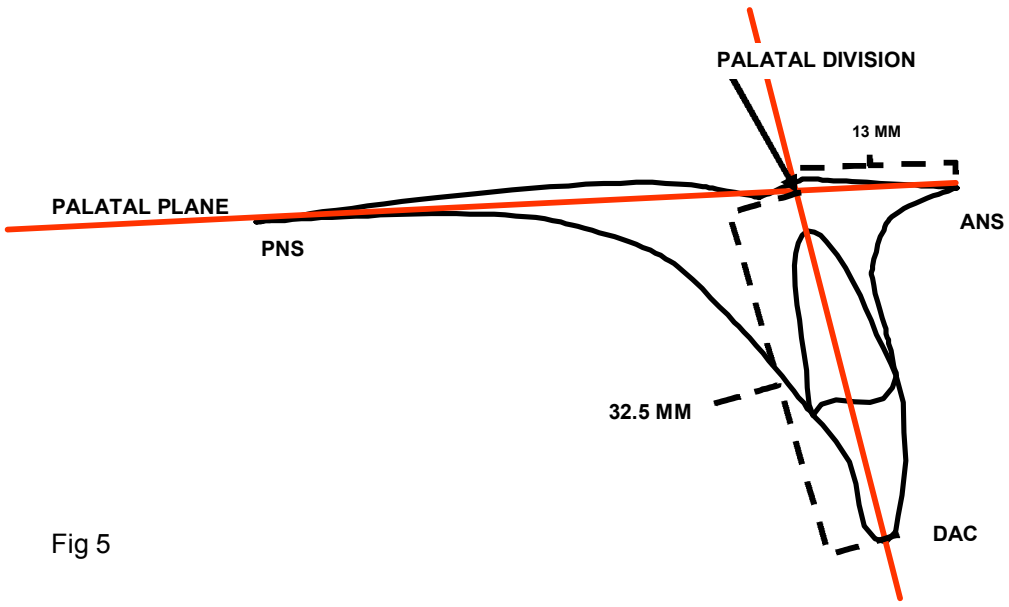


Fig 5

Lower Incisor- This is simply the angle of the long axis of the lower incisor to mandibular plane. It is now felt that a more protrusive angle of 95-102° is much more

stable and attractive. This permits a more desirable incisor tip to first contact the lingual surface of the maxillary incisor. This prevents labial first-contact that can initiate proprioception of mandibular retrusion.

Direction of Growth **–** This is one of the most useful features of the Analysis. To obtain the growth direction, the gonial angle is divided into two compartments. The upper compartment, with a normal angle of 52-55 degrees, is an indicator of horizontal or counterclockwise growth. The lower compartment, with a normal angle of 70-75 degrees is an indicator of vertical or clockwise growth. It is important to remember that vertical or horizontal growth does not occur in a straight line.

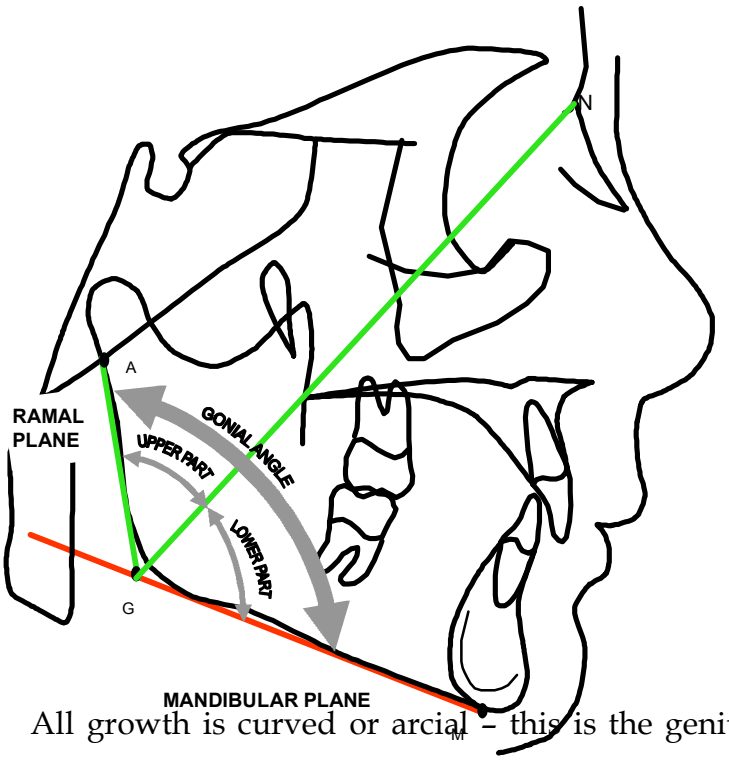


Fig 6

All growth is curved or arcial – this is the genius behind the Sassouni Analysis. It is arcial, and is an analysis that is capable of reflecting growth with any accuracy.

The estimation of the direction of growth is very important in the selection of functional appliances. The Constructed Gonial Angle used in the NFO Analysis improves the accuracy to which

we can predict. We must go beyond accepting the Gonial Angle as a single factor of Mandibular morphology. The manner in which the Ascending Ramus and the body of the Mandible are related to each other from the gonial Angle determines how the mandible will grow. When determining this angular relationship, the Gonial Angle is divided into two parts. First, you draw the Facial Depth Line from Nasion to Constructed Gonion. This divides the gonial Angle into Upper and Lower Angles. The Upper identifies the slant of the Ramus whereas the Lower Angle identifies the slant of the body of the Mandible. The normal range of the Gonial Angle is 120° TO 132°. The normal range for the Upper Angle is 52° TO 55° and the normal range for the lower angle is 70° TO 75°.

If the upper angle is large, the growth will be forward. If the lower is large the growth will be downward. If the upper angle is small the growth will tend to be downward and backward (CLOCKWISE). If the lower angle is small the growth will be forward (COUNTERCLOCKWISE).

The simplest and most accurate method of determining growth direction is to divide the upper angle by the lower angle. This will give you a percentage. This can then be related to the following chart to find the direction of growth.

70 to 78 per cent = Neutral Growth

69.9 per cent to 68.1 per cent = Clockwise Tendency

68 per cent or less = Clockwise Growth
Less than 60 per cent = Extremely Clockwise Growth

78.1 per cent to 79.9 per cent = Counterclockwise Tendency

80 per cent or more = Counterclockwise Growth

More than 88 per cent = Extremely Counterclockwise Growth

Maxillary Position – This relates the position of the maxilla to the cranial base. Ideally, the maxilla will lie with anterior nasal spine (ANS) on the anterior arc and

posterior nasal spine (PNS) on Cribiform Perpendicular. For this to be meaningful, the effective length (ELP) of the Premaxilla must be established (fig 5). You measure from the palatal division where the long axis of the upper incisor crosses palatal plane, to the anterior nasal spine. The length should be 12 to 15 mm. A short or long Premaxilla must be adjusted for maxillary position to be accurate. The effective length must be 12 to 15 mm no matter to what degree the incisors are inclined.

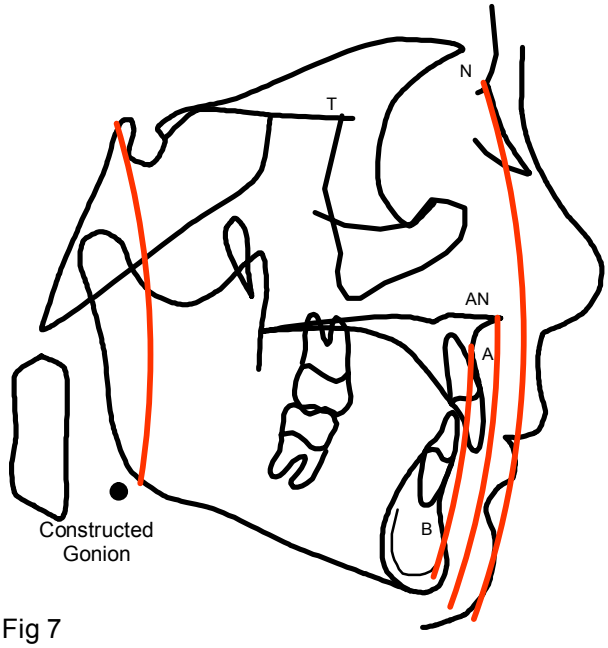


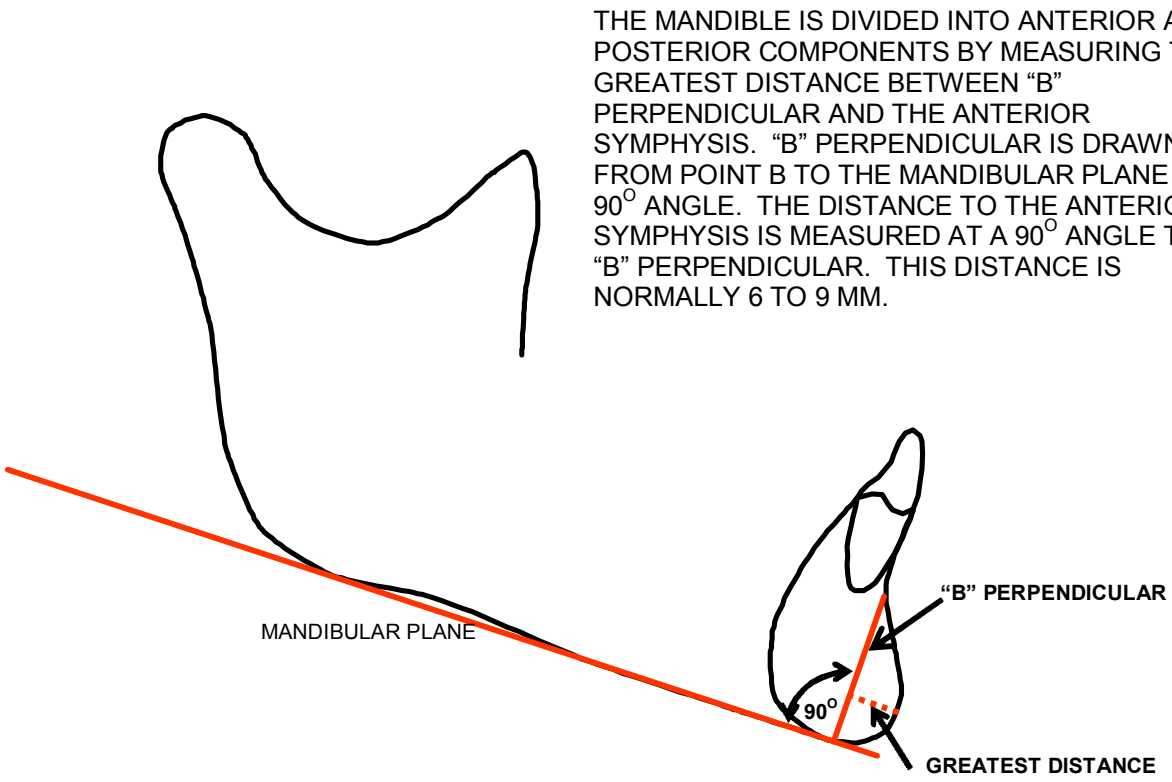
Fig 7

In **treatment planning**, it must be kept in mind that maxillary position is different in male and female patients. Male patients can have the maxilla up to four millimeters behind the anterior arc with no harm to facial esthetics. In fact, anterior position of the maxilla "feminizes" the face. In a female patient, the maxilla should be at least at the anterior arc, and, for the best facial esthetics, slightly forward of the arc. (fig 7)

Upper 6 Position – This measurement theoretically gives the ideal position of the maxillary first molar. Unfortunately, this measurement is very often useless, and cannot be relied upon to plan treatment.

Mandibular Position – Ideally, the mandible will lie between the anterior and posterior arcs at the age of twelve. Pogonion, the most anterior point on the curvature of the mental protuberance, should lie on the anterior arc at all ages. Constructed Gonion, the posterior reference point, should be anterior to the posterior arc before the age of twelve, passing through the arc as the patient ages. In the adult, Gonion should be up to four millimeters distal to the arc in a female, and up to six millimeters in a male. Again, the length of the mental protuberance must be accounted for in the position of the mandible. This should be from six to nine millimeters from B perpendicular. (fig 7)

Mandibular Length – The mandible should be equal in length to the distance from anterior arc to posterior arc at the age of twelve. (fig 7) The length of the mental protuberance, from B perpendicular to Pogonion (the most anterior point on the bony chin) should be from six to nine millimeters. The mandible may be long or short anteriorly, posteriorly, or both. The mandible may be of normal overall length while being short on one end and long on the other. The mandible which is long posteriorly may predispose the patient to temporomandibular joint problems, if other factors are present. A long or short mental protuberance may have facial consequences, but there is little which can be done therapeutically to affect this, although good lip balance certainly will improve the appearance in all cases.



Upper Lip Angle **–** This is included in the analysis because it has traditionally been included. We do not feel it has any diagnostic relevance. We would advise ignoring it, and judging lip balance by your patient's face.

Upper Incisor Inclination to Optic Plane **–** This is the simple angle between the long axis of the upper incisor and optic plane. (Fig 8) Previously this measurement was taken-off of the variable occlusal plane. We now use optic plane because it represents both a stable cranial landmark and the true horizontal reference of the analysis. Palatal

plane is adaptive to maxillary and mandibular eruptive occlusal changes and to the anterior maxillary changes brought on by upper airway obstructions.

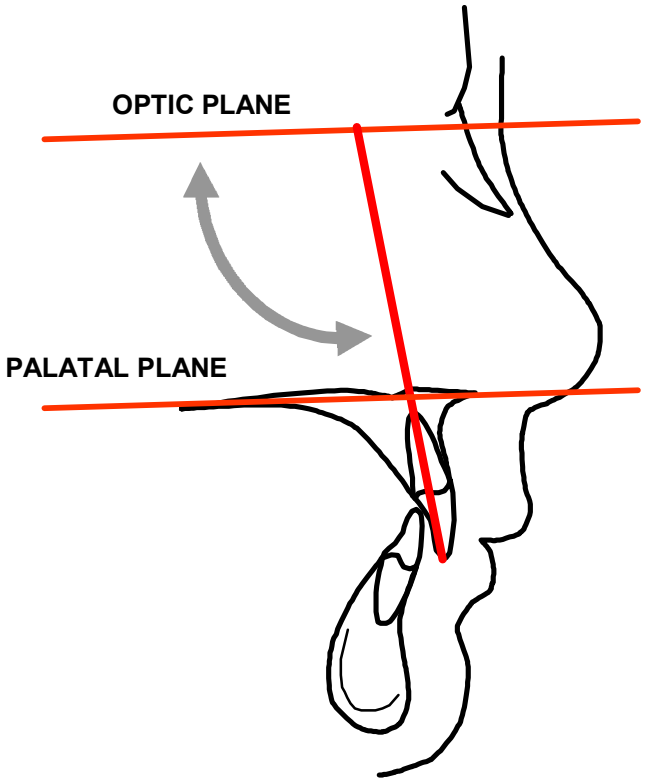


Fig 8

Cant of the Palatal Plane **–** the horizontal comparison of the Palatal Plane to Optic Plane gives us diagnostic information concerning the relative pathology underlying the skeletal and dental malocclusion. Figure #8 represents a normal balanced relationship in that the Palatal Plane parallels the Optic Plane.

In a malocclusion we might observe the planes to converge anteriorly, this indicates a lack of normal downward and forward placement the anterior maxilla or the pre-maxilla is tipped upward. The etiology is either an anterior tongue thrust or a

'finger' habit. The former may be consistent with Upper Airway Obstruction associated with open mouth breathing.

A second pathological condition would exhibit a Palatal Plane that tips-up in the back or one where the posterior Palatal Plane would converge to intersect the Optic Plane somewhere in the distance. This condition is thought to be brought on by the lack of posterior dental and skeletal growth that is often seen in patients with posterior deep bites.

It should be noted that most any anterior or posterior convergence is usually minimal and is only a few degrees. The more extreme cases are quite easy to spot.

Summary – This extensively modified version of the Sassouni Cephalometric Analysis is very beneficial to the dentist treating functional orthodontic and TMD patients. Some practitioners even derive benefits from its application when determining vertical in the edentulous patient.

The NFO analysis has been shown to be of great benefit to determine vertical proportion and growth potential of the young patient. The analysis has to ability to show incisor placement relative to opening and closing trajectory and where to place the mandible for functional advancement.

Practitioners need a diagnostic cephalogram that is visual and descriptive of the skeletal and dental malocclusion. This analysis provides many tools that will assist the clinician in making those decisions.

ext and illustrations are reprinted by permission from Dr. Jay Gerber and the *Functional Orthodontist.*.

Jay W. Gerber, D.D.S. is the clinical director of the TMJ and Craniofacial Pain Clinic where he provides treatment for orthodontics and TMD in Parkersburg, WV. He is the founder and director of the Center for Occlusal Studies an educational facility in Parkersburg. Dr. Gerber is a Certified IAO Senior Instructor. He has lectured to distinguished groups, associations and at universities since 1984. In 1990 he was honored as the 'Clinician of the Year' by the American Association for Functional Orthodontics. Dr. Gerber is the developer of the NFO™ Neuromuscular Functional Orthodontics Gerber Technique and numerous functional orthopedic appliances.

Mr. Thomas Magill has been in the orthodontic arena for over twenty-five years as a laboratory technician and owner of Frozen Tundra Diagnostics in Minneapolis.
Mr. Magill is recognized as an authority on cephalometrics. He is responsible for many progressive updates and changes to the modified Sassouni Cephalometric Analysis including the DAC and the ELP. He has personally traced over 50,000 radiographs and is recognized as an authority on functional diagnosis.

Travel Information

For all of your travel arrangements, please call our in-house travel agent, LVI Travel toll free (877) 805-3388.

Cancellation Policy

Please inform LVI of cancellations and/or substitutions as soon as possible so that other students may be accommodated. Due to the personal instruction and limited class sizes, all cancellation and rescheduling deadlines will be strictly enforced.

- If cancellation is received 60-90 days, 25% of the course fee will be forfeited.
- If cancellation is received less than 60 days prior to your registered class, 50% of the course fee will be forfeited.
- If cancellation is received less than 30 days prior to your registered class, 100% of the course fee will be forfeited.

If Matsco has financed your tuition, any cancellation refunds will be paid directly to Matsco Professional Finance Corporation and applied to your loan note balance. Registrant is responsible for any remaining balances due Matsco.

Proposed Course Schedule

Session I
Dr. Jay Gerber, instructor

Day 1 – *"The Integration of Neuromuscular Occlusal Orthodontic Treatment"*

8:00 am ***Why NM Orthodontics is a superior technique***?
-Course Goals
-NM Treatment for phase 2 Stabilization
Neuromuscular Functional Orthodontic Philosophy
Neuromuscular (NM) Stability defined
"Getting off the Orthosis & Knowing When"
- When to & when not to stabilize
- Limitations to stabilization & finishing treatment
- Gerber's 'Signs of Success' – NM Evaluation & Screening
  - Scans #3 - #13 & #15
- NM Scans to Balance Orthotics (adjustments)
  - #11 & #12

Indications of Occlusal & Orthodontic Treatment Stabilization
- Clinical Signs & Symptoms
- Causation - Occlusal breakdown

What makes our system work?
- Unlike traditional orthodontics "Stability is specifically defined"

The Orthodontic 'Neutral Zone" or the "Window of Adaptation"
- Settling-in of Orthodontic Occlusion

Indications for Reconstruction & incorporating orthodontics
TENS - EMG Construction Bite for:
-OFP, TMD, Orthodontic, Prosthodontic and/or Combination Finishing

12 noon lunch

1:00 pm *am topics continue…*

2:00 pm ***Phase 1 Treatment***
Treatment Protocols & Progress Records
-Goals of treatment - Keys to Successful treatment
- Treatment plans
- Protocols for NM treatment
-chronic & acute treatment

Orthotic Appliances in phase 1 therapies
- Options & limitations
- Selection, design, delivery & adjustments

Appliances
-Flat Plane, Pivot, NM, Pull-Forward & Orthodontic
- Adjustments
Orthodontic Appliances
Comprehensive treatment in the adult and teen
- Using braces, appliances & clear appliances
Limited treatment
- Anterior torquing for incisor placement (veneers) or total correction
- Anterior torquing for coordination of posterior reconstruction
- Molar up-righting for prosthetic enhancements
- To create space for implants, replacement prosthetics
- For correction of vertical discrepancies

5:00 pm Dismiss

Day 2

8:00 am ***Cephalometric Applications in Orthodontics***

-The NFO analysis – modified Sassouni Plus ***hands-on
- Tracing exercise
Arch Form Analysis*
-Proper dental arch Form, sagittal & transverse
- Schwarz Analysis - transverse measurement ***hands-on
- Symmetroscopic – facial / dental proportional evaluation ***hands-on
Facial Profile Analysis for Orthodontics
-Bowbeer, Sassouni & Roth

Noon Lunch break

1:00 pm ***Adult Phase 2 Orthodontic Finishing*** r
Orthodontic Finishing techniques
Orthodontic Adult Finishing
-Transitional Appliances
-Diagnostic & Treatment Records
-Scans & Imaging
-EMG Construction Bite
Appliances for
-Braces, elastics, arch wires
-Gerber Verticalizer, usage & applications
Appliances - Adjustments
-NM Orthotics
-Transitional appliances for mandibular advancement
-Pull-forward / NM Gerber
-Twin Block
-Transitional appliances for vertical correction
-Incisal Blocks
-Rickinator
Construction Bites for Orthodontics (EMG guided)
Support Phase Orthotics & Vertical Correction Appliances
-composite bites, lingual shelves

Finishing Scans for stability
4:00 pm "**Radiographic Quality Control" Mini-clinic** ~ Imaging Systems
5:00 pm Dismiss

Day 3

8:00 am ***Phase 2 Treatment Options using Functional Orthodontic Appliances***

- Sagittal ~ used to develop pre-maxilla & upper incisors
- Twin Block ~ advances the mandible forward
    - Mini-Bionator ~ retaining advanced mandibular position
- Rickinator/Incisor Block ~ advancing Mandible & opening vertical
- Braces ~ are used with orthotics to finish occlusion

Appliance functions

-Vertical: Incisor Block, Rickinator Plus, Bite Planes, RCS wires & Elastics
-Arch Development: Schwarz & Sagittal
-Functional Appliances, Gerber, Spahl, Twin Block, MiniNator
-Orthotics: Gerber ARA, G/M NM, Stack
-Braces: Straight Arch type, Gerber NFO Rx

12-1 Lunch

1:00 pm ***Effects of Upper Airway Obstruction upon treatment*** - Dr. Gerber

Intervention Treatment Options

- Soft tissue removal - Dental/Orthopedic Airway Evaluation
    - Facial changes - Soft tissues - Intra-oral changes
- Cervical Postural Evaluation

Case Studies of Dr. Gerber's Patients

Announcements for next session

- Project Exercises
- Braces & orthotic adjustments

Your Case Presentations & Typodont Projects for next session
Homework Assignment

4:00 pm Dismiss - End of Program

CE Information

Important Information Regarding Your Continuing Education Credits

How Many CE Hours Can I Expect to Receive From This Course?
After completing this program, you will receive a verification letter of the appropriate AGD approved continuing education hours. These credits represent the lecture and participation portion of the course. **Your AGD number must be on file at LVI in order for us to file your education credit hours with the AGD.** You are required to complete information regarding AGD number and membership on the sign in sheet for each course. If that information is not completed, your education hours will not be sent to AGD.

When Will I Receive My CE Credits?
Your CE form will be presented along with your plaque. Please copy the form and submit it to your governing agency.

Does LVI Submit My CE For Me?
Yes but only if you provide us with your AGD membership verification and your AGD number. It is your responsibility to keep the letter indicating your credits on file in your office and, if necessary submit your CE hours to the appropriate organization (i.e.: your state/territory, etc.).

What Happens If I Lose My CE Form?
Once you receive your CE forms, hold on to your originals and send copies when submitting your CE hours. If your original letters are misplaced, LVI must charge a $30.00 processing fee for necessary research. Replacement CE letters can take up to 3 weeks to receive.

Educational Objectives:
The objectives for this course are for the participant to:

- Utilize treatment philosophies and modality options to complete stabilization of occlusioin through Neuromuscular Orthodontics
- Define and use orthodontic techniques and procedures compatible with Neuromuscular Dentistry and Neuromuscular Functional Orthodontics
- Understand the correct diagnostic and treatment protocols for treatment
- Utilize diagnostic screening protocols as they relate to radiology, physical examination, bio-electrical instrumentation, scans, data interpretation and TENS
- Understand how to design, select and use the orthodontic appliances required for specific neuromuscular occlusal treatment
- Realize the importance of proper TMJ joint physiology in neuromuscular stabilization and the appliances necessary to achieve that end
- Describe the importance of a proper airway evaluation
- Understand what occlusion is possible with modern orthodontic appliances
- Investigate the treatment options of orthodontics and see the role they play in developing facial beauty