

Advanced Biomechanics Course



**Mechanics to solve day to day problems of orthodontist and improve clinical efficiency
(Straight-Wire x Edgewise Modified x Rickets x Segmented Arch Technique - Burstone)**

**Dr. Daniel Ianni Filho – Brazil - Master in Orthodontics, Faculty of Dentistry in "Araraquara"
State University of São Paulo. recadodaniel@terra.com.br**

❖ **Level 1 - 2 days seminar (13-14 November 2015 in Zagreb-Croatia)**

❖ **Level 2 - 2 days seminar (15-16 January 2016 in Zagreb-Croatia)** (Level 2 indicates only doctors who did the first level seminar. Focus is to learn Segmented Arch Technique – Burstone)

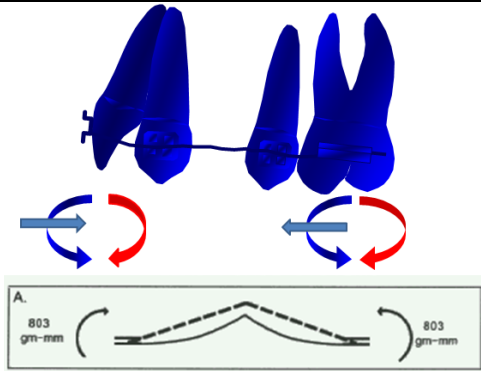
❖ **Optional - Modul in Brazil – 5 days intensive biomechanics course**

Program

1. Biomechanics level 1
2. Excellence and efficiency in Space closure Bull Mechanics and Reverse Bull Mechanics
3. Advanced analysis in nasopharyngeal obstruction
4. Cantilever mechanics of intrusion and extrusion and other applications
5. Correction of midline deviation with Double Bull mechanical
6. Root Resorption Predictability Protocol
7. Protocol of High Efficiency in Straight Wire Space Closure
8. Self ligating brackets – indications and limits
9. Biomechanics level 2 V symmetric geometry in the palatal bar mechanics
10. Excelencia in Bonding - protocols without intercuspitation
11. Biomechanics level 3 – V Asymmetric clinical applications correction of CI II unilateral, rotations, torques, Unilateral Posterior Cross bite
12. Mandible Protraction Appliance (APM/FLF e PMW)
13. Deep Bite correction – Parte 1
14. High efficiency in canine retractions with correct indications and triple pre-activations - Part 1
15. Protocols 1 and 2 in Open Bite
16. Biomechanics level 4 - Biomechanical principle Geometry stepped and clinical applications
17. Torque Revision and Systems Trainer
18. Deep Bite Correction - Part 2, system parts and Burstone
19. Biomechanics level 5 - Technical segmented Arch - Burstone - Fundamental concepts and Strap T (practice) and Mechanical Type B
20. Mechanical Type A - Critical Anchorage - Lock anchor space without loss (Burstone and Marcote)
21. High efficiency in canine retractions. Correct indications and triple pre-activations - Part 2 – TAS
22. Mechanical Type C - Critical Anchorage - space only lock with anchoring loss - mechanical Burstone and Marcote
23. Correction Root - Burstone Mechanical and Marcote
24. Correction Root - Ianni Mechanics - Advancement in Root correction Strap
25. Vertical Molars With and Without Extrusion

Lecturing fee: 800 Euro per Seminar, 2 days theoretical lecture and workshop

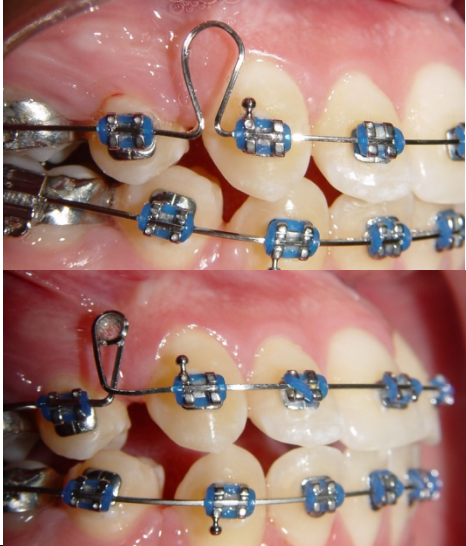
1 - Biomechanics level 1



System Force :

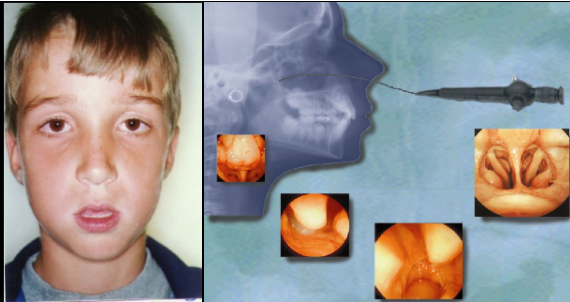
- Components
- Structure of general System Force
- Clinical applications

2- Excellence and efficacy in Space closure Bull Mechanics and Reverse Bull Mechanics



- Indications and why to use loops in regular cases of extraction.
- Traditional Bull and Reverse Bull
-

3- Advanced analysis in nasopharyngeal obstruction



RX and Video endoscopy – anterior and posterior septal deviation controversy and scientifically treatment + General, allergic and hypertrophic chronic Rhinitis + Sinusitis + Tonsils and Adenoids controversy in surgery and immunologist system + Hypertrophy of turbinates tail inferior + synechiae, tumors and polyps. Performance and limits of orthodontist in diagnostic and monitoring of mouth bleeding and correct way to have professional relationship of pediatric, Otorhinolaryngology and Speech therapist

4-Cantlever mechanics of intrusion and extrusion and other applications



- Biomechanics of cant lever
- Cant lever Intrusion for Deep Bite, Extrusion for Open Bite and design/material for others indications

5-Correction of midline deviation with Double Bull mechanical



Correction of midline shift with and without extraction in different degrees of difficulty anchorage.

Double mechanical Bull - activation protocol

6-Root Resorption Predictability Protocol



Root reabsorção predictability protocol.
How to identify the risk of reabsorção before the first bracket bonding
Histology applied to Pratic clinically and how to solve various orthodontic clinical situations thinking biologically

7-Protocol of High Efficiency in Straight Wire Space Closure



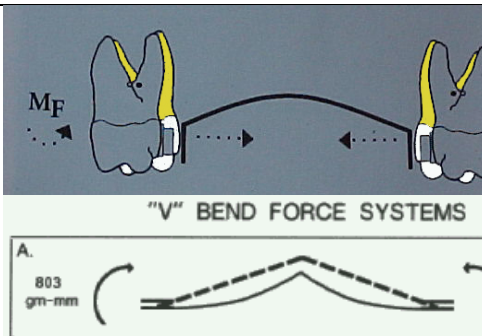
High efficiency protocol Straight Wire with 25 important points to consider before, during and after the extraction space closure for efficiency and decrease the orthodontic relapse.

8-Self ligating brackets – indications and limits

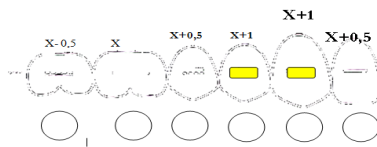


Important and vital indications of the philosophy of self-ligating
When the self-ligating help us reduce extractions, to remodel the shape of the bow, the more speed treatment and what are the limits of indications
Use protocols appropriate to the different degrees of difficulty
Mechanics of Wins

9-Biomechanics level 2 V symmetric geometry in the palatal bar mechanics

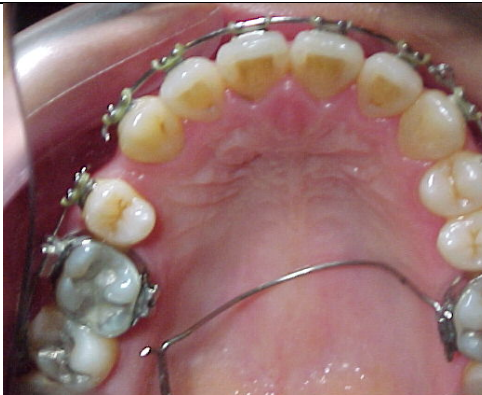


Symmetrical V applied to various clinical situations
Correction of cross bites, rotations, torque on the palatal bar mechanics with symmetrical V needs



10-Excelencia in Bonding - protocols without intercuspitation

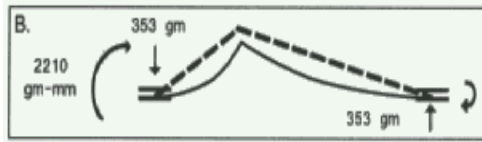
5 bonding different protocols respecting the anatomy of the teeth in order to eliminate the intercuspitation stage in orthodontic treatment
Smile Beauty protocol



11 Biomechanics level 3 – V Asymmetric clinical applications correction of

- Cl II unilateral
- Rotations
- Torques
- Unilateral Posterior Cross bite

V asymmetric applied in different clinical situations and intrusion mechanics



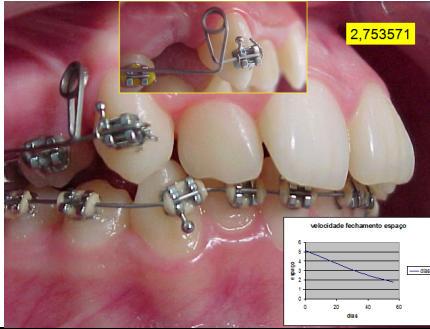
12-Mandible Protraction Appliance (APM/FLF e PMW)

Cl II correction in adults with braces mandibular protração without the need for patient cooperation



13-Deep Bite correction – Parte 1

diagnosis and several mechanics for deep bite correction



14-High efficiency in canine retractions with correct indications and triple pre-activations - Part 1

Correct indications and limitations on Ricketts strategy in mechanical partial retraction of canines
Protocol simplification of cases of great difficulty



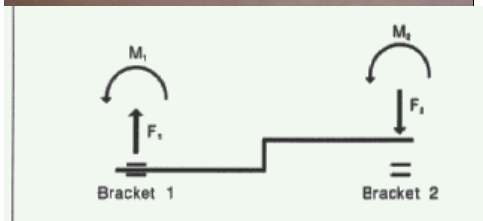
15- Protocols 1 and 2 in Open Bite

Use of knowledge partial retraction of the canine procolos Ianni 1 and 2 to skeletal open bite with crowding



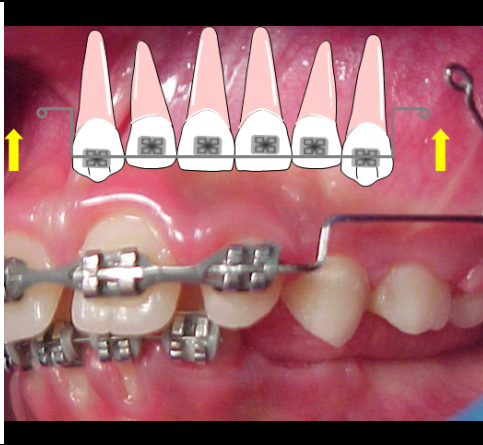
16 -Biomechanics level 4 - Biomechanical principle Geometry stepped and clinical applications

Clinical applications of geometry in step
Palatal bar in asymmetry correction of the occlusal plane, unilateral CI II, CI CI II and III, finishing bends



17 Torque Revision and Systems Trainer

Preventive apparatus type trainer to crowding correction in children, remodeling of arch form, mouth breathing, containment and mechanical protection in sports. , Mandibular replacement in mandibular deviations in adults



18 Correction Deep Bite - Part 2 and system parts and Burstone

Deep Bite correction with mechanical segmented with focus in mechanics of 3 pieces of Burstone
Adaptation of Ricketts Arch Base to correct biomechanical principles
Force systems modification from statically indeterminate to determined

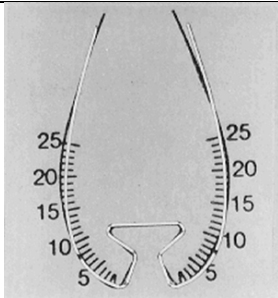


Table 1 Composite section (bowed) interaction space (TMA 50104)

Δ (mm)	F_d (N)	F_r (N)	M_d (N-mm)	M_r (N-mm)	θ
0.0	0.0	113.5	2311	-2,304.4	
0.5	15.4	107.7	322.1	-2,384.2	
1.0	33.9	102.1	446	-2,488.3	
1.5	50.0	97.1	466	-2,614.4	
2.0	62.5	92.4	551	-2,651.1	
2.5	84.7	87.5	659	-2,670.2	
3.0	102.3	83.2	728.7	-2,682.2	
3.5	118.7	79.4	797.6	-2,700	

19- Biomechanics level 5 - Arc Technical segmented Burstone - Fundamental concepts and T spring (practice) and Mechanical Type Burstone and Marcotte



20- Mechanical Type A - Critical Anchor - Lock anchor space without loss (Burstone and Marcote)

Fundamental concepts of segmented arch
Moment /force and load/deflection applied in efficiency
Types of movements unused in Straight Wire technique but fundamental in segmented arch technique in anchorage difficulties
segmentation of arcs and mechanics of two teeth



21- High efficiency in canine retractions. Correct indications and triple pre-activations - Part 2 – TAS

Partial retraction of canines in Segmented Arch Technique Burstone
Critical anchorage cases and cases with radicular correction needs



22- Mechanical Type C - Critical Anchoring - space only lock with anchoring loss - mechanical Burstone and Marcotte

Challenges in the extraction space closure only with loss of anchorage
Mechanical type C Burstone and Marcotte



23- Correction Root - Burstone Mechanical and Marcotte

Mechanical and strategies to root correction according to SAT Burstone and Marcotte

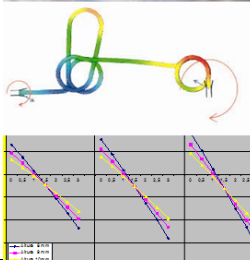


24-Root Correction Ianni Mechanics-Advancement in Root correction

Changes in the root corrections mechanics in Segmented Arch Technique according to new researchs and new root correction spring by Ianni

Root corrections with and without extrusion

Uprighting teeth opening or closing space and combination of all movements in accordance with Ianni protocol



25- Vertical Molars With and Without Extrusion

Various mechanical to Uprighting molars

Challenges and difficulties in Uprighting molars without extrusion

Simplifying Uprighting using geometry of arches applied to Straight Wire.

Doing simple something complex