Evaluation, Diagnosis and Treatment of the Worn Dentition

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West Coast District Dental Association
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Dr. John C. Cranham has a contemporary dental practice in Chesapeake, Virginia, focusing on cosmetic, restorative and implant services. Dr. Cranham is an internationally recognized speaker on the Esthetic Principles of Smile Design, Contemporary Occlusal Concepts, Treatment Planning, Laboratory Communication, and Happiness and Fulfillment in Dentistry. He has been listed by Dentistry Today as one of the leaders in Continuing Education for over a decade.

He is the Clinical Director/Partner of The Dawson Academy where he is involved with many of the lecture and hands-on courses within curriculum. Additionally Dr. Cranham founded Cranham Dental Seminars which in February of 2008 merged with the Dawson Academy. As an active educator, he has provided over 850 days of continuing education for dental professionals throughout the world.

Dr. Cranham is an active member of numerous professional organizations including the American Dental Association, The American Academy of Cosmetic Dentistry, The American Academy of Fixed Prosthodontics, and The American Equilibration Society. A published author, Dr Cranham has published numerous articles on Restorative Dentistry. He maintains a strong commitment to providing the highest quality of dental care, along with developing sound educational programs that exceed the needs of today's dental professional. Dr. Cranham can be reached at smildoc@aol.com.
Key Point: Complete Treatment Planning is the goal...

“90% of Cases that fail, fail not during the restorative phase but in the treatment planning phase. Failing to plan, is planning to fail.”
Peter E. Dawson DDS

Treatment Plan for Optimum:

- Esthetics
- Function
- Biologic Health
- Structural Integrity

Key Point: A complete understanding of all aspects of Dentistry, leads to complete treatment plans, and ideal treatment.
The Anatomy of the Gnathostomatic System
Understanding Anatomic & Functional Harmony...

- The TM Joint
- Muscles of Mastication
- The Teeth
- Proprioceptive input

1.) The TMJ
- Mandibular Condyle/mandibular connection
- Glenoid fossa/cranial base connection
- Articular Disc
- Medial and lateral attachments
- TMJ Ligament
- Posterior Ligament
- Retrodiscal tissue
- Superior Belly of the Lateral Pterygoid
- Synovial fluid: joint nourishment

The TMJ

Glenoid fossa/eminence: The cranial base connection

The TMJ

Midmost Position (braced at medial pole)
Properly Positioned Articular Disc

- Condyle
- Articular Eminence (note its steepness)
- Articular Disc
- Posterior Ligament
- Synovial nourishment
- Superior Belly of the Lateral Pterygoid
- Retrodiscal Tissues

2.) The Muscles of Mastication

lateral pterygoid

- superior head - infratemporal surface of sphenoid greater wing
- inferior head - lateral surface of lateral pterygoid plate

3.) The Teeth
Balancing the 4 Esthetic & 4 Functional Goals

<table>
<thead>
<tr>
<th>4 Esthetic</th>
<th>4 Functional</th>
</tr>
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<tbody>
<tr>
<td>1.) Incisal Edge Position.</td>
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<td>4.) Width to Length Ration.</td>
<td>the E.O.F.</td>
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<tr>
<td></td>
<td>4.) Condyles in CR.</td>
</tr>
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</table>

Four Steps to a Stable, Minimal Stress Occlusion

- Centric Stop on all teeth (or substitute).
- No posterior contact in excursives.
- Anterior guidance in harmony with the envelope of function.
- Condyles work *from* Centric Relation.

1.) Centric stop on all teeth

+ Teeth are in the “neutral Zone”.
+ Posterior teeth have a cusp-fossa occlusion.
+ Anterior teeth have a stable stop, or an acceptable substitute.

Teeth are in the “Neutral Zone”
1. Centric Stop on all teeth (or substitute).

2.) No posterior contact in excursive movements
Bite Force differs by a factor of Nine

Mansour & Regnik, J.
54 (1): 114-119

Anterior guidance: Its effect on electromyographic activity of the temporal and masseter muscles

3.) Anterior Guidance in harmony with the envelope of function.

- Lingual contour is steep enough to disclude the back teeth.
- Lingual contour is concave enough to be in harmony with the functional path of the lower incisors.

**Anterior Guidance**

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1. **Jaw Movements and Forces During Chewing and Swallowing and Their Clinical Significance**

   - Charles H. Gibbs
   - Harry C. Landeen

   Advances in Occlusion, Textbook 1982

   The Function of Teeth 2005
The Replicator

Key Point:
The lingual contour of maxillary incisors do NOT determine anterior posterior chewing stroke.

PEOPLE DO NOT CHEW THEIR TEETH AWAY.

Lingual slope of the maxillary canine is directly related to the chewing stroke in the frontal plane.
Anterior Guidance

The envelope of function is determined by:

1.) The Centric Relation Position.
2.) The need for “long centric”.

The envelope of function is determined by.....
4.) Condyles work from an orthopedically stable position: Centric Relation

Centric Relation:

“The relationship of the mandible to the maxilla when the properly aligned condyle-disc assemblies are in their most superior position against the eminentia, irrespective of tooth position or vertical dimension.”

Peter E. Dawson
Key Point:

Key Point: Without a seated, orthopedically stable condylar position ALL other requirements of an ideal occlusion is physically impossible.

Non-functional factors of Occlusion

...factors that alter tooth structure unrelated to the occlusal scheme

The Worn Dentition-
Abrahamsen, T.
Tooth Wear Sources:

Attrition = pathologic wear from abrasion & erosion

Abrasions = pathologic wear from mechanical/rubbing

Erosion = pathologic wear from chemical/dissolving

5 Major Etiologies of Wear (Attrition)

A. Abrasion
   1. Bruxism
   2. Toothpaste Abuse

B. Erosion
   1. Regurgitation
   2. Coke-Swishing
   3. Fruit-Mulling

Anterior wear greater than posterior wear

Consider: Neutral Zone changes/restorative options
Linguals of the upper anteriors are worn smoothly from the gingival margin

lower posterior amalgams are “standing up”

Etiology?

Hiatal Hernia --> Gastric Reflux

Anterior Matching Wear Facets...Bruxism
Severe Cupping and Cratering... Erosion

Are we at risk for continued parafunction?  
Should we consider a nightguard?

Did we mention Sleep Disorders?
"Stress Induced Cervical Lesions"
Braem, Lambrecht, Vanherie  J.P.D. May 1992

"Abfraction"  John Grippio D.D.S.
occlusal stresses initiate micro-fractures
  + friction (wear)
  + corrosion (chemical degradation)

Attrition, abrasion, corrosion, and abfraction revisited
JADA, 2004 Grippio, Simring, Schreiner

Toothbrush/paste related?

Occlusion related?
ABFRACTION OR ABFRICTION
In Vitro Reproduction of the Non-Carious Cervical Lesion
by
John J. Dzakovich, D.D.S., F.A.G.D.

Brushing Machine Lab Studies

John Dzakovich D.D.S.

Laboratory studies have not been able to reproduce lateral stress induced lesions.

Laboratory studies have not been able to reproduce lateral stress induced lesions.
Toothbrush without dentrifice has not been able to reproduce cervical lesions.
Toothbrush with dentrifice brushing in a vertical direction has not been able to reproduce cervical lesions.
Toothbrush with dentrifice brushing in a horizontal direction has reproduced cervical lesions identical to abfractions.

Work of Abrahamsen & Dzakovich
Conclusions:
“Toothbrush Abrasion” is an incorrect term
“Toothbrush Recession” occurs
“Toothpaste Abrasion” occurs
“Abfraction” due to lateral occlusal forces is doubtful
“Abfriction” is primarily related to toothpaste and horizontal brushing

Brushing machine created V shaped lesions
37 year old Dental Hygienist referred for an Occlusal Equilibration
Treatment of “Abfractions”

NOTE: Anatomic details have sandblasted appearance

Anatomic detail faded, sandblasted appearance

Generalized Gingival Recession + Tongue Thrust

Tom Abrahamsen D.D.S.
“Cause? Not Occlusion”

“Toothbrush Abrasion” + “Toothbrush Recession”

“Natural Toothpaste” including baking soda

82 y.o., restored 17+ years, stable occlusion

lower 1st molar occlusal defects
“coke-swishing”

NOTE: posterior open bite/tongue thrust

Tom Abrahamsen D.D.S.
Non-functional Occlusal Factors are managed by eliminating or controlling the cause.

Examples: Medically treat Gastric Reflux/ Bulemia
- Use Mouthwash instead of dentrifice
- Supplement with Fluoride Rinse
- Oral hygiene instruction on brushing
- Electric Toothbrush
- Eliminate Colas/ Acidic Foods
- Restore defective areas
- Avoid brushing immediately after low pH exposure
The Anatomy of a Beautiful Smile

12 steps to successful esthetics
1. Correct Incisal Edge Position

"The teeth fit properly in the face"

Goal: A full balanced, symmetrical smile. Showing 10-12 mm central incisors, and hint of free gingival margin.

a.) Evaluate patient's rest position

Rule: 1-3 mm of tooth display is esthetically pleasing.

Vig & Brundo Study:

<table>
<thead>
<tr>
<th>Age</th>
<th>Max. Tooth Display</th>
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<tbody>
<tr>
<td>30</td>
<td>3 mm max.</td>
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<tr>
<td>70</td>
<td>0 mm max.</td>
</tr>
<tr>
<td>.5</td>
<td>3 mm max. man. incisors</td>
</tr>
</tbody>
</table>

b.) Evaluate the “E” Position

Rule: Older patients lengthen teeth to the 50% position; Younger patients can be lengthened to the 70% mark.

50%

50%

c.) Evaluate the lipline in relationship to the smileline.

Rule: The lipline follows the smileline.
d.) Evaluate the horizontal position of the incisal edge

2.) Evaluate Gingival architecture for symmetry and second component of crown length.

- Rule: Central incisors are 10-11 mm long
- Rule: lateral gingival contour is 1 mm lower than central and cuspids.

3.) Evaluate the width relationship of the maxillary six.

Rule: Central 1.6 : Lateral 1 : Mesial 1/3 cuspids .6

e.) Evaluate the “f” and “v” sounds

Rule: The incisal edge position is harmonious with speech sounds.
4.) Evaluate the width to length ratio of the central incisors.

Rule: Width (8mm) / length (10mm) *100=80%

Balancing the 4 Esthetic & 4 Functional Goals

4 Esthetic
1.) Incisal Edge Position.
2.) Gingival Position.
3.) Golden proportion.
4.) Width to Length Ration.

4 Functional
1.) Centric Stops on all teeth.
2.) Non-interfering posterior teeth.
3.) Anterior guidance in harmony with the E.O.F.
4.) Condyles in CR.

The Complete Examination: Records for Success

Complete Evaluation of Gnathostomatic System
Joints ** Muscles ** Teeth/supporting structures

The Goal: To identify the weak link in the system & to connect with the wants of the patient

TMJ-Occlusal Exam
What you need...

- A New Patient/Records System in your practice.
- A semi-adjustable articulator, that accepts a facebow.
- A process to evaluate the TM Joint/occlusion & dental structures.
- A well trained team member dedicated to the "records gathering process".
- A quality Digital Camera.
- Time blocked in the day to treatment plan.

The components of The TMJ-Occlusal Examination

1. The History (7 questions)
2. Range of Motion Test
3. The Centric Relation Load Test
4. TMJ Doppler Auscultation/JVA
5. Muscle Palpation
6. Evaluation of the Dentition for wear, mobility and migration
7. Imaging

TMJ-Occlusal Examination

Negative Occlusal Exam
- No signs of instability
- Stable Joint
- Can work in Patient's Habitual Occlusion (Maximum Intercuspal)

Positive Occlusal Examination
- Irreversible CR
  - Signs of Instability:
    - Tooth wear
    - Tooth mobility
    - Tooth migration
    - Malposed canines
    - Lateral Pole Click or lock
  - Adapted Centric Posture

Positive Occlusal Examination
- Non-reversible CR
  - Signs of Instability:
    - Anterior Pole Displacement
    - Active DIS

Treat TM Joint:
- Joint must be stable prior to equilibration/ortho/ restorative/orthognathic or a combination.
- (Tx position approach)
Splint Therapy in the everyday practice of Dentistry

Complete Examination

Goals of Occlusal Splint Therapy...

Harmonize the Masticatory System through Modifying the occlusion

1. decrease MUSCLE hyper-activity
2. decrease sustained JOINT loading
3. decrease noxious TEETH contacts
4. increase NEUROMUSCULAR harmony

Splint Therapy in the everyday practice of Dentistry

Complete Exam/Muscle Deprogramming

Differential Diagnosis

Extra-capsular Disorder

Occluso-Muscle

Parafuction

Intra-Capsular Disorder

Lateral Pole

Medial Pole

Parafuction

other

Refer M.D., P.T.
Function/Dysfunction Evaluation

1. HISTORY (muscles, joints, occlusion)
2. Range of mandibular movement
3. JOINT palpation
   load testing
   auscultation/JVA
   imaging (when needed)
4. MUSCLE palpation / deprogramming
5. OCCLUSION analysis

ask about SYMPTOMS (pain), look for SIGNS

Function/Dysfunction Evaluation

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Splint Therapy in the everyday practice of Dentistry

Complete Examination
muscle deprogramming

Simple Splint... “clears the dancefloor”
Splint Therapy in the everyday practice of Dentistry

Complete Examination/muscle deprogramming

Splint Therapy in the everyday practice of Dentistry

Complete Exam/Muscle Deprogramming

Differential Diagnosis

Extra-capsular Disorder

Intra-Capsular Disorder

other

Differential Diagnosis

Does the problem appear to be intra-capsular (in the joint)?

NO

extra-capsular

(Where is the source of discomfort (if any) located?)

Does it appear to involve the muscles and/or occlusion?

YES

This is an excellent candidate for occlusal splint therapy in the form of a:

midpoint contact occlusal splint
ideal for occluso-muscle & parafunction

Devices such as the NTI Tension Suppression System (NTI-TSS) do reduce voluntary clenching intensity to one-third of maximum, and clinical observation is impressive regarding the rapid relief of muscle hyperactivity on properly selected patients. What we did not realize in past splint fabrication is that canine contact does, in fact, permit an increase in muscle contraction activity over contact at a single midline point stop. This difference is significant enough to warrant its use in diagnosis as well as for clenching suppression in selected patients who continue to clench even with a perfected occlusion.

Peter E. Dawson D.D.S

EMG study of Masseter/Temporalsis contraction force

Empty mouth clench

Clench w/ B splint

80% decrease in EMG activity

Splint Therapy in the everyday practice of Dentistry

Complete Exam/Muscle Deprogramming

Differential Diagnosis

Extra-capsular Disorder

Intra-capsular disorder

Other

Occluso-Muscle

Parafunction
**Occluso-Muscle Dysfunction vs. Para-function**

**FUNCTION** - “the natural, specialized actions of a system, organ”
- non-interfering Tooth contacts to normal jaw function, border→border
- coordinated Muscle activity
- physiologic Joint loading, forces
- neuromuscular harmony of the a total Masticatory System

**DYSFUNCTION** - “abnormal, incomplete or impaired functioning”
- interfering Tooth contacts to normal jaw function border→border
- in coordinated Muscle activity
- non physiologic Joint load compression/tension
- neuromuscular disharmony

**PARAFUNCTION / BRUXISM** - “functionally disordered, aside from normal”
- Tooth contacts may be completely unrelated to the jaw movement. Signs and symptoms of tooth instability may be observed.
- Muscle activity may include static clenching, bruxing, and cross-over jaw movements in both outward and inward directions.
- Joints may be heavily loaded in centric and eccentric positions. Extreme translatory jaw movements may be present, especially nocturnally.

- Neuromuscular disharmony typically believed to be initiated at the CNS
Treatment Program

Extra-capsular Disorder

Occluso-Muscle

Splint Type: NTI or B Splint (single or dual)

Phase I:
overnight→4 weeks,
If Dual: 24/7
P.T., meds pm

Phase II: occlusal correction

Design of B Splint

Biostar Thermoformer (Perma Laboratory)

Biocryl thermoplastic disc 1.5 mm thick

Orthodontic acrylic platform

Design of B Splint
...can be fabricated on the upper or lower arch

Keys to success:
1. Perpendicular contact with the opposing teeth
2. No contact on the posterior teeth in any jaw position
3. Minimize vertical opening- separate posteriors 1 mm
4. Smooth excursive movements- no tripping contacts

Design of B Splint

Retention comes exclusively from the posterior teeth:
-engage 1/3 up the buccal of posteriors
-do not engage the labial of the incisors
Design of B Splint

Advantages of a dual splint at bedtime
- Upper and lower “retainers”
  preventing any tooth movement, associated with segmental appliances
- Prevents tooth soreness of opposing incisors
- Prevents wear/grooves on the anterior platform
- Prevents irregular incisal edge problems
- Creates a smooth horizontal “runner bar”

Problem: Uneven incisal edges
Solution:
Dual Splint with lower “runner bar”

A deep groove developed over a six month period of nighttime usage of a single upper B Splint
Solution: Nighttime Dual Splint

Instructions for using B Splints...
- Wear single splint during the day, take out for meals, to prevent tooth movement.
- Do not use a midpoint contact splint if the joints are unstable: clicking; painful; load test pain, etc.
- Typically, daytime use is temporary, 1–4 weeks.
- Nighttime usage of a dual splint can be indefinite for parafunction/bruxism

Treatment Program

Extra-capsular Disorder

Parafuction

Splint Type: NTI or B Splint (single or dual)
Phase I: overnight→4 weeks, 24/7
  P.T., meds prn
Phase II: Dual B Splint prn bedtime
“Afferent pain from Masticatory Muscles affects a CNS Sympathetic response leading to increased blood flow. This can result in Migraines.”

“Reducing muscle sensory feedback can reduce Migraines as well as tension type headaches.”

Andrew Blumenfeld M.D.
The Headache Center of Southern California
Headache & Pain Symposium  November 2005

“Nociceptive Trigeminal Inhibition” (N.T.I.)
...inhibiting noxious feedback from sore Temporalis muscles through the Trigeminal circuitry that results in a Sympathetic Nervous System controlled change in intracranial bloodflow leading to migraine-like symptoms.

Customize the fit reline with Snap Acrylic

•Daily Migraines for years
•strong clencher
•minimal wear on teeth, CR = MIP
•No joint problems

Bioresearch Associates
3-D Jaw Tracking
EMG Recordings
Joint Vibration Analysis
Para-function Research

- Daytime clenching = 20% of adults in U.S. Goulet, JOP 1993
- 1/3 of patients w/ severe sleep bruxism report a.m. moderate pain Dao, JOP 1994
- Sleep bruxism is associated w/ microarousals Kato, JDR 2001
- Peripheral sensory influences may affect sleep bruxism Kato, JOP 2003
- 21-50% of child bruxers have family histories of childhood bruxing Kuch, Ped. Dent. 1979

Para-function Research

- Tension-type headache sufferers clench, on average, 14x more intensely during sleep than controls
- Pericranial tenderness is present in every migraine and tension-type headache sufferer, while absent in controls
- Nightly use of an NTI for 8 weeks reduced migraine headaches 77% in 82% of medically dx migraine pts.
- Suppressing the intensity of nocturnal para-function can reduce or eliminate the frequency and intensity of migraines

Decreased afferent input from muscles and teeth...
Migraine like symptoms eliminated

Treatment Program

Occluso-Muscle

Splint Type: NTI or B Splint
Phase I: overnight→4 weeks, 24/7
P.T., meds pm
Phase II: occlusal correction

Extra-capsular Disorder

Parafunction

SAME
SAME
SAME

B Splint hs
Dysfunction & Parafuction

Splint Therapy in the everyday practice of Dentistry

Complete Exam/Muscle Deprogramming

Differential Diagnosis

Extra-capsular Disorder

Intra-Capsular Disorder

Differential Diagnosis

Does the problem appear to be intra-capsular (in the joint)?

YES

- Classify using Piper Classification.
- Imaging clarifies tissue damage, aids in treatment planning.

Intra-capsular Disorder

Lateral Pole Disc Displacement

Splint Type: Superior Repositioning Splint (S.R.S.)

Phase I: 6-8 weeks
Phase II: occlusal correction
S.R.S. nightguard prn
“S.R.S.” Splint
1. manipulation = comfortably seated joints
2. uniform tooth contacts
   - Lower design advantages
     1. better compliance (more invisible, doesn’t affect speech)
     2. shallower anterior guidance
     3. greater comfort of muscles and ease of retention

“S.R.S.” Splint
1. manipulation = comfortably seated joints
2. Uniform tooth contacts
3. Anterior guiding plane .......... lines in front
4. Immediate posterior disclusion in excursions ................. dots in back

Protrusive Guidance:
Incisors only
Lateral Guidance:
Cuspid's only

Problem Case: Restorative Failure
Symptoms: Sore Muscles, Bite uncomfortable, Lateral Pole Disc Click, Mobile Upper Anterior Teeth

Upper C.R. Splint → Deprogram Muscles
   → Stabilize Occlusion/
      mobile teeth
   → Stabilize Joint
Medial Pole Disc Displacement

Prognosis??
1. Pseudo-disc
2. Perforation
3. Pain...

Intra-capsular Disorder
Splint Type: S.R.S. or A.R.S.
Phase I: 3 + months
Phase II: occlusal correction
S.R.S. nightguard prn
**How does an A.R.S. work?**

<table>
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<tr>
<th>Painful seating into retrodiscal tissue</th>
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**A.R.S. in place**

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**Intracapsular Disorders**

when is splint therapy completed?

1. Can load test and palpate the joints comfortably
   .....joint structure adaptation
   ... stability?
2. Symptoms are relieved
   ... joint and muscular
3. Bite is stable on the splint for several months
   ... reflects joint hard/soft tissue stability

.........Average time? **3+ months**

“Relatively comfortable”…but, very unstable joints & occlusion

How can we differentiate lateral pole from medial pole disc displacements?

- Lateral pole disc displacement
- Medial pole disc displacement

Linda
**LATERAL POLE**
- History: minimal
- ROM: normal, wiggle
- Palpation: O.K., tender
- Load test: negative or tension
- Doppler: quiet medial pole
- CBCT: normal joint space
- MRI: disk intact on medial
- Occlusion: no bite shift
- Deprogrammer: click may stop

**MEDIAL POLE**
- pain, locking, bite changes limited, asymmetric
- tender, tender history
- tenderness, pain, history
- crepitant medial pole
- reduced joint space
- disk displaced off medial
- bite shift, open anterior
- may make joint hurt more

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### When are Occlusal Splints helpful?

1. **Harmonizing of Occluso-Muscle Disorders**

   **B Splint**
   - worn 24/7 (removed for meals)
   - single splint during the day
   - dual splint at bedtime

   Typical "Phase I" Therapy = 2–4 weeks

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### When are Occlusal Splints helpful?

1. **Harmonizing of Occluso-Muscle Disorders**

2. **Controlling chronic parafunction/bruxism**

   **B Splint**
   - worn 24/7 for 1–2 weeks if symptomatic
   - worn as a nightguard indefinitely for chronic sleep bruxism

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### When are Occlusal Splints helpful?

1. **Harmonizing of Occluso-Muscle Disorders**

2. **Controlling chronic parafunction/bruxism**

   **B Splint**...
   - 24/7...
   - 2–4 weeks

3. **Stabilizing Joint derangements**

   **SRS**

   "Phase I" Therapy:
   - 6–8 weeks for Lateral Pole Disc Displacement
   - 3+ months for Medial Pole Displacements
**When are Occlusal Splints helpful?**

1. Harmonizing of Occluso- Muscle Disorders  
   - BSplint...24/7...2–4 weeks
2. Controlling chronic parafunction/bruxism  
   - BSplint...24/7...1–2 weeks→nightguard
3. Stabilizing Joint derangements  
   - SRS...24/7...6–12+ weeks until stable
4. Stabilizing Joint derangements  
   - ARS...10 days–2 weeks, followed by:  
   - SRS ...until stable, 3+ months

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**When would we consider one vs. other?**

**Anterior Contact Splint**

1. occluso-muscle problems
2. Headaches/clenching
3. Healthy joints
4. Short term  
   (out for meals)
5. Patient education
6. Parafunction control

**Full Contact Splint**

1. occluso-muscle-joint problems
2. monitoring stability of the joints
3. Weeks to months
4. Harmonizing the occlusion

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**A Programmed Approach to 2D & 3D Treatment Planning**

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**Patsy’s Case**
### Functional Esthetic Check List

<table>
<thead>
<tr>
<th>Item</th>
<th>Normal</th>
<th>Problem</th>
<th>Correction</th>
</tr>
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<tbody>
<tr>
<td>1. TMJ's healthy, complete in C.R.</td>
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<tr>
<td>2. Equal incisal center and/or alveolar ridge</td>
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<tr>
<td>3. Leeway of anterior teeth</td>
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<td>4. Anterior guidance in harmony with the envelope of function</td>
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<td>5. Vertical &amp; horizontal nose edge position</td>
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<tr>
<td>7. Golden proportion of 0-12</td>
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<tr>
<td>8. Width to length ratio 0.6 to 0.9</td>
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<tr>
<td>9. Papillary position</td>
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<tr>
<td>10. Central embrasures superimposed on nasal edges</td>
<td></td>
<td></td>
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<tr>
<td>11. Diastema relations of teeth</td>
<td></td>
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<tr>
<td>12. Depth of nasolabial embrasures</td>
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<tr>
<td>13. Buccal Corridor</td>
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<tr>
<td>14. Posterior Occlusal Plane</td>
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<tr>
<td>15. Lab Incisal plane</td>
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<tr>
<td>16. Severe tendance</td>
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<td></td>
</tr>
</tbody>
</table>

**Key Point:** Remember your treatment options:
- Reshape
- Reposition
- Restore
- Reposition Bone
1.) TMJ Healthy, Condyles in Centric Relation

Determined by:
- The patient's history. No History of joint problems, clicking or headaches.
- Patient's Range of Motion. 42-Q, P-12, RL-11, LL-10
- Centric Load Test - WNL
- Doppler/JVA - Piper IIIA rt joint, Piper It joint
- Imaging when indicated - no imaging indicated
- Other significant occlusal findings: Muscles all normal to palpation, but Significant tooth wear/erosion on teeth 22-27.

Key Point: When joints are healthy, and signs of instability exist, our condylar position is Centric Relation.

Utilize Occlusal Examination form & Mounted Diagnostic Models to fill out steps 1-4 FE Checklist

<table>
<thead>
<tr>
<th></th>
<th>normal</th>
<th>problem</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) TMJ's healthy, condyles in C.R.</td>
<td></td>
<td>X</td>
<td>Joints are healthy, will be able to work in CR, CR &amp; MI are Not the same side [mm-fact and right]</td>
</tr>
<tr>
<td>2.) Equal intensity centric stops on all teeth (or acceptable substitutes)</td>
<td></td>
<td>X</td>
<td>Need to do trial equilibration, looks like lower incisors will repositioning to establish ideal stops - looks like a combo of Equilibration &amp; Minor tooth movement.</td>
</tr>
<tr>
<td>3.) No posterior contact in excursive movements</td>
<td></td>
<td>X</td>
<td>Set condyles to CR &amp; establish anterior guidance. Posterior morphology good, can sequence posterior restorations.</td>
</tr>
<tr>
<td>4.) Anterior Guidance in harmony with the envelope of function</td>
<td></td>
<td>X</td>
<td>7-10 have lingualized due to bulimia. Wear into dentin. 6-11 need crowns, establish ideal stops and more concave EOP.</td>
</tr>
</tbody>
</table>
5.) Vertical & horizontal incisal edge position.
   X Maxillary incisal edge is 2 mm short incisally, and 1-2 mm to far to the lingual, Tooth 8.5 mm long

6.) Gingival position & balance
   X Gingiva in good position, height of tooth 11 is higher than 6-discuss with patient.

7.) Golden proportion of 5-12
   X Problem on left side, Rotation of 10, and protruding facially.

8.) Width to Length Ratio 8 & 9
   X 90+% W/L Ratio. Will improve into normal range when lengthening teeth.

9.) Papillary Position
   X

10.) Central embrasure space/central incisal edges
    X

11.) Disto-axial inclinations of teeth
    X

12.) Depth of incisal embrasures
    X Irregular due to wear, patient likes deeper, youthful “natural” embrasures.

13.) Buccal Corridor
    X Left side is a problem, Teeth 12 & 13 lingual, 14 is facial.

14.) Posterior Occlusal Plane
    X Tooth 15 down (missing 16)

15.) Lip Hypermobility
    X Lip hyper-mobile, high esthetic risk

16.) Skeletal tendencies
    X Patient focused on teeth, does not want facial change

---

**The Treatment Plan**

- **Prophy**
- **Extract 15**
- **Orthodontically align 21-28**
- **Occlusal Equilibration**
- **Crowns 6-11, Veneers 4, 5, 12, 15**
- **Onlays 2, 3, 30, 31**
- **Possible Veneers 21-28**

---

**The Sequence**

**Stage I Treatment**

- Eliminate pain and/or abscesses
- Emergency concerns of patient
- Initial scaling & root planing
- Home care instructions
- Caries Control

**Prophy**
**Extract 15**

---

**Stage II Treatment**

- Splint therapy
- Equilibration
- Referral to specialists for treatment (Ortho, O.S., Perio, Endo)
- Provisional Restorations

**Orthodontically align 21-28**
**Occlusal Equilibration**
The Sequence

Stage III Treatment
Restorative Dentistry
1. Mandibular Anteriors
2. Maxillary Anteriors
3. Posteriors

Crowns 6-11,
Veneers 4,5,12,15
Onlays 2,3,
Onlays 30,31
Evaluation for veneers 21-28
Relating Esthetic Goals to Critical Functional Protocol

Developing the 3 Dimensional Plan

Four Esthetic Goals
1.) Incisal Edge Position
2.) Gingival Position
3.) Golden Proportion
4.) Width to Length Ratio

Four Functional Goals
1.) Condyles in Centric Relation
2.) Centric Stops on all Teeth
3.) Anterior Guidance in Harmony with the EOF
4.) Non-interfering Posterior Teeth

Step One: Choose Condylar Position.
(based on TMJ-Occlusal Examination)

- Maximum Intercuspation
- Centric Relation
- Treatment Position
Centric Relation:

“The relationship of the mandible to the maxilla when the properly aligned condyle-disc assemblies are in their most superior position against the eminencia, irrespective of tooth position or vertical dimension.”

Peter E. Dawson

Step Two: Go Tooth-by-Tooth.

- With casts, restorative chart, periodontal probings and photographs mark hopeless teeth, questionable teeth and teeth that need to be restored (onlayed or crowned) due to weakness or breakdown.
Step Three: Evaluate maxillary, mandibular occlusal plane, and facial asymmetries, as well as skeletal abnormalities.

Step Four: Choose vertical & horizontal position of mandibular incisal edge.

Wax or reposition teeth into ideal position utilizing casts, photos and video clips as reference.

Step Five: Choose vertical and horizontal position of maxillary incisal edge.

- Utilize photo’s and video clips: Rest, “e” position, smile views, full face, profile smile and tipped smile is key. Wax or reposition teeth to establish ideal esthetic vertical and horizontal incisal edge position.
Visualize Esthetics but Treatment Plan Function

Key Point: The diagnostic wax-up should visualize the solutions to all esthetic & functional problems.

Step Six: Choose Vertical Dimension of Occlusion.

If Centric Relation is the goal, two options exist:
1.) Reduction Equilibration Option.
2.) Additive Equilibration Option
Note the change in the angle of guidance...
Step Seven: Provide Equal intensity Stops (or an acceptable substitute).
Step Eight: Eliminate balancing & working interferences.
Step Nine: Harmonize Anterior Guidance.

Step Ten: Final Functional-Esthetic Check.
Temps adjusted for aesthetics & function

Temps adjusted for aesthetics & function

Temps adjusted for aesthetics & function
Key Point:
We do cases 4 times...

Let your Provisionals guide your way....

Question?
How likely is the diagnostic wax-up to perfectly solve the esthetic, functional and biological problems of the patient?

Key Point: Take a systematic approach to contouring the provisional restorations.
Contour in the following order:

1. Establish centric holding stops.
2. First facial plane in line with alveolar contour.
3. Second facial plane in harmony with lip closure path.
4. Determine incisal edge using “s”, “rest” and smile line.
5. Verify incisal edge length using “F” & “V” sounds.
6. Adjust for long centric.
7. Establish lingual contours (anterior guidance) in harmony with the
   envelope of function
   a.) smooth protrusive path.
   b.) smooth lateral excursions.
8. Evaluate “s” sounds.
9. Evaluate cingulum contours using T, D zone.
10. Refine & verify lower incisal edge position, shape & plane.

Contouring the Provisional Restorations:

Key Point: Properly contouring provisional restorations may be the single most important procedure during the restorative process for the long term esthetic, functional & biologic success of the case.
The Diagnostic Wax Up
The 3-D Plan

- Visualize optimum esthetics
- Visualize optimum function
- Use to fabricate provisionals

Step 1:
Refine and verify lower incisal edge position: shape and plane

Refining the lower Incisal Edge Position

from Dr. Peter E. Dawson's
The Concept of Complete Dentistry
©2003 Vernon Shafer, Jr.
Step 2:
Establish centric holding stops

Centric holding contact is determined by:

1.) Lower incisal edge position
2.) condylar position

Step 3:
Lip support in line with alveolar contour
Step 4:
Lip closure path

from Dr. Peter E. Dawson’s
The Concept of Complete Dentistry
©2003 Vernon Shafer, Jr.
Step 5: Determine incisal edge length (using the smile line)

The Incisal Edge Position is determined by:

1. The “Rest” & “E” positions in diagnostic phase
2. Determining its optimum horizontal position using the lip closure path.
3. The patients smile line.
4. F & V sounds.
Step 6:
Verify incisal edge position (using “f” and “v” sounds)

Key Point: Finalize Incisal edge position using “F” & “V” Sounds

Key Point: “F” sound only tell you if teeth are to long, not to short. Let the “E” & rest guide in the diagnostic phase.

Use the F & V to fine tune the vertical & horizontal position of the Maxillary incisal edge after fine tuning smile line...it should be very close.

Step 7:
Adjust for long centric (if needed)
1.) The Centric Relation Position
Step 8: Establish lingual contours in harmony with envelope of function

Envelope of function is determined by:

- a.) Centric relation position.
- b.) Correct Incisal Edge Position
- c.) Need for long centric.
- d.) Smooth protrusive path.
- e.) Smooth lateral anterior guidance.
Step 9:
Evaluate “s” sounds

Step 10:
Evaluate cingulum contours (using “t” and “d”)

Key Point: After final contouring, measure the thickness of your provisional to insure adequate thickness of restorative material.

24 hour post-op
We do cases 4 times
The Dawson Occlusal Classification
Case Studies

Occlusal Goals:
1.) Stable holding contacts on all teeth (or an acceptable substitute) when condyles are in centric relation or adapted centric posture.
2.) Anterior guidance in harmony with the envelope of function.
3.) Immediate disclusion of the posterior teeth in protrusion.
4.) Immediate disclusion of the posterior teeth on the non-working side.
5.) Immediate disclusion of the posterior teeth, whenever possible, on the working side.

Key Point: The posterior teeth cannot interfere with the anterior teeth.

Key Point: The posterior teeth cannot interfere with a stable, seated condylar position.
Dawson I: Maximum intercuspation is in harmony with centric relation.

- def. centric relation: The maxillo-mandibular relationship when the properly aligned condyle-disc assemblies are in the most superior position, against the eminenciae, irrespective of tooth position or vertical dimension.

Dawson Ia: Maximum intercuspation is in harmony with adapted centric posture.

- Adapted Centric Posture (def. adapted centric posture: Is the manageably stable relationship of the mandible to the maxilla that is achieved when deformed TMJs have adapted to a degree that they can comfortably accept firm loading when completely seated at the most superior position against the eminenciae).

Dawson II: Condyles must displace from a verifiable centric relation for maximum intercuspation to occur.

Dawson IIa: Condyles must displace from an adapted centric posture for maximum intercuspation to occur.
Three ways to Find, Verify & Record Centric Relation:

1) Bimanual Manipulation.
2) Using a Lucia Jig with bimanual manipulation.
3) 36-48 hours with an anterior deprogrammer with bimanual manipulation.

The Four Treatment Options:

- Reshaping: Occlusal Equilibration
- Repositioning: Orthodontics
- Restoring
- Repositioning Bone: Orthognathic

**Dawson III:** TMJs cannot accept loading without tenderness or tension, so the relationship of maximum intercuspidation to the ideal joint position cannot be determined until the TMJ problem is resolved. This is typically a transitory condition that is resolvable.
Phase One Treatment - Occlusal Splints

1. Anterior Deprogrammers
2. Full Coverage Premissive Orthotics
3. Full Coverage Directive Orthotics

Phase Two Treatment

Phase Two treatment will involve *occlusal equilibration, orthodontics, restorative dentistry, orthognathic surgery or a combination...*

Dawson II (CR-MI slide)

Dawson III
(CR is not verified, requires diagnosis)

Dawson IV Piper Va, Vb
Actively breaking down TM Joint (DJD)

Dawson IIa (ACP-MI slide)

Treat with Full Coverage Permissive Splint

John Cranham DDS
Chesapeake, Virginia
smildoc@aol.com

Thank You!!

The Dawson Academy
www.thedawsonacademy.com
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<td>Skeletal tendencies</td>
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</table>
Treatment Planning-Model/photographic Flow Sheet

**Step One: Choose Condylar Position**

(based on restorative TMJ-Occlusal Examination)

a.) Maximum intercuspation

b.) Centric Relation

c.) Treatment Position

note: if case is an MI case, models should be mounted in Maximum intercuspation, if Centric Relation, models should be mounted in CR, and if a treatment position is used, models should be mounted for study in this position.

**Step Two: Go tooth by tooth:** with casts, restorative chart, periodontal probings & photos, and mark hopeless teeth, questionable teeth, and teeth that need to be restored (crowned or onlayed) due to weakness or breakdown.

**Step Three: Evaluate Maxillary, mandibular occlusal plane, facial asymmetries, and skeletal abnormalities:** using photographs (full face, profile, and smile shots) & mounted casts.
Step Four: Choose vertical & horizontal Position of Mandibular Incisal Edge
(wax or reposition teeth into ideal position (casts & photo’s as reference)

a. Acceptable
b. Unacceptable

Step Five: Choose vertical & horizontal Position of Maxillary Incisal Edge
(utilize photos: rest, “e” position, smile from 3 views, full face, profile smile, & tipped down smile-This is a Key Step when cosmetic dentistry is driving the case.) Wax or reposition teeth to establish ideal esthetic vertical & horizontal incisal edge position.

a.) Acceptable
b.) Unacceptable

Step Six: Choose Vertical Dimension of Occlusion

procedure: Unlock the centric relation lock and slide the cast together into Maximum Intercuspatation.

Drop the anterior guide pin down to contact the table on the front of the articulator and secure that in position.

Now place the cast back into CR and lock into place

Close the cast together to contact the first tooth contact and observe the distance of separation between the pin and table. THIS IS THE AMOUNT OF ROOM AVAILABLE FOR REDUCTION TO RETURN TO VERTICAL DIMENSION OF OCCLUSION.

DECIDE ON VERTICAL DIMENSION OF OCCLUSION YOU WISH TO WORK AT.

Choose: Reductive Equilibration  (Equilibrate casts back to original vertical)

Additive Equilibration (adding to posterior teeth in restorative process, can be helpful when adding length to max anteriors. This will maintain a shallow anterior guidance. Remember that lengthening anterior teeth will often steepen the guidance-
and infringe on the envelope of function. Look for evidence of horizontal parafunction (anterior wear) on photographs & casts). Note: rarely you may need to open the pin further than the first point of contact in CR for prosthetic convenience. These cases are usually full mouth rehabilitation's and will require time for the occlusion to “settle”-long term provisional restorations may be indicated.

**Step Seven: Provide Equal Intensity Stops**

*If Reductive Equilibration is the choice:* Equilibrate all premature interfering contacts to return the pin to contact with the anterior guide table and to establish uniform CR stops all the way around the arch, INCLUDING the anterior teeth (Note: the only time we do not provide stops on the incisors, is when they are not contacting & stable in Maximum intercuspation).

*If Additive Equilibration is the choice:* Wax the posterior teeth (one arch or both arches) to provide uniform anterior and posterior stops.

*Note: We should now have uniform centric relation stops with a good cusp fossa relationship on each posterior tooth and a stable holding contact on each anterior tooth. If consider sawing and moving the tooth, or waxing to restore teeth. Be sure to create ideal lower anterior incisal edge position (step four), as well as ideal maxillary anterior lingual contour-through shaping, or waxing.*

**Step Eight: Eliminate balancing & working interferences**

By unlocking the CR lock and guiding the cast in left, right and protrusive excursions, marking with a red ribbon.

Lock cast back in CR and mark with a black ribbon to read your CR stops which have been previously established.

Now eliminate all RED skid marks that do not directly super-impose over black centric relation stops which you have established on all posterior teeth.

What remains should be only centric relation stops posteriorly and red guiding marks on anterior teeth (lines on the front, dots in the back)

**Step Nine: Harmonize Anterior Guidance**

Now harmonize the anterior guidance to establish a smooth gliding movement of the casts both left, right & protrusive. It is desirable to share this movement with as many teeth as possible.

Consider waxing up teeth in order to create and ideal anterior guidance being careful not to STEEPEN THE ENVELOPE OF FUNCTION.
Be sure the Anterior guidance is not to steep and Envelope of Function is not constricted.

Consider cross-over any other habits as revealed by wear facets.

**Step Ten: Final Functional-Esthetic Check**

Once anterior Guidance has been harmonized, recheck for any balancing, working, or protrusive interferences and eliminate them. Smooth anterior movements.

Make changes necessary changes to gingival plane, to establish ideal crown length from incisal edge to free gingival margin. Every tooth visible in a full smile should be considered.

Consider width changes of anterior teeth to idealize golden proportion & width/length ratio.

Wax incisal embrassure depth to align with shape the patient desires.

Since we want to visualize the final product, we are able to decide, through model work and photo analysis, if we can successfully complete the case through equilibration, tooth repositioning (orthodontics), restorative dentistry, or orthognathic surgery. Regardless of the treatment option, our goal is always to do the LEAST amount of dentistry to provide the patient with the requirements of occlusal stability, and satisfy the elective esthetic wants of the patient.
Treatment Sequencing

Stage I Treatment

- Eliminate pain and/or abscesses
- Emergency concerns of patient
- Initial scaling & root planing
- Home care instructions
- Caries Control

Re-evaluate (endo, oral surgery, patient motivation, ready for stage II)
Refer to specialists for evaluation to get the “whole picture”
second consultation if needed

Stage II Treatment

- Splint therapy
- Equilibration
- Referral to specialists for treatment (Ortho, O.S., Perio, Endo)
- Provisional Restorations

Re-evaluate to be sure TMJ, perio, ortho, etc...completed satisfactorily

Stage III Treatment

Restorative Dentistry

1. Mandibular Anteriors
2. Maxillary Anteriors
3. Posteriors
Patient Name:__________________  Date:__________

Oral Cancer Examination

ExtraOral

Head  WNL___ Pathology_____________________________
Neck  WNL___ Pathology_____________________________
Face  WNL___ Pathology_____________________________
Ears  WNL___ Pathology_____________________________
Eyes  WNL___ Pathology_____________________________
Lips: WNL___ Pathology_____________________________

Intraoral

The Buccal Mucosa: WNL___ Pathology_____________________________
Tongue: WNL___ Pathology_____________________________
Floor of the Mouth: WNL___ Pathology_____________________________
The Oropharynx: WNL___ Pathology_____________________________
Tonsils: WNL___ Pathology_____________________________
Hard & Soft Palate: WNL___ Pathology_____________________________
Posterior Pharyngeal Wall: WNL___ Pathology_____________________________
Base of Tongue: WNL___ Pathology_____________________________

TMJ-Occlusal Examination

A.) Patient history:
1.) Have you ever been diagnosed with a problem with either jaw joint?_____________________
2.) Does your jaw joint click, pop or make noise when you open or close?___________________
3.) Do you have pain or tenderness in your jaw when you open, close or chew?______________
4.) Has your jaw ever locked open or closed?_________________________________________
5.) Do you have frequent headaches? If so how often or when?___________________________
6.) Do you clench or grind your teeth, or ever been told that you do?_______________________
7.) Do you have a history of trauma to your chin or jaw?________________________________

B.) Range of motion: slant drawing: protrusion
Open:__________
Protrusion:_______
Rt Lateral:_______                   Right                           Left
Lt Lateral:_______

C.) CR Load Test:
Right Joint: WNL Tension Tender Light Medium Firm      CR= MI ______
Left Joint:   WNL Tension Tender Light Medium Firm      First contact in CR:_____
                     Direction of slide:_____
Opening
D.) Lateral Pole Palpation

Right___________    Left____________ (scale 1-5)

E.) Joint Sounds (JVA/Doppler):

Right Joint Diagnosis:  WNL  Lateral Pole  Medial Pole  Click  Closed Lock  DJD
Left Joint Diagnosis:  WNL  Lateral Pole  Medial Pole  Click  Closed Lock  DJD

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F.) Muscle Palpation

<table>
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<tr>
<th>Muscle</th>
<th>Right (1-5)</th>
<th>Left (1-5)</th>
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<tr>
<td>Superficial Maseter</td>
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<tr>
<td>Deep Masseter</td>
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<tr>
<td>Ant. Temporialis</td>
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<td>Post. Temporialis</td>
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<tr>
<td>Medial Pterygoid</td>
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<td>SCM</td>
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<tr>
<td>Diagastric</td>
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</tbody>
</table>

G.) Teeth with wear:______________________________________________________
Teeth with mobility:___________________________________________________
Tooth migration:______________________________________________________

H.) Need for mounted diagnostic casts?  Yes  No

I.) X-rays/Imaging:  BWX  FMX  Panorex  Ceph  CBCT  MRI  Other:_______

J.) Treatment Position:  Maximum Intercuspation  Centric Relation  Other:_______

K.) Dawson Classification  I  Ia  II  IIa  III  IV

L.) Joint Diagnosis

Right Joint:  __Stable  __LP Click  __LP Closed Lock  __MP Click  __MP Closed Lock  __DJD

Left Joint:  __Stable  __LP Click  __LP Closed Lock  __MP Click  __MP Closed Lock  __DJD
### Restorative Examination

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<th>#</th>
<th>1</th>
<th>2</th>
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<th>16</th>
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| Tooth | # | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 |

☐ Restorative information entered in computer

### Periodontal Examination:

Perio Case Type: ____________________________

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<tr>
<th>FACIAL</th>
<th>IAG</th>
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| LINGUAL | PRO |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|         | REC |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

| LINGUAL | IAG |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|         | REC |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|         | PRO |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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| FACIAL | PRO |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|        | REC |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|        | IAG |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

☐ Perio information entered in computer
Esthetic Smile Analysis

Raw Data:
Length 8:___ Length 9:___ Width MF-6:___ Width 7:___ Width 8:___ Width 9:___ Width 10:___ Width MF-11:___

Maxillary Midline:__________ Mandibular Midline:__________

Facial Esthetics

1. Maxillary Incisal Edge Position
   a. Vertical Component
      i. Display @ Rest _________
      ii. Display @ “max e” smile _________
   b. Horizontal Component
      i. Position relative to the wet/dry line of lower lip ______

2. Lip Mobility
   a. Excessive/Hyper-mobile
   b. Ideal
   c. Minimal

3. Neutral Zone
   a. Tight
   b. Average
   c. Loose

4. Midline relative to the long axis of the face
   a. Parallel
   b. Canted

5. Incisal Plane relative to the inter-papillary line
   a. Parallel
   b. Canted

6. Skeletal Tendencies (Arnett’s true vertical line)

Macro Esthetics

1. Proportions
   a. Tooth to Tooth
   b. Ratios w/in teeth themselves

2. Axial Inclinations
   a. Do the axial inclination increasingly converge toward the midline

3. Occlusal Plane

4. Periodontal Architecture
   a. Symmetry of gingival zeniths
   b. Position and Contour of Papilla

5. Incisal Embrasures
   a. Do they graduate as they move posterior

6. Buccal Corridor/Transverse Skeletal development
   a. Is it adequately developed?

Patient Esthetic Goals

Initial Clinical impression:  Bleaching  Reshaping  Repositioning  Restoring  Orthognathic
TMJ-Occlusal Examination

Negative Occlusal Exam
- No signs of instability
- Stable Joint
  - Can work in Patient’s Habitual Occlusion (Maximum Intercuspation)

Positive Occlusal Examination
- Verifiable CR
  - Signs of Instability:
    - Tooth wear,
    - Tooth mobility,
    - Muscle pain,
    - Occluso-muscle pain,
    - Lateral Pole Click or lock
    - Adapted Centric Posture
  - Equilibrate/Move Dentition/ Restore in Orthopedically stable Joint (CR) with Posterior Disclusion

Positive Occlusal Examination
- Non-verifiable CR
  - Signs of Instability:
    - Medial Pole Displacement
    - Active DJD
  - Treat TM Joint. Must be stable before restorative phase “Treatment Position Approach”