Sample case documentation of functional therapy including rehabilitation of the entire stomatognathic system in accordance with the EDA accreditation guidelines for Specialists in Reconstructive Dentistry, Esthetics, and Function

A case by Dr. Salvador Congost

### General medical history:

56-year-old female patient, good general health condition

- •no known pathology (cardiovascular, renal, hepatic, diabetes mellitus, infections)
- •no known allergies
- •current medication: Ibuprofen 400mg, about twice weekly for headache, for several years.

#### Special medical history:

- Extensive dental treatment since childhood; currently no dental subjective symptoms.
- Patient has had radiating pain in the left TMJ region for years, particularly when chewing.
- Frequently she experiences head and neck pain and finds herself clenching/grinding her teeth
- She feels that her extensively restored teeth do not "fit together properly".
- Previous physiotherapy resulted in only temporary and partial improvement.
- The patient is not satisfied with the present level of her dental esthetics, and
- wants a second opinion, since treatment with a "bite guard" provided by another dentist failed to improve her symptoms, and new restorative treatment has been planned.

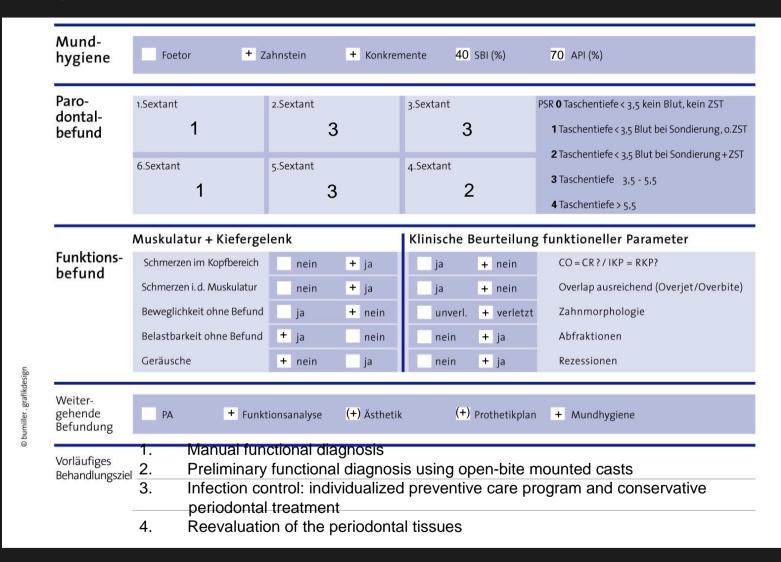
The patient is willing to undergo comprehensive diagnostic and therapeutic procedures and whishes a stable long-term result.

## Preliminary dental examination:

#### Basisbefund **EUROPEAN DENTAL ASSOCIATION** Name Patient Muster, Gertrud; \*09.05.48 Datum 24.02.04 Konsul-+ Ästhetik + Prothetik Prophylaxe Kontrolle tations-PAK Implantat + Schmerzen + Funktion grund Zahnstatus Röntgenbefund Vitalität + + Hartsubstanz Läsionen С С С ! Fg Fg k k Vorh. Versorg. 22 62 12 23 63 52 82 71 k k k Fg Vorh. Versorg. b k k b Hartsubstanz Läsionen ! С Vitalität + + + + + + С Röntgenbefund

**EDA** 

### Preliminary dental examination (continued):



#### Klinischer Funktionsstatus FUROPEAN DENTAL ASSOCIATION Lizenz Nr.: 5 001 38-1 / LINDAUER GMBH In Zusammenarbeit mit Prof. Dr. Johann Müller 1. Untersuchungszeitpunkt 24.02.04 Name Muster, Gertrud; Geb. Datum 09.05.48 2. Untersuchungszeitpunkt Angaben zur Anamnese Dr. S. Congost Praxis Extensive dental treatment since childhood; currently no dental subjective symptoms. Patient has had radiating pain the in the left TMJ region for years, particularly when chewing. Finds herself clenching and grinding her teeth, particularly at night. Frequent head and neck pain. Patient feels that her extensively restored teeth do not "fit together properly". Physiotherepy resulted in only temporary and partial improvement. Spezielle anamnestische Fragen Liegt eine Allgemeinerkrankung vor? ja nein+ Beeinflussen Ihre Beschwerden Ihr ja 🛨 nein Wohlbefinden oder Ihre Leistungsfähigkeit? Nehmen Sie Medikamente? ja 🛨 🛮 nein Erlitten Sie einen Unfall oder Schlag? ja nein 🛨 Knirschen Sie mit den Zähnen? ja ∔ nein Haben Sie Schmerzen oder Beschwerden im/am Sind ein oder mehrere Zähne schmerzhaft ja nein+ und/oder empfindlich? Kopf (allgemein)? ja nein Nacken / Hals / Schulter ? ja# nein Kiefergelenksgeräusche seit ja nein Ohrenbereich / Kiefergelenke? nicht mehr seit ja + nein Schläfen? ja 🛨 📗 nein 📗 Kauen od. Mundöffnung behindert seit 6-7 J. nicht mehr seit ja nein 🛨 Andere wo? DEFINITIVE DIAGNOSE Schmerzlokalisation (nach Angaben des Patienten) Myopathy (myofascial pain) of the masticatory and throat and neck muscles ausstrahlend = 7 Schmerzintensität 1 2 3 4 🗶 6 7 8 9 10 Schmerzintensität 1 2 3 4 5 6 7 8 9 10 Palpation

#### 1 = Missempfindung, 2 = Schmerz O. B. = ohne Besonderheit O. B. 2. Untersuchung O. B. = ohne Besonderheit O. B. 1. Untersuchung re 1 li 1 M. masseter M. masseter M. temporalis ant./post. re 1 li 2 M. temporalis ant./post. Suboccip.-/Nacken- / Halsmuskulatur Suboccip.-/Nacken- / Halsmuskulatur re 1 li 1 M. trapezius M. trapezius M. sternocleidomastoideus re li 1 M. sternocleidomastoideus M. digastr. venter post./ stylohyoideus re li M. digastr. venter post./ stylohyoideus Mundboden Mundboden Temporalissehne Temporalissehne re li Zunge re li Zunge M. pterygoideus medialis re 1 li 2 M. pterygoideus medialis Fossa pterygopalatina Fossa pterygopalatina re 1 li 2 Sonstige: Sonstige:

Klinisc	her Fun	ktionsst	atus	55000		1000	
Mobilität des	Unterkiefers 1 = ein	geschränkt, 2 = schmerzhaft					
Mundöffnung	1. Untersuchung	2. Untersuchung	Seitenabweichung:		1. Untersuchung	2. Untersuchung	
aktiv	mm 1 2 50	mm 1 2	Deviation nach		re li	re li	
passiv	mm 58 1 2	mm 1 2	Deflexion nach		re li 🛨	re li	
rechtslateral (RL)	mm 1 2 10	mm 1 2					
linkslateral (ш)	mm 14 1 2	mm 1 2	Sprechabstand (Schneidezahnbereich) mm 5 mm				
Protrusion (P) re	mm 110 2	mm 1 2					
Protrusion (P) Ii	mm 1 8 2	mm 1 2	Sprechmuster	О. В. 🛨	ant/	ant/	
Klin. Okklusion	sprüfung IP = In	terkuspidations Position, ZOP	= Zentrische Okklusion	nsposition			
Statische Okklusion	1. Untersuchung	2. Untersuchung	Dynamische	RL	<b>NWS</b> interfe	rences	
IP - stabil	ja nein	ja nein	Okklusion		NWS interferences		
IP ≙ ZOP	ja nein 🛨	ja nein	P		Interferences, left side		
abgleiten (ZOP-IP)	mm ca. 1	mm	Frontzahn-	horizonal	0	mm	
	RL P + LL	RL P LL	überbiss	vertikal	4	mm	
Vorkontakte	teeth 27/37		Führung schwierig	1 🛊 3	4 5 6 7	8 9 10	
Zahnstatus und	Parodontalstatus						
Vitalität 📗 🛨	<b>+ + +</b>	+ + -	- +	+ +	+ +	+	
Hartsubstanz Läsion							
±			+ +	+ +	<b>+ +</b>	+ -	
Lockerung 18 17	7 16 15 14	13 <b>     </b>	H H	23 24	25 26	28	
Lockerung 48 4:	7 46 45 44	43 42 41		33 34	<b>II</b> 36		
Hartsubstanz Läsion	+ + +		+ +	+ +	+ +	+ -	
Vitalität	- + +	+++	+ -	+ +	+ -	+	
Parodontal- befund O. E	3. Lockerung	ja 🛨 nein 🗌		Entzündung	ja 🛨 nei	n 🗌	
Gelenkgeräuse R = Reiben, K = Kna Öffnung u. Exkursioner	icken	chung ja nein +	2. Untersuchung Öffnung u. Exkursion	janein	Schl	ießen u. Inkursionen	
R K K R	initial termi intermediär intermed terminal ini niedrig mitt	nal liär tial R K K R	R K K	initial intermediär terminal	terminal intermediär initial	K K R	
Weitere Befun	de		Verdachtsdia	ignose			
Tendendy t	owards anterior	Angle class II/2	+ Myopathi	e A	rthropathie: rech	ts links	
			Weitergeher	nde diagnos	tische Maßna	hmen	
			Instrumentelle Ok			ja 🕂 nein	
			MRT			ja nein 🛨	
Manuelle Kiefe	argelenk 1. Untersu	chung 2. Untersuchung	HWS-Untersuchung ja + nein				
untersuchung		AGO-thera	apy	ja 🛨 nein			
untersuchung "Joint Play" ja + nein ja nein sonstige MAGO-thera							

Name Muster	, Gertrud	In Zusammenarbeit mit Prof. Or. Johann Müller Geb. Datum 09.05.48					
		Praxis:	Dr. S. Congos	t			
Parameter		1. Untersuchungszeitpunkt 24.02.04		z. Untersuchungszeitpunkt			
	100000	rechtes Gelenk	linkis Gelenk	rechtes Gelenk	Jinkes Gelenk		
Beweglichkeit	Rotation	+ 0.8.	+ 0.0	0.8	0.8.		
		eingeschrönkt	eingeschränkt	eingeschränkt	eingeschränkt		
		schmerchaft	schmorahaft	schmerzheft	schmorzhaft.		
	Translation	+ 0.8	+ 0.8.	0.8.	0.8.		
		eingeschichtit	eingeschränkt	eingeschränkt	eingeschränkt		
		schmenhäft	schmerzhaft	schmerzhaft	schmerzhaft		
	bel Distraktion	+ 0.8.	+ o.a.	0.8.	D.B.		
		eingeschicknikt	eingeschrünkt	eingeschränkt	eingeschränkt		
		scherendraft	schmerzhaft	schmerzhaft	schmerzhaft		
	bei Kompression	+ as	+ 0.0	0.8.	0.0		
		elogeschränkt	eingeschränkt	eingeschränkt	eingeschränkt		
		achmendraft	schmerzhaft	schmerzhaft	schmerzhaft		
	Vertikale Resilienz (in Decalposition)	+ 0.8	+ 0.8.	0.8	0.8		
		vermindert	vermindert	vermindert	vermindert		
		onone	erhökt	erhölvt	erhölt		
	Besonderes		- 1				
Belastbarkeit	Distraktion (in Dorsalposition)	+ 0.8.	+ 0.0.	0.8	0.8		
SHIROSHIONIA.		schmeralindernd	schmerzfindernd	schmerzlindered	schmerzändernd		
		schmouventärkend	schmorzventärkend	schmerzwostänkend	schmerzeentärke		
		+ as	+ 0.8	0.8	D.B		
	Kompression	scheigwerstärkend	200	schmerzwestärkend	schmerzverstärke		
		krantal	kranial	iotaniai	Reanial		
		kranial-ant.	kranial-ant.	Roselol-ant.	Equiplant.		
		krantel-post.	kranial-post.	krantal-poet.	Kranial-post		
		posterior.	posterior	posterior	posterior		
	Basanderes	1					
Gelenkkapsel	(Medictrusion)	+   a =	+ 0.0.	O.B.	D.S.		
Serving	20 123	schmerzhaft	schinerzhaft	schmerzhaft	schmerzhaft		
Geräusche	Lautstärke / Intensität	unverändert	unverändert	unverändert	unverändert		
bei Kranialmanipulation)		▲ Intensität	<u> </u>	▲ Intensität	▲ Intersität		
		andere		andere			
	Besonderes			2000-2			
Diagnose	Arthropathie	ja + nein	ja + nein	ja nein	ja nein		
arche Nexter	kompensiert	in ja irett	ja rein	ja nein	ju neśn		
Resonderes / Therapievorschlag	-						

### Radiographic evaluation: OPG



#### Radiographic findings:

- Hardly any degenerative alteration of the condylar structures, as far as assessable.
- Localized horizontal and vertical periodontal bone defects indicative of chronic adult periodontitis,
- No other osteolytic conditions.
- No signs of space-occupying lesions or inflammatory processes.
- No displaced/impacted teeth.
- Incomplete endodontic treatment of teeth 11, 21, 31(?).
- Discrete carious lesions and insufficient restorations.

(Guidelines; Article 4.2.4)

## Radiographic evaluation: Bitewings and periapical films of the nonvital teeth



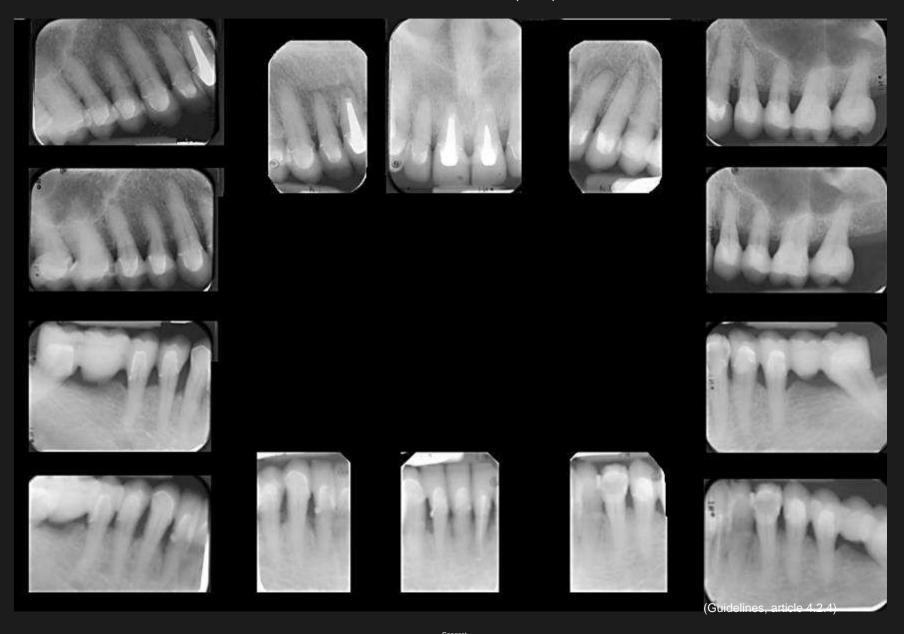


#### Additional findings:

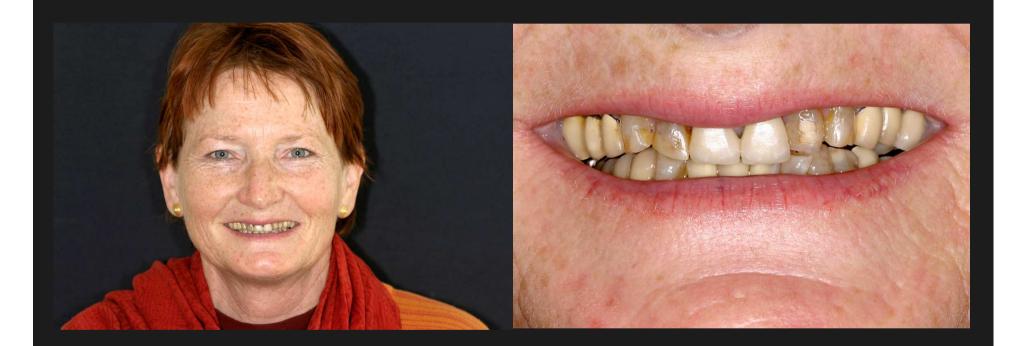
- Subgingival concrements.
- Marginal leakage/overhanging crown margins on teeth 17, 16, 14, 11, 21, 25, 26, 27, 37,35, 32.
- Carious lesion in tooth 34.
- Incomplete endodontic treatment of teeth 11, 21, 31.



# Radiographic evaluation: Full mouth radiographs after temporarization and prior to endodontic retreatment of 11, 21, 31



# Clinical photographs: frontal view smiling; lips



## Clinical photographs: frontal view – maximum intercuspation and incisal position



# Clinical photographs: lateral right/left view – maximum intercuspation



# Clinical photographs: upper and lower arches

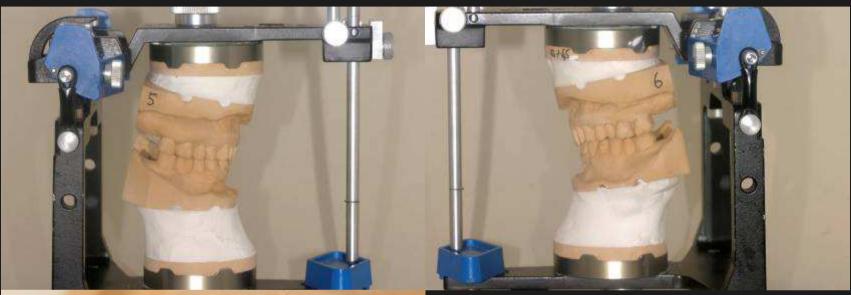


# Clinical photographs: emergence profile and sagittal tooth shape of the upper/lower incisors; vertical dimension





# Diagnostic casts: Pre-treatment study casts; arbitrary mounting in preliminary centric relation.



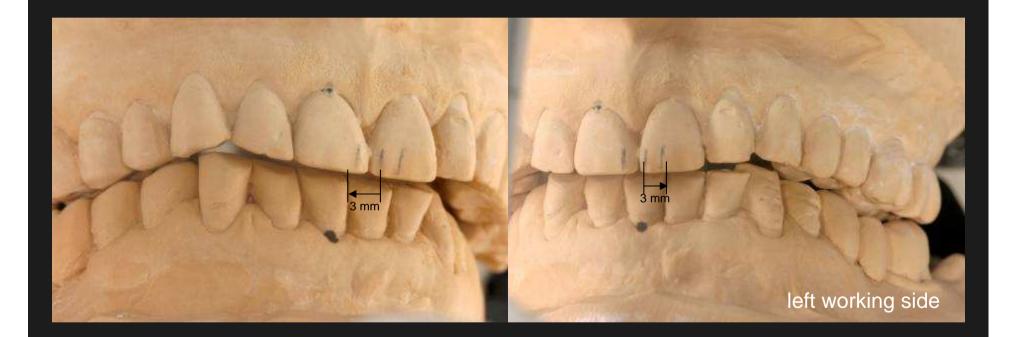


No visible discrepancy between CO (or ICP, intercuspal contact position) and CR (or COP, centric occlusion position) in preliminary centric relation.

# Diagnostic casts: Upper/lower arches; Trauma to dental hard tissues, dysmorphic restorations

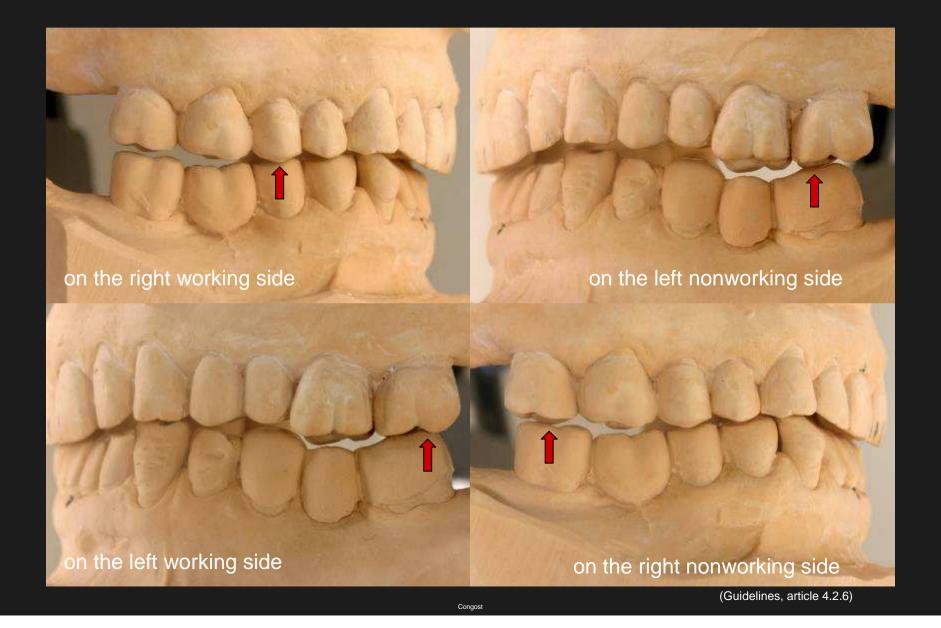


Diagnostic casts: Articulator simulation of right and left working sides: no cuspid relations; obvious transverse problem on the left

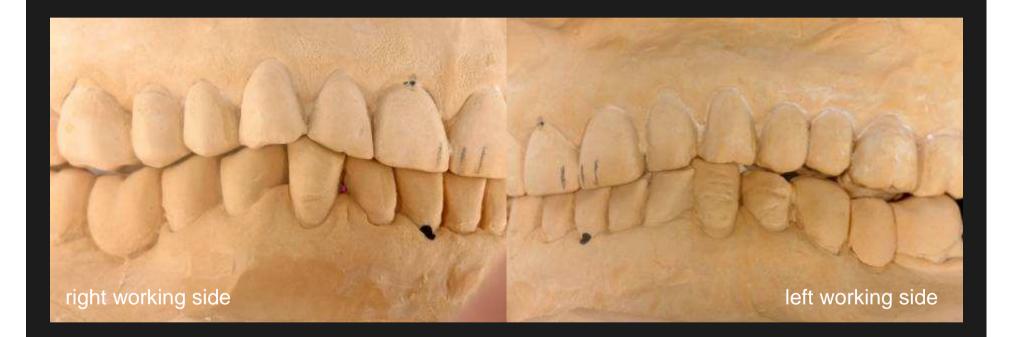


resulting in....

# Diagnostic casts: ...interferences in dynamic occlusion



Diagnostic casts: These dynamic interferences inevitably result in a "guidance" by both cuspids <u>and</u> incisors in terms of a <u>protrusive contact guidance</u> on the right and left working side which may explain for the tooth abrasion seen in this patient.



### Diagnosis and etiology:

- Myopathy of the masticatory and neck muscles caused by antagonistic muscle imbalance during mastication.
- •Abrasion and abfractures of dental hard tissues caused by avoidance pattern of the mandible and resulting contact guidance.
- •<u>Localized chronic periodontitis</u>
  caused by inadequate plaque control, absence of preventive care, genetic predisposition (?), and functional overloads of the tissues.

#### Treatment plan:

- 1.: Periodontal infection control:
  - Oral hygiene instruction and motivation (Phase I)
  - Conservative periodontal therapy (Phase II)
  - Reevaluation of the periodontal situation
- 2.: Splint therapy:
  - Maxillary anterior-cuspid guided splint in centric relation (MAGO)
  - Achieve and verify stable centric relation of the TMJ complexes
  - Reevaluation of the functional problems
- 3.: Assessment of treatability of the case
  - by creating a wax-up in a new vertical dimension on hinge axis-mounted models in centric relation
- 4.: Dental infection control:
  - Removal of all existing restorations and placement of long-term temporary restorations according to wax-up in CO; retreatment of root-filled teeth.
- 5.: Definitive restoration of all teeth: bonded all-ceramic restorations; lower PFM fixed partial dentures
  - considering all aspects of natural tooth shape as well as pronounced overbite and overjet of the incisors and cuspids, and
  - maintaing a stable centric relation

### Prognosis:

Periodontal: No aggressive periodontitis; prognosis is favorable, if professional care and good patient complience are provided.

Functional: Functional prognosis is good, provided that

- symptoms respond to splint therapy, and
- a centric occlusion can be realized in the given dentoalveolar situation.

Orthodontic pretreatment may be an option.

Dental: Unclear prognosis regarding preservation of teeth 11 and 21 in view of the interradicular osteolytic process. The patient was informed that she might require

implants for her upper centrals.

## Treatment sequence:

Sept. 04: Start of periodontal management

Oct. 04 - March 05: MAGO therapy; since Dec. 04: resolution of symptoms



MAGO in place

Treatment sequence: hinge axis mounted casts in centric relation; vertical dimension of centric premature contact.



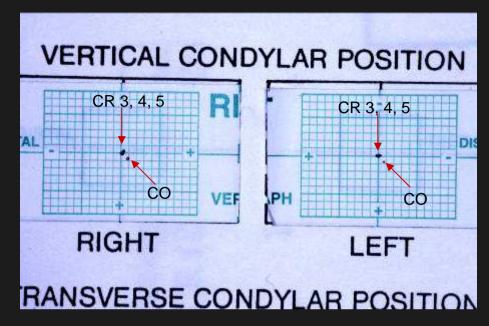
No visible discrepancy between CO (or ICP, intercuspal contact position) and CR (or COP, centric occlusion position) in preliminary centric relation prior to initiation of treatment.

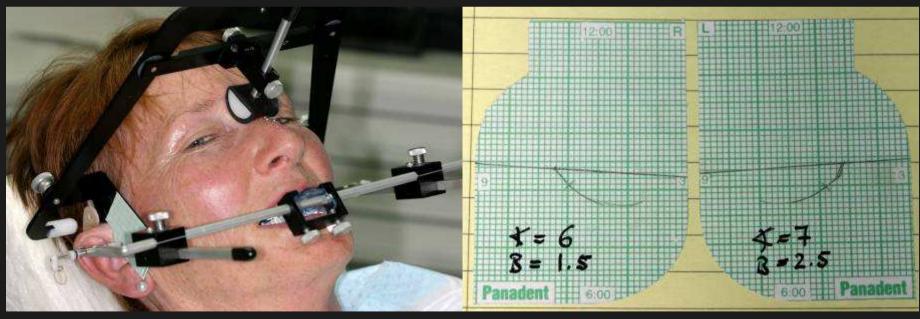
March 05: clearly visible CO-CR discrepancy after MAGO therapy for stabilization of the TMJ complexes.

#### Treatment sequence:

March 05: Verification of stable condylar position using three independent centric bite registrations (CR 3, 4, and 5, obtained at separate appointments).

Establish joint axis, horizontal path inclination, Bennet shift.

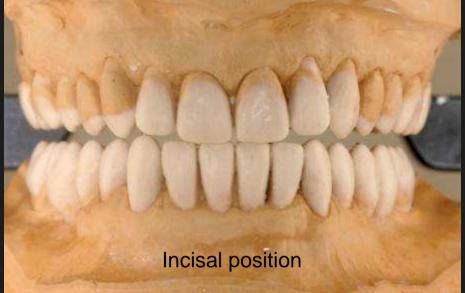


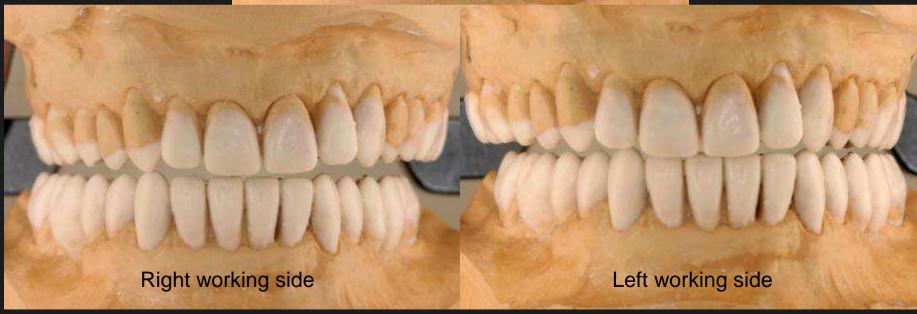


Treatment sequence: April 05: Wax-up; new tooth shapes on hinge-axis mounted casts in centric relation



# Treatment sequence: April 05: Wax-up; test positions





# Treatment sequence: April 05: Wax-up; try-in of the mock-up; teeth 4 - 4



Treatment sequence: June 05: Use of wax-up for fabrication of long-term temporaries from acrylic veneering material.



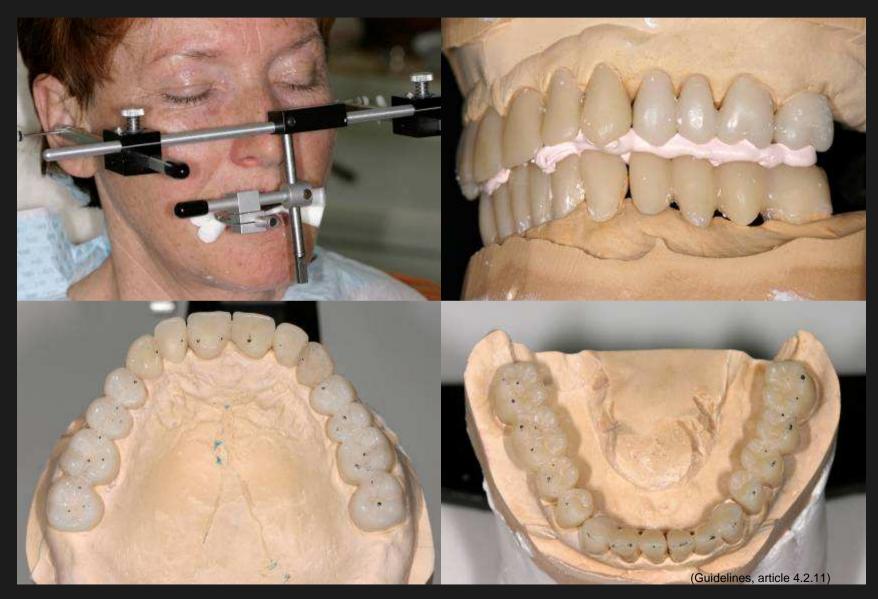
Core build-ups

Silicone index for tooth preparation

Treatment sequence: June 05: Use of wax-up for fabrication of long-term temporaries from acrylic veneering material: Pick-ups for remounting the provisionals.



Treatment sequence: June 05: Use of wax-up for fabrication of long-term temporaries from acrylic veneering material: hinge axis and centric relation remount

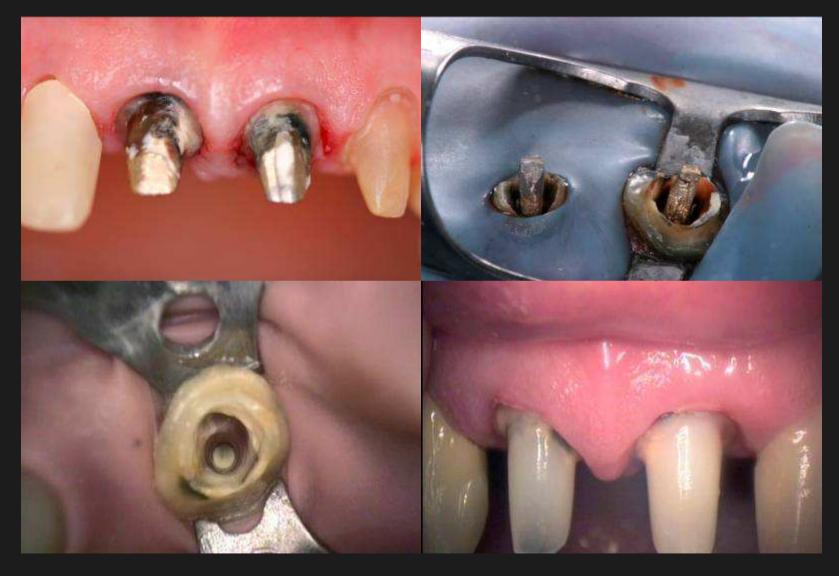


Treatment sequence: June 05: Use of wax-up for fabrication of long-term temporaries from acrylic veneering material: clinical result



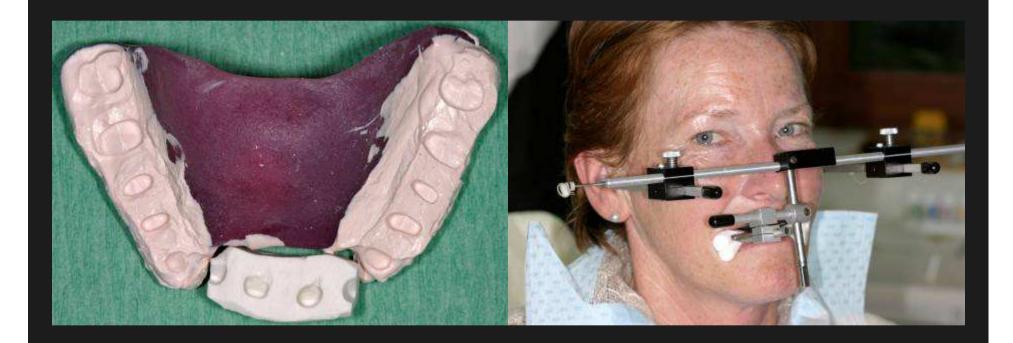
Frontal view; smiling.

Treatment sequence: July 05: Retreatment of root-filled teeth 21 and 11 (Dental office Dr. Marquart)

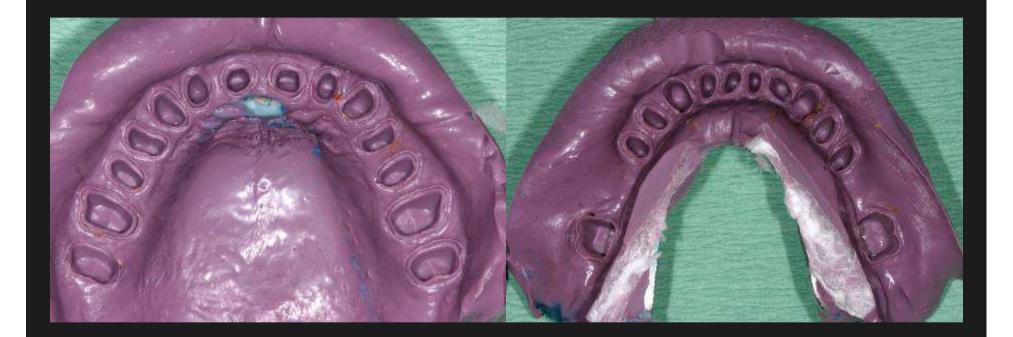


Treatment sequence: Sept.-Nov.05: Fabrication of the final restorations:

Centric record and hinge axis mounting of the upper jaw



# Treatment sequence: Sept.-Nov.05: Fabrication of the final restorations: Impression taking of the prepared teeth



Treatment sequence: Sept.-Nov.05: Fabrication of the final restorations: (pressable glass ceramics): The finished dental lab work (MDT Th. Rethwisch)



Treatment sequence: Sept.-Nov.05: Fabrication of the final restorations:

Part of the all-ceramic restorations are in place
(bonded pressable glass ceramics; lower fixed partial denture PFM)



Treatment sequence: Sept.-Nov.05: Fabrication of the final restorations:

Most of the restorations are in place



#### Final assessment: Dental examination

#### **EDA** Basisbefund **EUROPEAN DENTAL ASSOCIATION** Name Patient Muster, Gertrud; \*09.05.48 Datum 10.12.05 Konsul-Ästhetik Prophylaxe Prothetik Kontrolle tations-PAK Implantat Schmerzen Funktion grund Zahnstatus Röntgenbefund Vitalität Hartsubstanz Läsionen Vorh. Versorg. 62 52 51 61 63 k **4** k ▶ b k k k Vorh. Versorg. b k k Hartsubstanz Läsionen Vitalität + + + Röntgenbefund

#### Final evaluation: Dental examination (continued)

Paro- dontal- befund	1.Sextant	2.Sextant	3.Sextant  O	PSR <b>0</b> Taschentiefe < 3,5 kein Blut, kein ZST <b>1</b> Taschentiefe < 3,5 Blut bei Sondierung,
	6.Sextant	5.Sextant O	4.Sextant	2 Taschentiefe < 3,5 Blut bei Sondierung + 3 Taschentiefe 3,5 - 5,5 4 Taschentiefe > 5,5
	Muskulatur + Kieferge	lenk	Klinische Beurteilung	g funktioneller Parameter
Funktions- befund	Schmerzen im Kopfbereich	+ nein ja	+ ja nein	CO = CR?/IKP = RKP?
	Schmerzen i. d. Muskulatur	+ nein ja	+ ja nein	Overlap ausreichend (Overjet/Overl
	Beweglichkeit ohne Befund	+ ja nein	+ unverl. verletzt	Zahnmorphologie
	Belastbarkeit ohne Befund	+ ja nein	+ nein ja	Abfraktionen
	Geräusche	+ nein ja	+ nein ja	Rezessionen
Weiter- gehende Befundung	PA Funkt	cionsanalyse Ästheti	k Prothetikplan	Mundhygiene
Vorläufiges				

#### kTinal avaluation; clinical assess Klinischer Funktionsstatus EUROPEAN DENTAL ASSOCIATION Lizenz Nr.: 5 001 38-1 / LINDAUER GMBH Mobilität des Unterkiefers 1= eingeschränkt, 2 = schmerzhaft In Zusammenarbeit mit Prof. Dr. Johann Müller 1. Untersuchung 2. Untersuchung 1. Untersuchung 2. Untersuchung 1. Untersuchungszeitpunkt 24.02.04 Mundöffnung Seitenabweichung: Name Muster, Gertrud; Geb. Datum 09.05.48 2, Untersuchungszeitpunkt 10.12.05 mm 1 250 mm 55 1 2 re li re li Deviation nach mm 58 1 2 mm 60 1 2 Deflexion re li + re li Angaben zur Anamnese Praxis rechtslateral (RL) mm 1 210 mm 13 1 2 Dr. S. Congost mm 14 1 2 mm 15 1 2 Sprechabstand (Schneidezahnbereich) mm 5 Protrusion (P) re mm 1 1 10 2 mm 12 1 2 Extensive dental treatment since childhood; currently no dental subjective symptoms. Protrusion (P) li mm 182 mm 131 2 Sprechmuster O. B. + ant. / ant. / Patient has had radiating pain the in the left TMJ region for years, particularly when chewing, Finds herself clenching and grinding her teeth, particularly at night, Frequent Klin. Okklusionsprüfung IP = Interkuspidations Position, ZOP = Zentrische Okklusionsposition head and neck pain. Patient feels that her extensively restored teeth do not "fit together Statische Okklusion 1. Untersuchung Dynamische NWS interferences 2. Untersuchung properly". Physiotherepy resulted in only temporary and partial improvement. Okklusion IP - stabil nein + ja + nein LL NWS interferences IP ≙ ZOP ja nein + ja + nein Interferences, left side Spezielle anamnestische Fragen abgleiten (ZOP-IP) ca. 1 mm O Frontzahn-Liegt eine Allgemeinerkrankung vor? ja nein 🛨 Beeinflussen Ihre Beschwerden Ihr ja 🕂 nein RL P LL RL P LL überhiss vertikal Wohlbefinden oder Ihre Leistungsfähigkeit? Nehmen Sie Medikamente? ja 🛨 nein Vorkontakte teeth 27/37 Führung schwierig 1 + 3 4 5 6 7 8 9 10 Erlitten Sie einen Unfall oder Schlag? ja nein 🛨 Knirschen Sie mit den Zähnen? ja 🛨 nein Haben Sie Schmerzen oder Beschwerden im/am Zahnstatus und Parodontalstatus Sind ein oder mehrere Zähne schmerzhaft ja nein 🛨 und/oder empfindlich? Vitalität + + $\pm$ Kopf (allgemein)? ja 🛨 nein Hartsubstanz Läsion / Abrasion Nacken / Hals / Schulter ? ja 🛨 nein Kiefergelenksgeräusche seit ja nein 🛨 + + + Ohrenbereich / Kiefergelenke ? nicht mehr seit ja 🛨 nein Schläfen? ja 🛨 nein Kauen od. Mundöffnung behindert seit 6-7 J. nicht mehr seit Andere wo? ja nein 🛨 DEFINITIVE DIAGNOSE Schmerzlokalisation (nach Angaben des Patienten) Myopathy (myofascial pain) of the masticatory and throat and neck muscles Hartsubstanz Läsion / Abrasion + + + + **+** + + + + + + + + -+ + **— +** Parodontal-befund O. B. Lockerung ja + Entzündung ja 🛨 ausstrahlend = 7 Gelenkgeräusche 1. Untersuchung ja nein + 2. Untersuchung ja nein + Schmerzintensität 1 2 3 4 **X** 6 7 8 9 10 Schmerzintensität 1 2 3 4 5 6 7 8 9 10 Öffnung u. Exkursionen Schließen u. Inkursionen Öffnung u. Exkursionen Schließen u. Inkursionen Palpation 1 = Missempfindung, 2 = Schmerz initial initial termina O. B. = ohne Besonderheit O. B. 2. Untersuchung O.B. = ohne Besonderheit O.B. O.B. 1. Untersuchung intermediär M. masseter re 1 li 1 re li M. masseter M. temporalis ant./post. re 1 li 2 M. temporalis ant./post. KR R K hoch Suboccip.-/Nacken- / Halsmuskulatur Suboccip.-/Nacken- / Halsmuskulatur M. trapezius M. trapezius Weitere Befunde Verdachtsdiagnose M. sternocleidomastoideus M. sternocleidomastoideus re li Arthropathie: rechts links + Myopathie Tendendy towards anterior Angle class II/2 M. digastr. venter post./ stylohyoideus M. digastr. venter post./ stylohyoideus re li Mundboden Mundboden re li Temporalissehne Weitergehende diagnostische Maßnahmen Temporalissehne re li Instrumentelle Okklusions-/Funktionsanalyse ja 🛨 nein Zunge Zunge re li MRT ja nein 🛨 M. pterygoideus medialis re 1 li 2 M. pterygoideus medialis re li HWS-Untersuchung ja 🛨 nein Fossa pterygopalatina Fossa pterygopalatina 1. Untersuchung 2. Untersuchung re 1 li 2 re li Manuelle Kiefergelenk-Sonstige MAGO therapy untersuchung "Joint Play" ja + nein ja nein + ja 🕂 nein Sonstige:

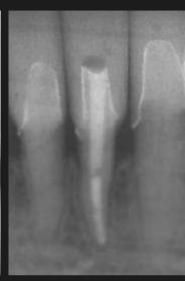
(Guidelines, article 4.2.32)

Sonstige:

#### Final evaluation: Radiographs



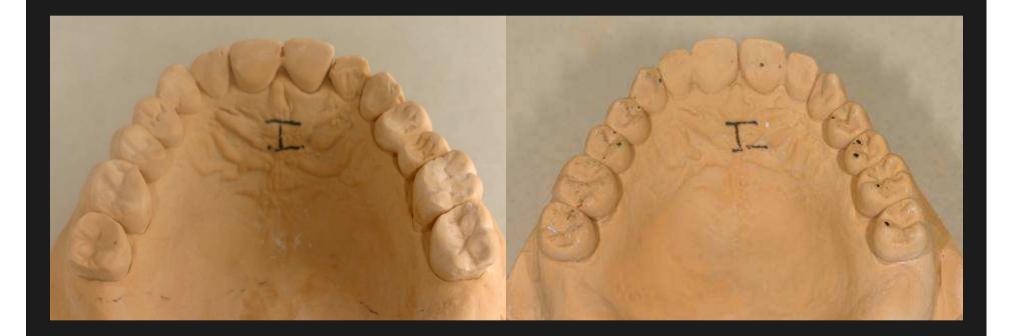






(Guidelines, article 4.2.12)

Final evaluation: casts; upper arch, before/after restorative treatment



Final evaluation: casts; lower arch, before/after restorative treatment



## Final evaluation: casts; articulator test positions; after restorative treatment: working and non-working side clearance



### Final evaluation: clinical photographs; frontal view, maximum intercuspation; before/after restorative treatment



### Final evaluation: clinical photographs; right lateral view, maximum intercuspation; before/after restorative treatment



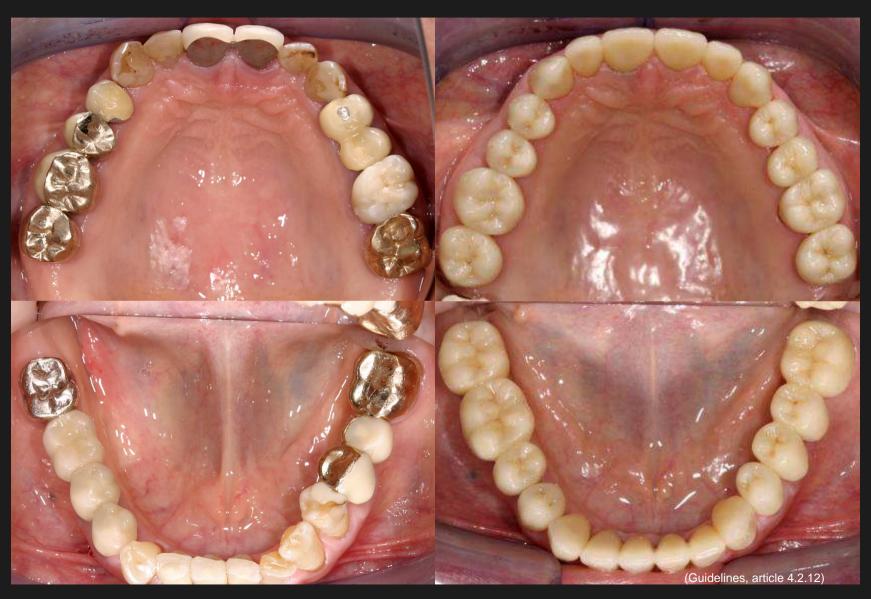
### Final evaluation: clinical photographs; left lateral view, maximum intercuspation; before/after restorative treatment



# Final evaluation: clinical photographs; upper/lower arches before/after restorative treatment



# Final evaluation: clinical photographs; upper/lower arches before/after restorative treatment



Final evaluation: clinical photographs; emergence profile upper/lower incisors, before/after restorative treatment



### Final evaluation: clinical photographs; vertical dimension before/after restorative treatment



# Final evaluation: clinical photographs; view of lips, smiling; before/after restorative treatment



# Final evaluation: clinical photographs; frontal view, smiling; before/after restorative treatment



#### Discharge Summary; Treatment and Aftercare:

Periodontal: The treatment procedures resulted in inflammation-free periodontal tissues.
-Recall maintenance system for individualized preventive care.

Function: Resolution of symptoms. Given the baseline situation, the comprehensive management provided seems reasonable.

- Next control visit in about 5 years' time for reevaluation based on hinge axismounted study casts in centric relation

Esthetics: Mucogingival procedures (crown lengthening of teeth 11 and 21, forced eruption of tooth 22) would have enhanced the soft-tissue esthetics of the upper anterior region (gingival line). However, the interradicular condition between teeth 11 and 21 would have been a limitation. The patient did not wish to have any such procedures done.

Dental: Dental implant replacements for missing teeth 36 and 46 would have been an option and possibly preferable in terms of proprioception, as this would have avoided splinted pontics. However, the patient did not accept implants, nor did she agree to any augmentation procedures for pontic site enhancement. In view of the severe destruction and high degree of treatment of all teeth the placement of crowns was indicated.

- Regular X-ray controls to monitor teeth 11, 21, and 31 in particular.

