Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Title:
Work-related stress: new market opportunities for gnathology:
Clinical cases of complex interdisciplinary rehabilitation: from allostatic disorder to health

5th FIAPP-RNO International Congress, Paris, June 7th-10th, 2012

Keywords:
Health, wellness, trouble, occupational maladjustment syndrome, work-related stress, workplace safety, mouth diseases, occupational medicine, health surveillance, allostatic state, dentists, gnathologists, Planas Neuro-Occlusal Rehabilitation (RNO).

Abstract:
The focus on health, understood as physical, mental and social health, is the health and social challenge of the Europe and the world. The European program "Closing the Gap" showed that the average age of a person's life dragged on for 85 years, but only 15 years of health, the rest is lived in a status of malaise. The occupational maladjustment syndrome and the work-related stress are the health and social challenge of this century. Reducing people's dysfunctional troubles means reducing the general occupational maladjustment syndrome and the work-related stress, highly detrimental to the health and quality of life. The synergistic health action of various people destined to improve citizens' health needs leads to a behavioral requalification both of the environment and of society.
As part of safety at workplace in 2004 the EU introduced the work-related stress risk assessment that shifts the focus on the status of malaise. Mouth early intercepts diseases foreign to her, said WHO in 2007.
As part of work-related stress risk assessment the occupational medicine and the health surveillance of the workplace have introduced the obligation to prevent, detect and treat the status of malaise both of general practice and of the workers' mouth.
The general and local dysfunctional occupational maladjustment syndrome is connected to the allostatic status of instability and it has specific and individual indicators of risk and response times. They open new therapeutic scenarios for gnathologic dentists and especially for those who follow Planas Neuro-Occlusal Rehabilitation_RNO.
The complex and combined interdisciplinary rehabilitation needs goals to be shared among health professionals, both doctors and dentists; it has its pivot in the NOR mandibular therapeutic change in posture which deconstructs the symptoms of the general and local maladjustment syndrome and remodels the condition of CNS and PNS from instability to stability conditions.

New therapeutic opportunities and roles for gnathologists are opened, especially for those who follow the Planas & Simoes' neuro-occlusal rehabilitation: prematurely, the mouth intercepts diseases foreign to her (WHO 2007).

The OCCUPATIONAL MALADJUSTMENT SYNDROME is "The Health and Social Challenge."

In 2004, in the field of health and safety of the workplace the European Community introduced the work related stress risk assessment: **in Europe, the work stress is the second occupational disease. This disease concerns about 40 million people only in Europe, affecting the female gender for 22%. It causes considerable economic and social costs, for example in Italy it creates from 50% to 60% of absenteeism in the workplace according to the percentages released by the Ministry of Health. It creates significant health costs: according to the OSHA, the European Agency for the Safety and Health at Work, the EU spends approximately 20 billion euros annually.**
It also causes a loss of corporate competitiveness and human resources productivity.

With the estimate of that risk the focus is shifted to the status of malaise of the company and of the human resources "which manifests itself in physical, psychological or social symptoms related to the inability of people to fill a gap between their needs, their expectations and their work. "
A prolonged exposure to stress can decrease work efficiency and cause health problems of "physical, psychological and psychosomatic nature."
There are two stressor environments:
• an "objective" one, linked to company, work organization, working and environment conditions;
• a "subjective" one tied to the worker, their adaptability to environmental pressures both psychological and social, their ability and their required work load.

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

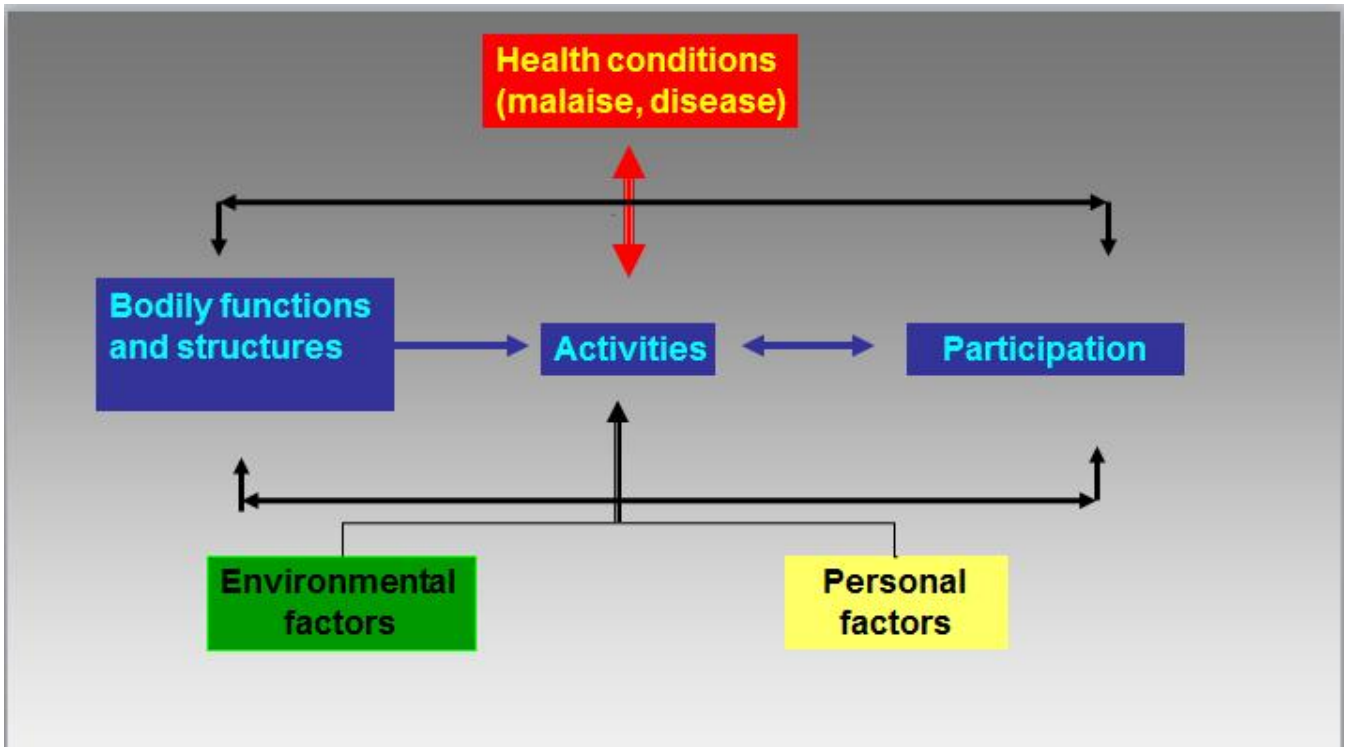
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Occupational medicine and health surveillance are required to prevent, detect and treat the general and local dysfunctional occupational maladjustment syndrome in the fields of medicine and dentistry.

In 2001 the WHO created the ICF Institute with a bio - psycho - social approach correlating health, disease and malaise conditions to medical facilities and functions, to the activity, the participation and the presence of environmental factors and personal facilitators or barriers.



In the ICF classification of disabilities the mouth is missing and only in 2007 the WHO considered it as the alarm bell of other diseases.

The ICF algorithm for the estimation of work-related stress is summarized in the following table:

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Bio - psycho - social risk WORK STRESS	Part 1: Conditions of health, malaise and disease Human resources condition		Part 2: Contextual factors Company condition	
Components	Bodily functions and body structures	Activities or participation	Environmental factors	Personal factors
Fields	Bodily functions body structures	Life areas (tasks, actions)	External influences on functioning and disability	Internal influences on functioning and disability
Results	Change in bodily functions (physiological) Change in body structures (anatomic)	Capacity of executing tasks in a standard environment. Capacity of executing tasks in the present environment.	Facilitating or obstructing impact on the features of the physical and social world and of the attitudes	Impact on the person's features
Positive aspect	Functional and structural integrity	Activities participation	Facilitators	N/A
Stable	Normal functioning Physiologic allostatic load Healthy company and worker Physiological activity		Normal functioning Physiologic allostatic load Healthy company and worker Physiological activity	
Bio - psycho – social competence	Low work stress risk	High	Low work stress risk	High
Negative aspect	Handicap	Limited activity	Barriers/Obstacles	N/A
Instable	Allostatic status Occupational and environmental maladjustment Company and worker's poor health		Allostatic status Occupational and environmental maladjustment Company and worker's poor health	
Bio - psycho – social competence	Medium	Low	Medium	Low
Work stress risk	Medium	High	Medium	High

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

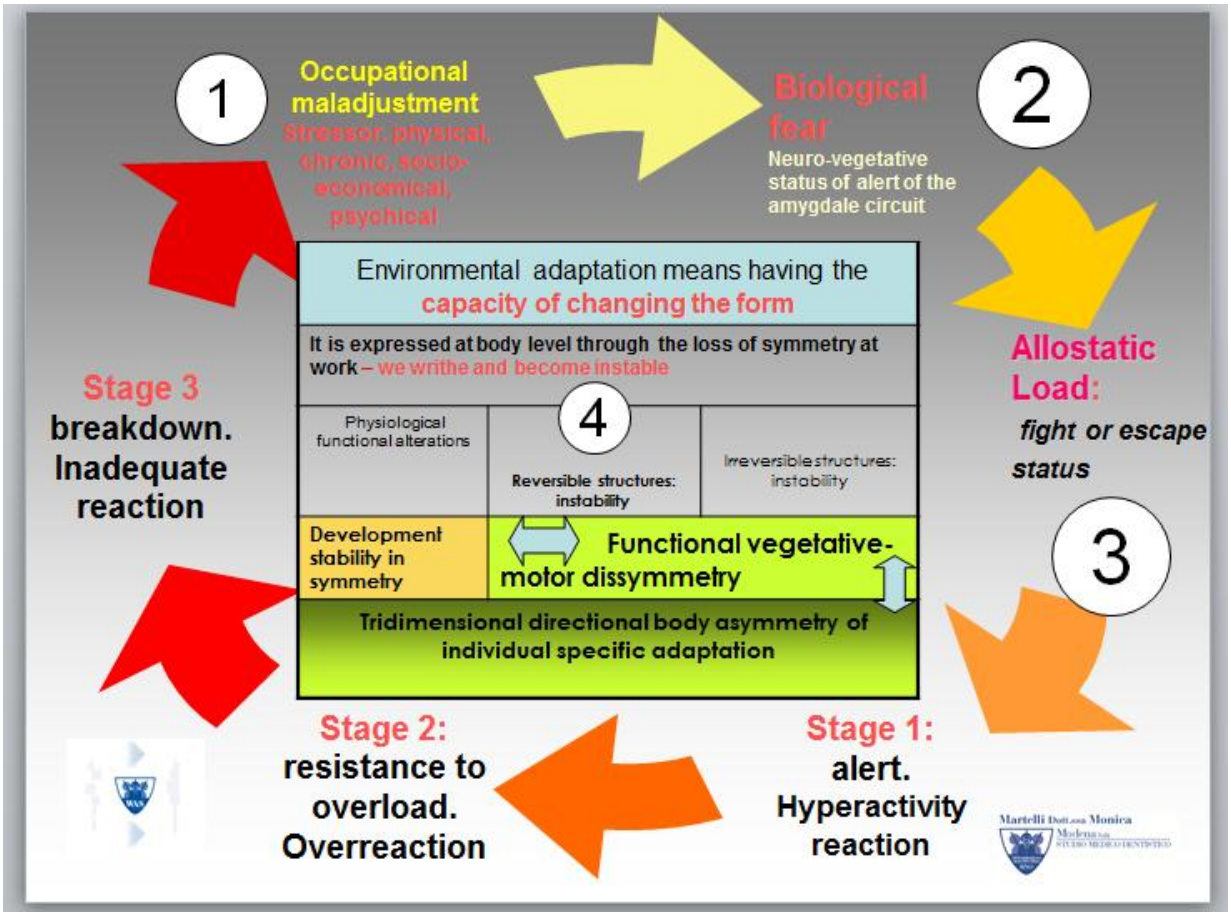
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

The HEALTH SURVEILLANCE of the general and local maladjustment syndrome:
1. is linked to the allostatic status of malaise and instability;
2. has specific and individual risk indicators and reaction times;
3. requires a complex, combined interdisciplinary rehabilitation;
4. ***requires a therapeutic synergy with the participation of all health branches (dental and medical) as well as occupational medicine;***
5. its goals are shared between the different health professionals (physicians and dentists) and they have ***the NOR MANDIBULAR THERAPEUTIC CHANGE IN POSTURE*** *as* ***pivot****, which deconstructs the symptoms of the general and local maladjustment syndrome and remodels the structure of CNS and PNS from instability to stability conditions.*

Neuro-physic-environmental disease
The dysfunctional occupational maladjustment syndrome triggers for the activation of the mechanism of environmental neurology survival.



Physical, acute, chronic, socio-economic and psychological stressors trigger for the neurovegetative alert status of the amygdala circuit. It is highlighted with the loss of work symmetry and with the allostatic status of instability.
When stress is acute, we enter a reversible physiological allostatic load.

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

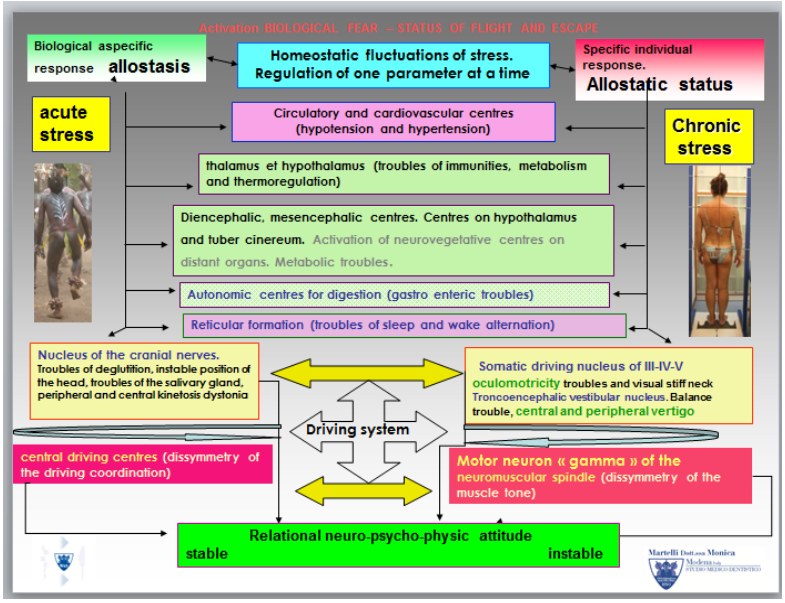
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

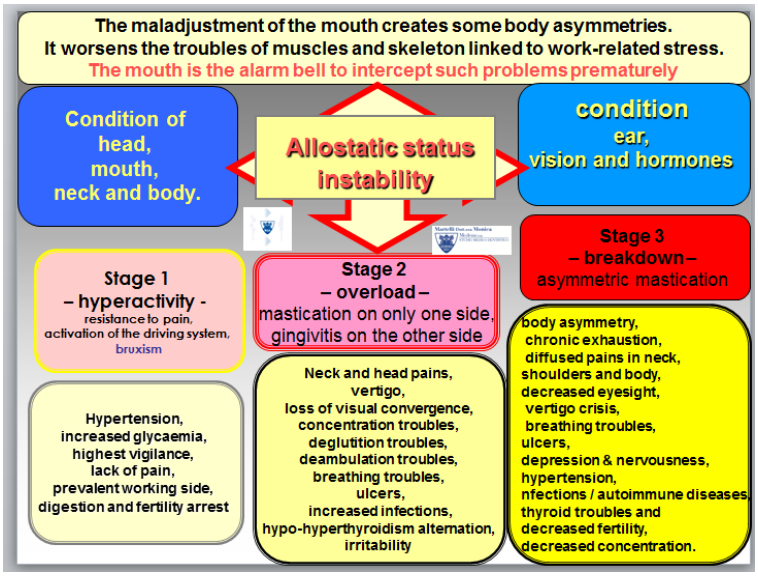
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

When stress is chronic, we enter an allostatic status, first reversible, then irreversible with 3 stages:
Stage 1 - Hyperactivity & alert
Stage 2 - Resistance – overload and excessive response
Stage 3 - Exhaustion - Inadequate reaction

The amygdala circuit of the CNS triggers for the symptoms of biological fear and status of fight and escape.



The cranial nerve system, the driving system and the mouth come into neurological dissymmetry with the loss of work in symmetry and the choice of one prevalent working side and instability: the mouth is its alarm bell. Figure 1



Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Each individual is normally fully **capable of supporting a short-term exposure to tension,** which can be considered as **positive.**
The same individual may react differently to similar situations at different times of their lives → **specific adaptation of the individual. Their adaptive response is in allostatic physiological load, which means stability and health with wholesome physiological activity.**

The allostatic status of environmental and occupational maladjustment is an indicator of instability and of a status of malaise: it occurs when you have more difficulty in coping with a prolonged exposure to an intense pressure. Moreover, different individuals may react to similar situations differently.

When it comes to the ALLOSTATIC STATUS of INSTABILITY, the specialist can implement two types of preventive actions:
Type 1: homeostatic regulation of the system, when they adjust one parameter at a time, without any overview;
Type 2: allostatic adjustment of the system when they modulate several parameters together.
This bio-psycho-social approach is facilitator → it activates a virtuous cycle in anticipation of the CNS→it triggers for an adaptive behavioural change with respect to a wrong variable →It reduces, prevents and intercepts the risk factors for medical and dental health. It deconstructs the allostatic status of individual stress-related maladjustment and the general and local DYSFUNCTIONAL MALADJUSTMENT OCCUPATIONAL SYNDROME.
Goals:
In a virtuous cycle activated in anticipation, the facilitated CNS triggers:
1. for an automatic behavioural change based on multiple parameters;
2. the more this change becomes automatic, the more the sensory and driving perceptions are coordinated;
3. a coordinated perception increases individual skills;
4. the increase and the stabilization of the skills lead to increased performances under workload;
5. Therefore, the work maintenance, the activities and the social participation of the worker are improved.

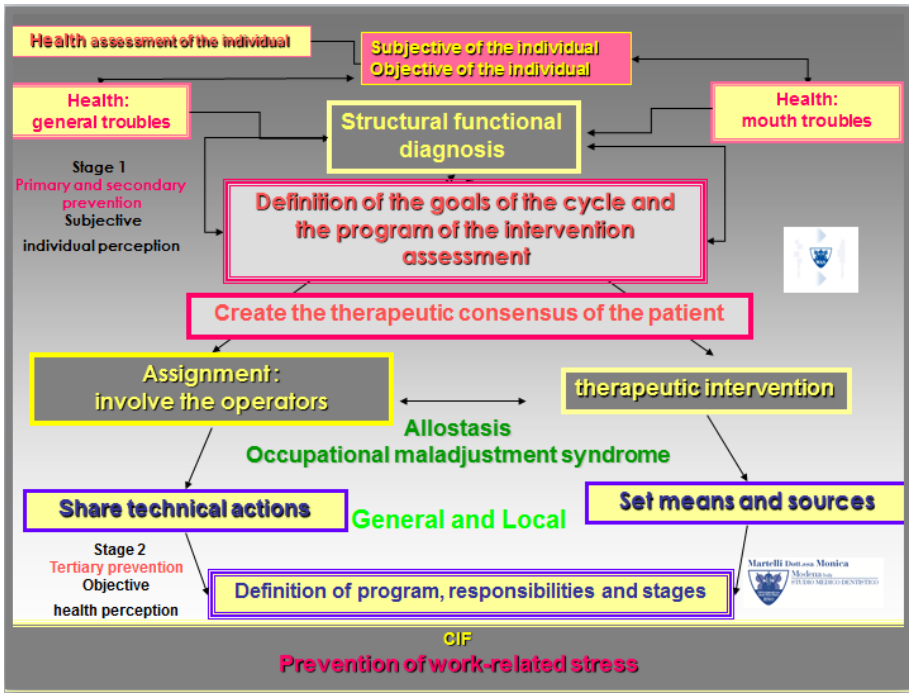
According to the ICF, prevention of work-related stress correlates dysfunctional and structural health disorders in medical and dental fields, highlighting the goals and the program of therapeutic intervention designed to deconstruct the general and local maladjustment syndrome. The definition of the programs and the therapy steps require a complex interdisciplinary rehabilitation: a neuro-psycho-physical medical optimization and a neuro-occlusal, dental, orthopaedic, orthodontic and prosthetic rehabilitation (see fig.).

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

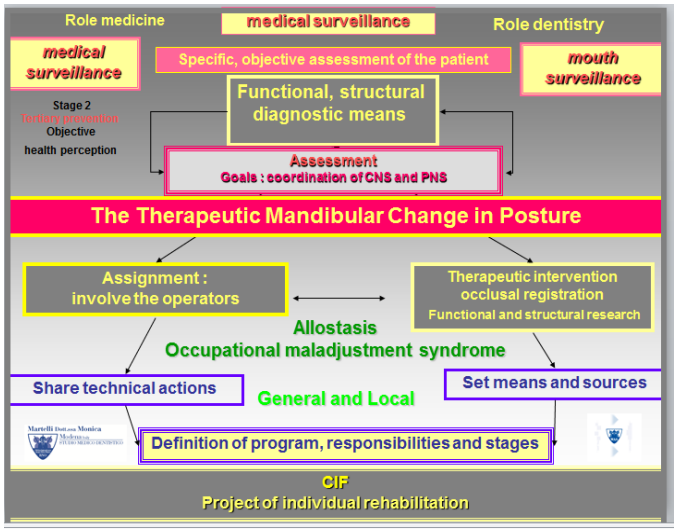
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com



According to ICF, within the individual rehabilitative project of the patient, the coordination of CNS and PNS takes place through the NOR mandibular therapeutic change in posture (see fig. 2).

Therapeutic interventions

Combined and complex interdisciplinary rehabilitation.
Medical neuro-psycho-physical optimization.
NOR dental, orthopaedic, orthodontic, prosthetic, occlusal rehabilitation.



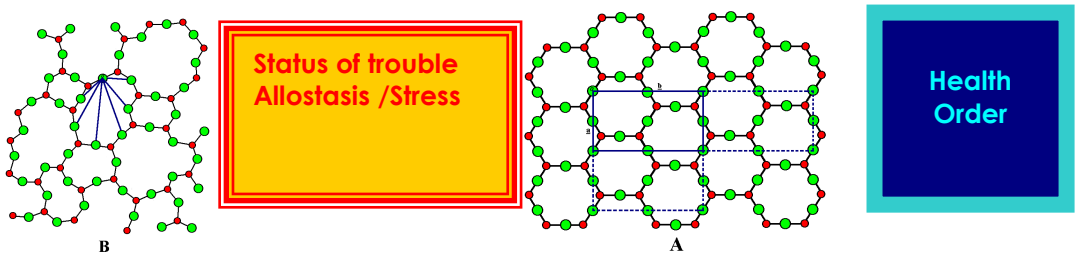
Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

From disorder and instability of maladjustment → to stability/order



HEALTH / STABILITY

Each individual / worker is stable when he finds himself in a status of complete physical, social, psychological well-being.
He has genetically and epigenetically specific, individual characteristic:
He has BODY STRUCTURES → as symmetrical as possible
He has BODILY FUNCTIONS → stable, species-specific, functional activity (bilateral balanced occlusion and bodily functions in balance)
He presents ACTIVITIES AND PARTICIPATION with a well-developed organization and neurological maturation
- Good cognitive-driving skills → individual functional integrity
- Good body performances → ability to work
- Good structural components (reflex mechanisms, automatic elementary mechanisms, synergies).

Good postural and movement strategies.
Good individual strategies of neuro-psycho-physical, relational, cognitive and emotional attitude.
He has ENVIRONMENTAL FACTORS with good social integration and effective, adaptive, environmental strategies.

Case 1 – An asymptomatic 28-year-old female worker. Stably adapted in physiological allostatic load in PHASE OF HEALTH SURVEILLANCE OF HER ANNUAL STABILITY.

Structural Study

Head and neck conditions: cranial asymmetry

1. A stable, badly occluded mouth counterbalances the patient's skeletal problems
2. Condyle-meniscal compensatory incoordination
3. Genetically-based subclinical specific chronic cervical syndrome
   - ✓ Bulging C2-C3 and C3.C4
   - ✓ Incomplete and complete somatic fusion of C2-C3
   - ✓ accentuation of the lordosis of the epistropheus tooth

Tooth and periodontal dissymmetry of the mouth

Compensated spatial adaptation in torsion

1. Very evident palatine torus
2. Asymmetrical arches for the extraction of the first superior premolars with contraction of the maxillary (10.1 mm) on the maxillary first molars;
3. Deep bite, inner mandibular block, cross bite on the left;
4. The midlines do not coincide
5. Occlusal plane with Z angle
6. Double occlusion:

• 1st contact at the level of 16 46, mandibular retrusion and deviation to the left
• 2nd contact: the mandible moves forwards and it is displaced rightwards

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

- Class II on the right and the left with class I canine

Cervical-lingual dissymmetry of the epistropheus. Adaptation in torsion

Sagittal plane. Cranial and cervical dissymmetry.
Dyskinesia of SSB C0 C1 C2 C3. Suspected fusion C4 C5 C6
Vertical hyoid bone twisted at the front Palatal torus
Vertical and sagittal dissymmetry of the jaw and of TMJ 64 -66 mm
Deep bite, mandibular block, internal torsion
Strong esoversion of the inferior incisors.
2 visual planes **2 occlusal planes**
Skeletal class II due to mandibular retrusion. Normo- and hyper-divergent
With AOBO of class II 9/8 mm
Twisted occlusal plane and Normo- and hypo-divergent.

Tooth-periodontal dissymmetry of the mouth
Morphological asymmetry of the contracted maxillary
Maxillary twisted to the right and mandible twisted to the left
ATM articular dissymmetry: larger, taller and rear condyle to the right due to a fixed mastication on the right. It is also slightly more elongated, dysmorphic and distracted on the left.
Planas dysfunctional masticatory dissymmetry: asymmetric masticatory angles.

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

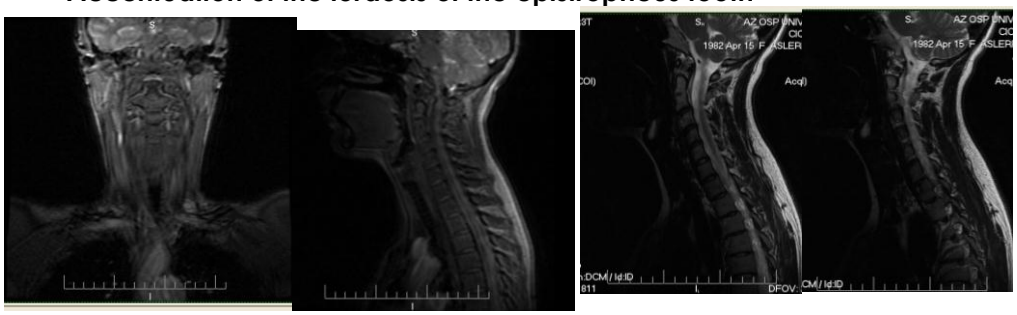
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

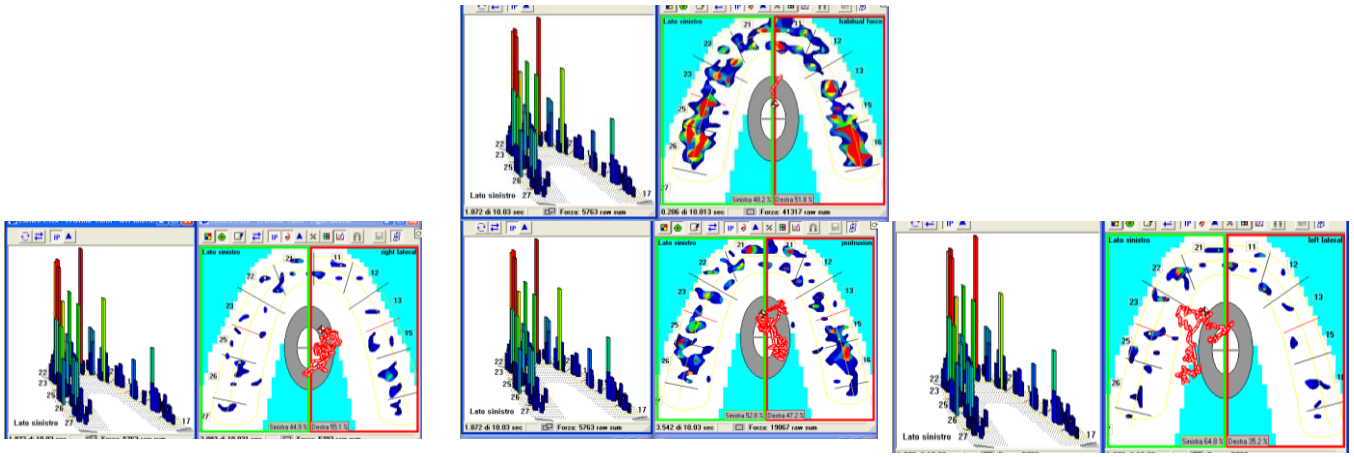
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Frontal plane
Cranial asymmetry: adaptation in torsion
C0 C1 C2 in torsion
Mandibular lateralization to the left
The maxillary is twisted to the right, mandible to the left

Genetically-based subclinical specific chronic cervical syndrome
Bulging C2-C3 and C3.C4
Incomplete and complete somatic fusion of C2-C3
Accentuation of the lordosis of the epistropheus tooth



Functional study: analysis of the specific occlusion of a patient
Stable, bilateral balanced occlusion by NOR laws
The cross bite to the left keeps the centre of force in the physiological position
Protrusive with movement deviated to the right
Laterality balanced to the right
Laterality to the left with advanced movement and, then, deflected to the left
Habitude: good load distribution, stable centre of gravity, prevalent support on the right.



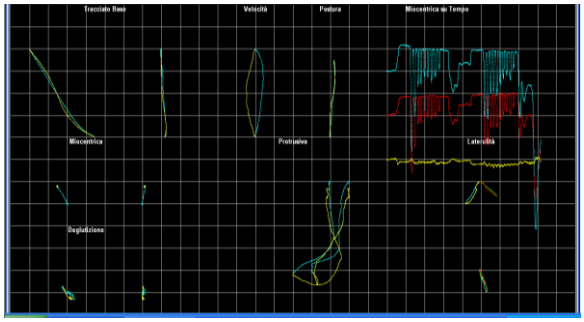
Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

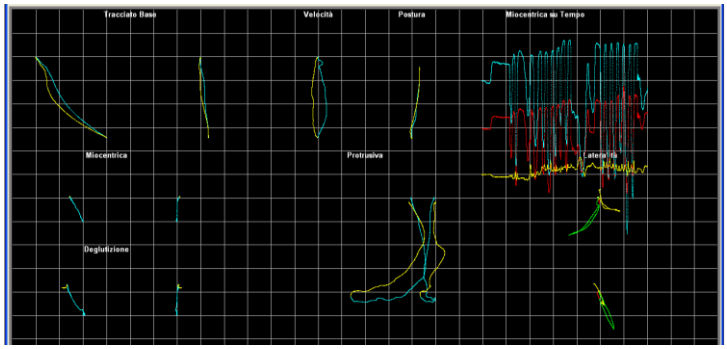
Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Analysis of jaw movement in normal physiological conditions
Deviation of the mandibular movement on the left
Steep broken protrusion due to cervical instability with condyle-meniscal incoordination
Steep asymmetric chewing angles, mastication on the left
Good activity in myocentric



Occlusal registration. Horizontal plane with Gothic arch. Worsening situation.
Worsened large movements with adaptation in torsion to the right
Small movements in myocentric. Coherent and stable swallowing
Tooth movement
Broke protrusion according to Simoes: paradoxical movement of the cervical spine in the horizontal plane. Condyle-meniscal incoordination, cervical instability C0 C1 C2, cervical skeletal pathology, dysfunctional mastication dissymmetry: worsen asymmetric masticatory angles: unilateral left-sided mastication.



The vertical plane : Lauret's mask improves the skeletal and cervical pathology, but it is not decisive.
Large movements: adaptation in twist to the left.
Little movements of the myocentric and consistent and stable swallowing
Tooth movement
Broken protrusion according to Simoes: improved condyle-meniscal incoordination; improved cervical instability C0 C1 C2; improved cervical skeletal pathology, but it is not decisive.

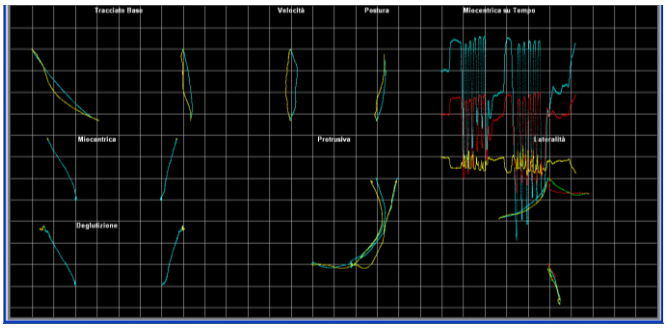
Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

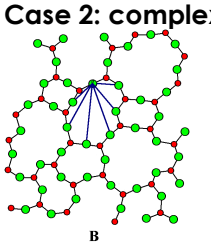
Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Dysfunctional masticatory dissymmetry: asymmetric masticatory angles, Favoured unilateral left-sided mastication.



Case 2: complex clinical case



Instable head position: allostatic status. Structural disorder

Medecine
1- ictus result
2- hypochondriac psychosis of suicide and depression
3- pelvic inlet syndrome, surgically treated
4- bilateral cataract
5- total pansinusite
6- TDM
7- S. chronic cervical
8- facial neuralgia
9 - Hepatitis C

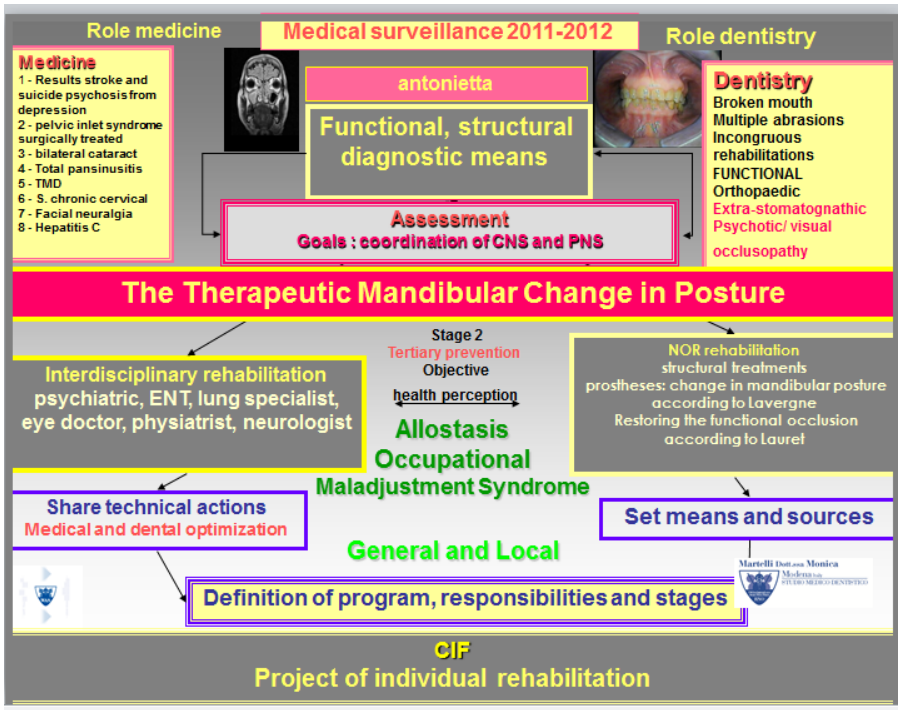
Dentistry
Broken Mouth
Structural
Multiple abrasions
Incongruous rehabilitations
Functional Orthopedics
Psychotic extra-stomatognathic
Occlusopathy

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

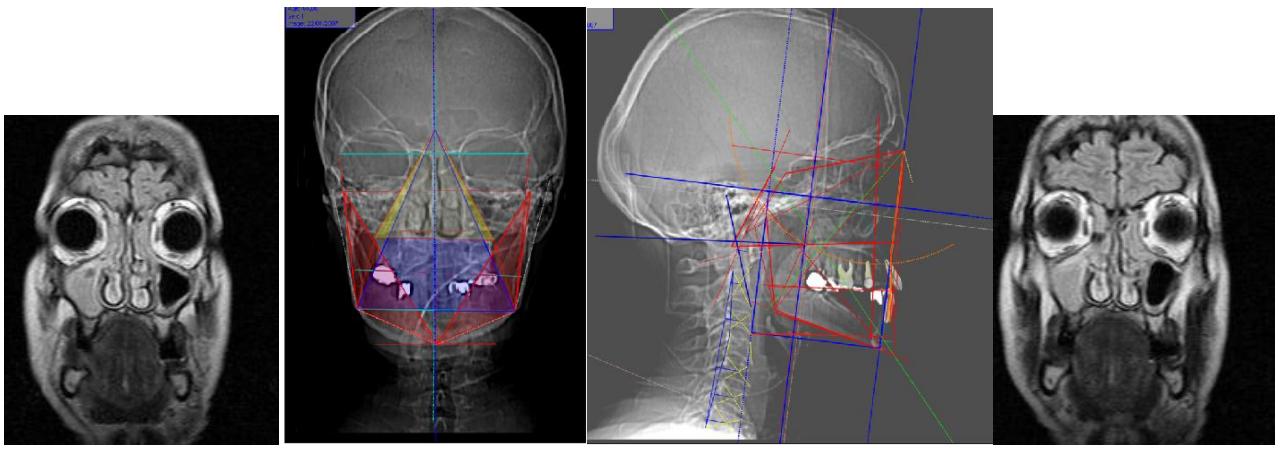
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com



Instability of head condition: allostatic status. Entry structural disorder

Frontal plane

1. cranial asymmetry, cranial lateralization and rotation of the head;
2. occlusal instability of the mouth;
3. hypertrophic asymmetry of the muscles: dysfunctional muscular dissymmetry;
4. cervical-lingual dissymmetry of the epistropheus. Instability in swallowing, strongly contracted palate, tongue without a resting space →
5. Severe, chronic, obstructive, respiratory syndrome, suspected apnoea;
6. Chronic, cervical syndrome, cervical dyskinesia, torsion SSBB C1 C2 C3;
7. Cranial, cervical and mandibular TMD disorder; condyle-meniscal incoordination & TMD dissymmetry; disparallelism between visual, Camper and occlusal plane.



Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

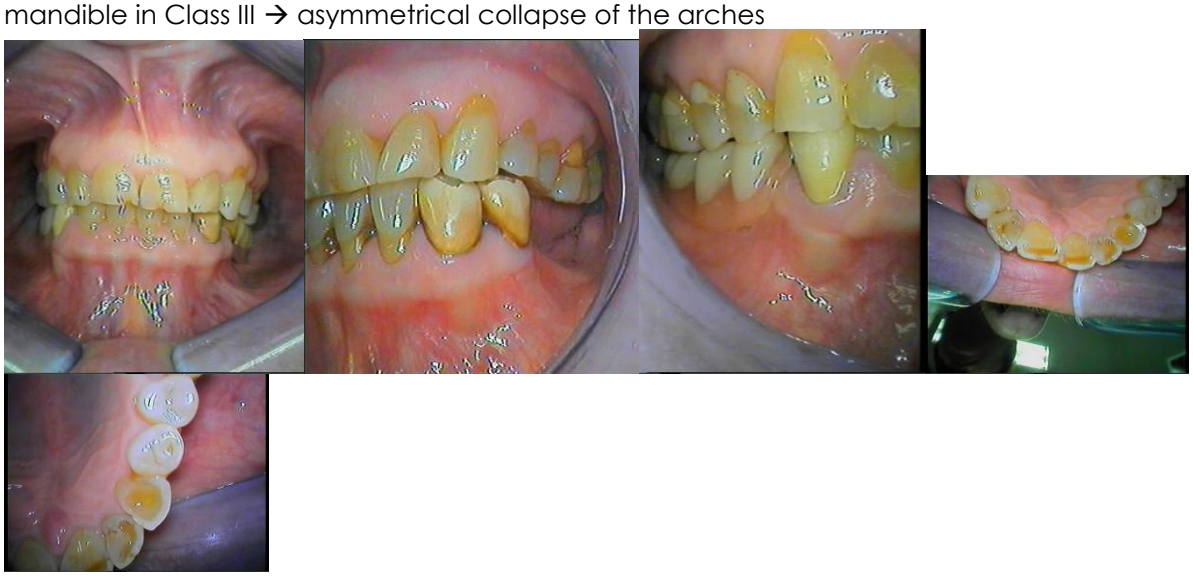
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

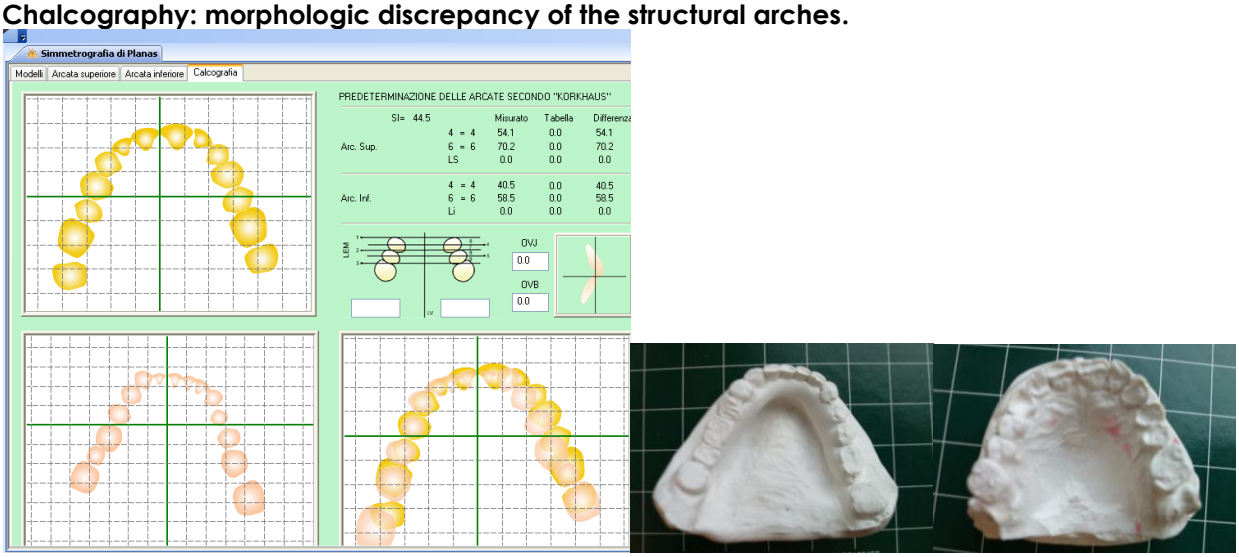
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

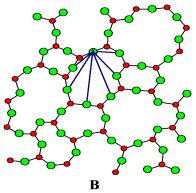
Structural rupture of the mouth:

Strong abrasion of the structures → stomatognathic occlusopathy → structural instability → loss of the vertical dimension of the teeth → double occlusion → posterior contacts with wisdom teeth → forward sliding in protrusion of the mandible in Class III → asymmetrical collapse of the arches

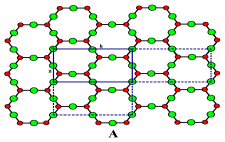


Chalcography: morphologic discrepancy of the structural arches.





Instability and allostatic disorder →
Structural stability and order



Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

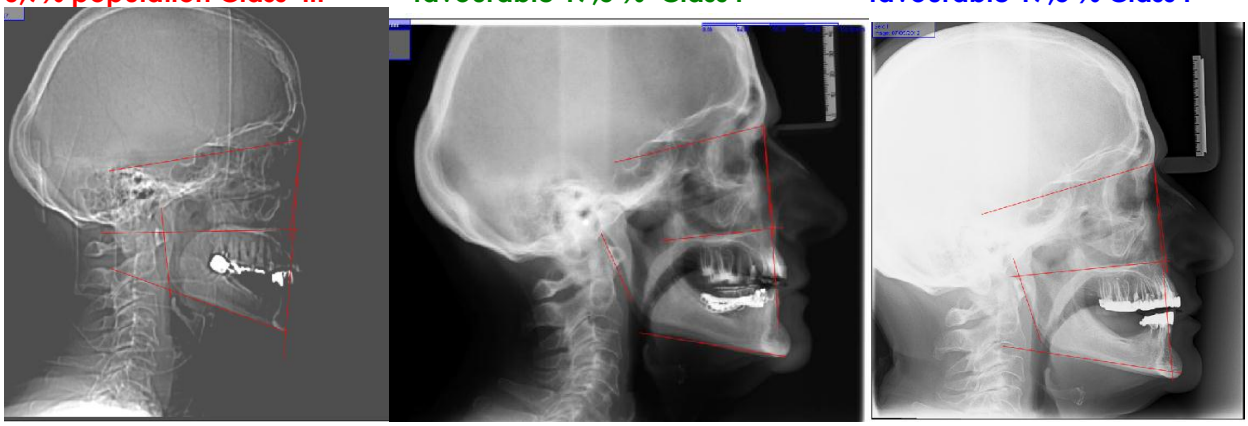
Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

The therapeutic mandibular change in posture

June 2011 entry position — **November 2011 temporary teeth** — **February 2012 definitive teeth**

0,9% population Class III — **favourable 17,5 % Class I** — **favourable 17,5 % Class I**



Prognosis of the initial case

Skeletal biretrusion Class III
Mandibular Rotational Type: Anterior (A) Group A3 MDB
0.9% of the population:
mandibular shortening due to an anterior rotation of the mandible.
After correction the occlusal comparator stabilizes.
Tendency to the mesio, tissue growth potential lightened by anterior rotation

Therapeutic goals:
1.Improving vertical dimension
2.Remotion slipping in class III due to wisdom teeth
3.Stabilisation of bone basis and tooth morphology

Prognosis of the case: good definite teeth
Normal position of maxilla and mandible
Skeletal Class I
Mandibular rotational type: anterior (A) + Group A1 NDB
17.5% of the population:
mandibular shortening due to an anterior rotation
Neutral sagittal rotation.
The shortening offsets the greater potential of mandibular growth

Temporary teeth:
1: extraction of the wisdom teeth
2: increased vertical dimension
Definitive teeth :
balance between the base and the vertical morphology

June 2011 — **November 2011** — **February 2012**

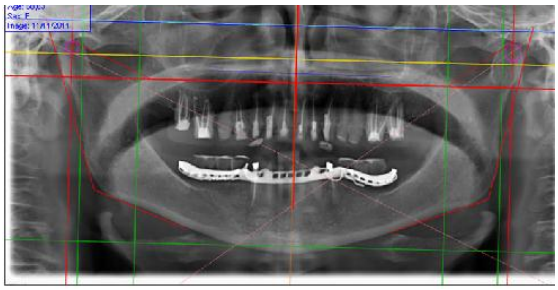
Significant improvement in occlusion and head position
There remains the strong opacification of the completely clogged paranasal sinuses

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

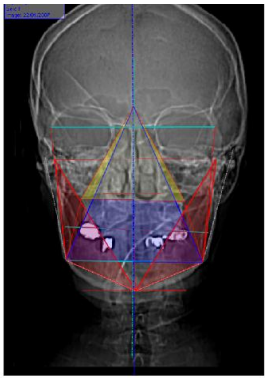
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

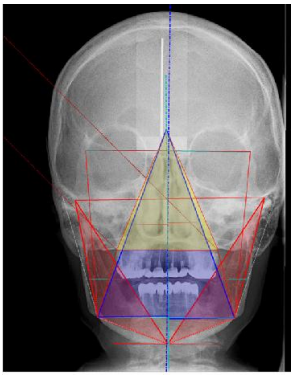


Normal position of the superior maxillary and mandible
Skeletal class I, Index WITS skeletal Class II
Normodivergent subject to brachyfacial hypodivergent
Endoinclination of the superior incisors & endoinclination of the inferior incisors
Retroinclination of the superior incisors & retroinclination of the inferior incisors

Before NOR **after NOR**

Symmetrization
Re-balancing of visual, TMJ and occlusal plane



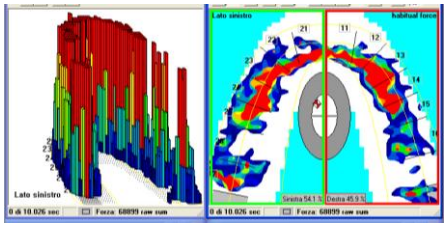


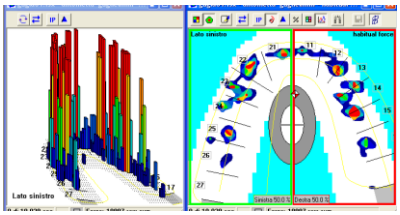
Functional study: complex interdisciplinary rehabilitation

Analysis of the occlusal barycentre **Stomatognathic occlusopathy**

Start June 2011 **10/20/2011 Temporary superior and inferior teeth**

Overload on the left **Improved loads and barycentre**

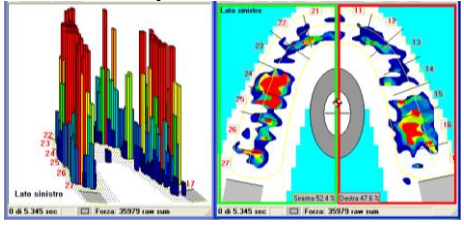


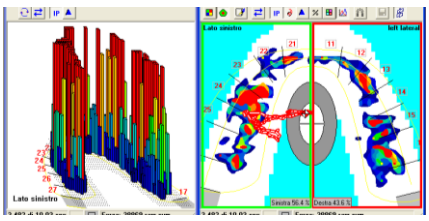


02/18/012 Bilateral balanced occlusion

Delivery inferior definitive teeth /teeth with a Metal fixed prosthesis

Protrusive 02/20/2012





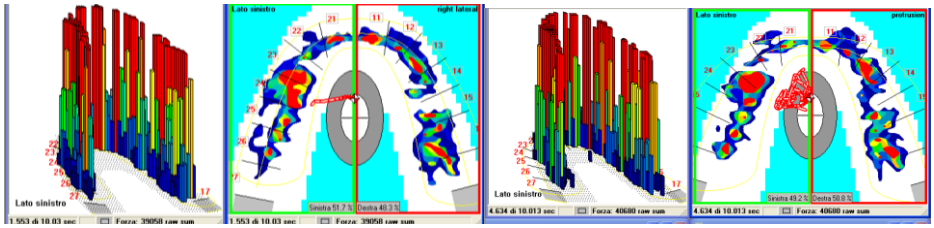
02/20/2012 Right and left laterality

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

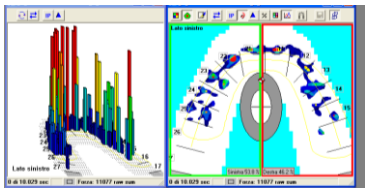
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com



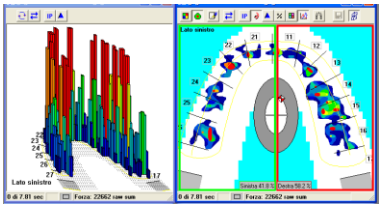
Extra-stomatognathic occlusopathy - occlusione a bascula

Instability from psychotropic drug.

Temporary teeth



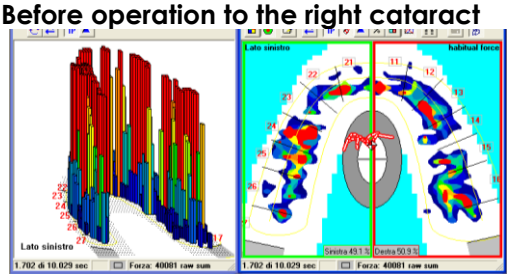
Pharmacologic calibration



Visual interferences. Delivery of the definitive teeth

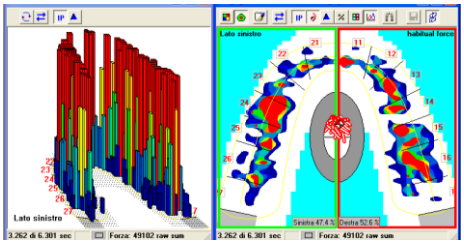
02/20/2012

Before operation to the right cataract



03/082012

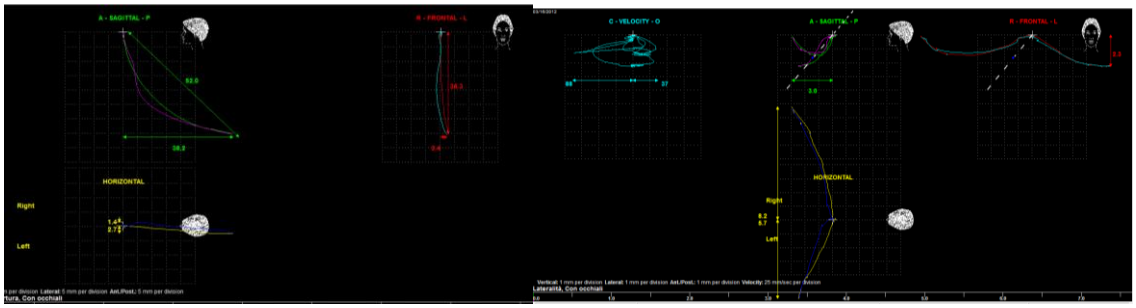
After operation to the right cataract



APRIL 16th, 2012: Analysis of the mandibular movements: good

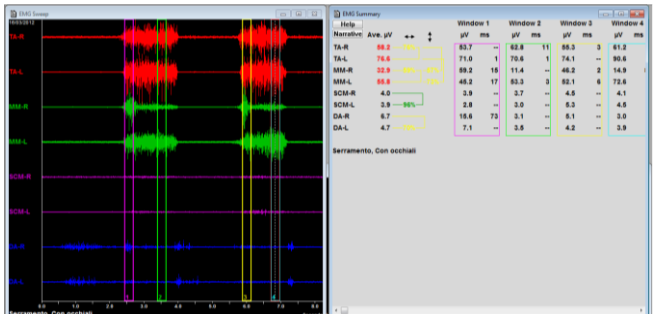
TRACE BIG OPENING

TEETH MOVEMENTS



MUSCULAR ACTIVITY: good

CLOSING



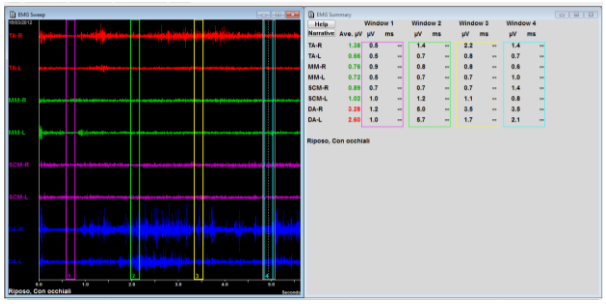
Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

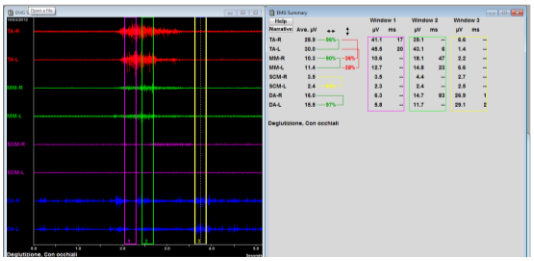
Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

REST



DEGLUTITION



Achieved goals: therapeutic mandibular change in posture

Achieved medical goals:
Recovered and improved lung function

- Increased space to rest the tongue
- Cervical functionality
- Correct TMD of TMJ
- Improved cranial asymmetry
- Improved lung conditions
- Improved visual plane
- Net decrease of psychiatric drugs

Mouth goals: achieved
stomatognathic occlusopathy

- Functional orthopaedic head
- Mandibular posture
- Vertical dimension
- Dental morphology
- Functional occlusion
- Masticatory function

Extra-stomatognathic occlusopathy
Instability related to psychiatric treatment
Correction of the left eye cataract

Still to be monitored
before finalizing superior arch

- **Pan-sinusitis - waiting for ENT surgery**
- **psychiatric therapy - monthly checks**
- **OS Cataract - waiting for intervention & visual plane**
- **Burning mouth due to psychiatric drugs**

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

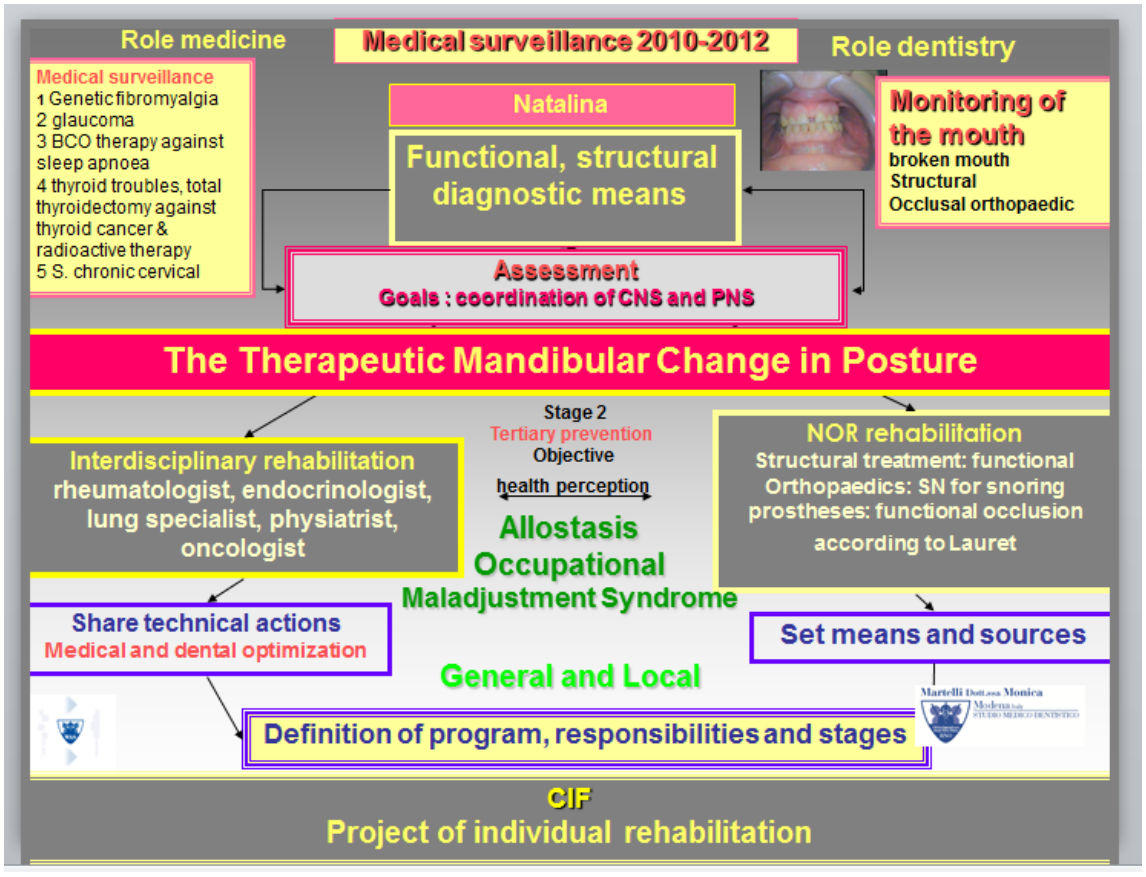
Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Complex clinical case

Health Surveillance
1- Genetic fibromyalgia
2- Glaucoma
3- BCO therapy for sleep apnea
4- Thyroid problems: total thyroidectomy for papillary thyroid cancer & radiation therapy
5-S. chronic cervical

Case 3: NATALINA

Mouth surveillance
Broken mouth
Structural
Occlusal
Orthopedic
Extra-stomatognathic occlusopathy
Snoring
Results of neck intervention



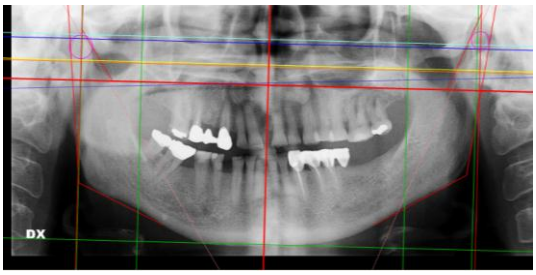
Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

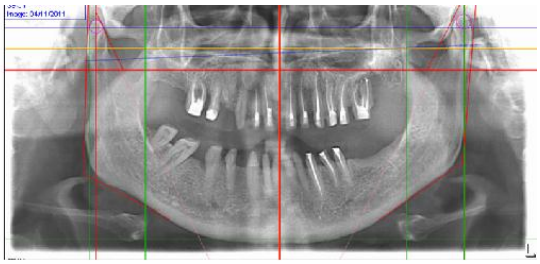
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Structural study





Rehabilitation: the progressive change with rebalancing between Frankfurt, maxillary and occlusal planes

2010
Initial status
Cross bite

2011
temporary teeth & snoring device & papillary thyroid cancer

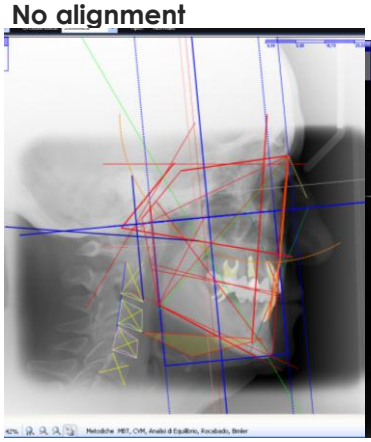
2012
definitive teeth after intervention

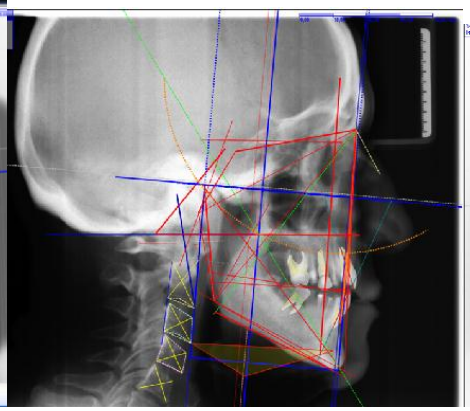
Adaptation
Initial torsion
No alignment

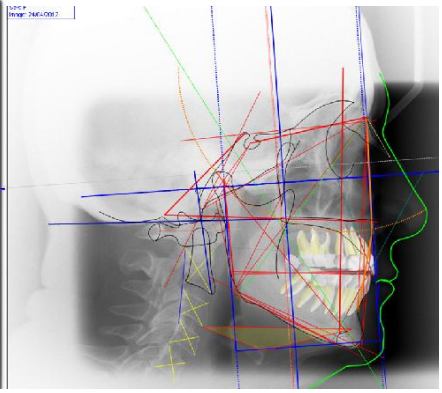
temporary teeth

definitive teeth

NOR Rebalancing of visual, Camper and occlusal planes







Improved balance between visual, Camper and occlusal planes
In torsion because of thyroid cancer
Under treatment for cervical instability

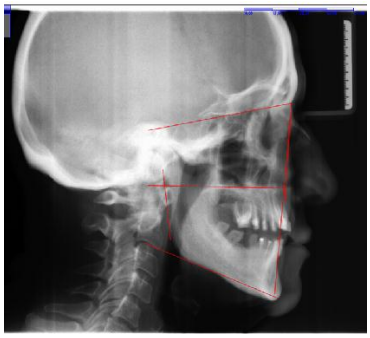
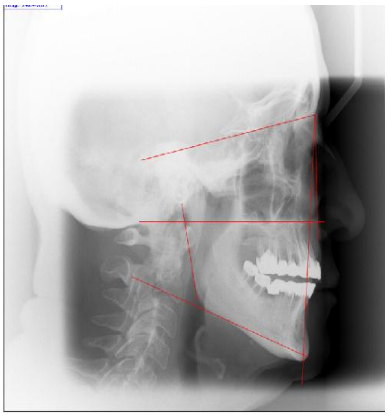
consistent visual, Camper and occlusal planes

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

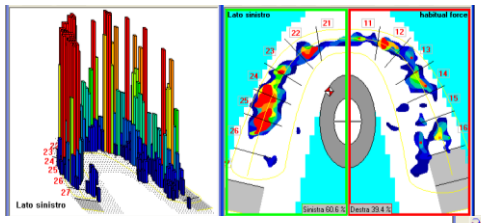
Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

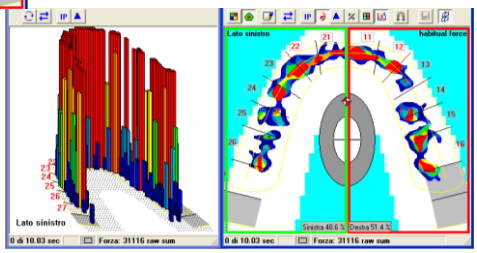
Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

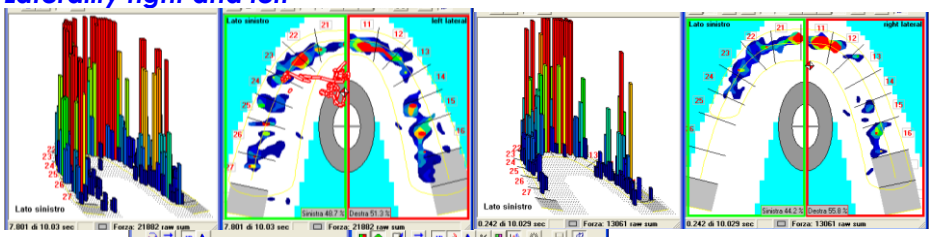




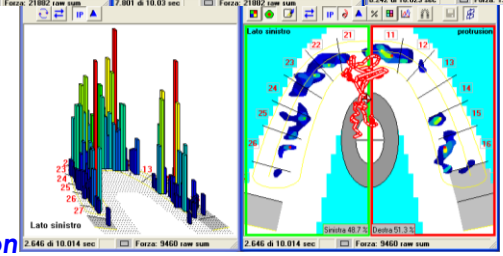
Functional study of a complex interdisciplinary rehabilitation
Analysis of occlusal centre of gravity
Before 2010-2011: load distribution on the left





10-05-2012: good load distribution
Laterality right and left





Protrusion

Martelli Dott.ssa Monica
Modena Italy
STUDIO MEDICO DENTISTICO

Studio Medico
Master II livello
Università di Firenze
Sezione Medicina del Lavoro
Ottimizzazione Neuro Psico-Fisica e CRM terapia

Studio Dentistico
Aut. Reg. 17656
Specialista in Odontostomatologia
RNO-Riabilitazione Neuro-Occlusale di Planas

Martelli Monica
Viale G. Verdi 40 – 41100 Modena
Tel. e Fax 059.210516
email: martellimonica@hotmail.com

Achieved medical goals:

Found and healed thyroid cancer

Recovered and improved its functionality

- **Increased space to rest the tongue**
- **Cervical functionality**
- **Correct TMD of TMJ**
- **Improved cranial asymmetry**
- **Significan diminuition of apneas**
- **Improved visual plane**
- **Improved perfusion of the carotid arteries**

Mouth goals: achieved

Occlusopathy: broken mouth

stomatognathic occlusopathy

Improved and recovered condition

- **Functional orthopaedic head**
- **Mandibular posture**
- **Vertical dimension**
- **Dental morphology**
- **Occlusional function**
- **Masticatory function**

The focus on health, understood as physical, mental and social wellbeing, is the health and social challenge of the Europe and the world. The European program "Closing the Gap" showed that the average age of a person's life dragged on for 85 years, but only 15 years of health, the rest is lived in a status of malaise. The occupational maladjustment syndrome and the work-related stress are the health and social challenge of this century.
To this goal are called both the general practice and the dentistry in therapeutic synergy. Optimizing the health needs and the organization of the therapeutic rehabilitation in the health care means reducing direct and indirect health costs with repercussions on other socio-economic issues which are intertwined with the individual health status. Reducing people's dysfunctional troubles means lessening the general occupational maladjustment syndrome and work-related stress, highly detrimental to the health and quality of life. The synergistic health action of various people destined to improve citizens' health needs leads to a behavioural requalification both of the environment and of society. Analysing, collecting data, informing, educating and motivating new behaviours and strategies lead to greater efficiency and the productivity of the country. Gaining confidence and stability allows you to choose, know, accept and educate large areas of population on good long-lasting behaviour, in order to direct and plan the choices of the country towards a sustainable economy with shared costs and benefits.