About the Speaker: Lauren Gueits, RDH BS

• Lauren Gueits, a dental hygienist of 20+ years and a recipient of the 2010 RDH Sunstar Award of Distinction, lectures nationally to health professionals on Comprehensive Care and Oral/Systemic links.

• Lauren received her degree from the State University of New York at Farmingdale in 1991 and post graduate training in Myofunctional Therapy through the AOMT in 2013. Lauren is a published author and has been seen on WNBC, WABC and the Colgate Oral Health Network raising awareness about diabetes and oral health. She is passionate about the peri-ortho connection and the health benefits of aligned teeth, thus enjoying her role as Hygiene Education Manager for Align Technology.

• *Mom of 3 — all in Invisalign treatment
Our Time Together: Part One and Part Two

Part I
- Ortho 101: Perio-Ortho-Systemic Connections
- Long Term Oral Health Solutions with Invisalign Therapy
- Attractions vs. Annoyances
- Implementing Ortho in the Dental Practice

Part II
- Orthodontic Conversations from the Hygiene Chair
- Hygiene Ortho Exam
- Effective Strategies for Increased Case Acceptance
- Case Review

PART I
The Hygienist's Role in Identifying Malocclusion and the Benefits of Proper Tooth Alignment

Comprehensive Care
Don't Forget the ORTHO!
Comprehensive Care/Treatment?

- Assessing Risk Factors: Periodontal/Systemic Disease/Sleep Apnea
- Educating Patients on the Inflammatory and Systemic Ramifications of Periodontal Disease
- Non-Surgical Periodontal Therapy Strategies
- Recognizing Malocclusion and Orthodontic Solutions
- Myofunctional Therapy?
- Educating and Screening Diabetes Patients
- CAMBRA “Caries Management for Risk Assessment”
- Oral Cancer Screening
- Communication with Medical Team
- Smoking Cessation/Nutritional Counseling

Ortho 101
Transverse Dimension: Arch Shape

- U Shape
- V Shape
- Square
- Omega

Transverse Dimension: Arch Width

- Normal
- Spacing
- Crowding

3 Causes of Crowding
- Improper Arch Form
- Improper Arch Width
- Buccolingual Inclination
Vertical Force vs. Horizontal Force

ClinCheck® Software

Vertical Dimension
Vertical Dimension: Anterior Bite

Overbite (OB): Vertical overlapping of the upper teeth over the lower. Ideal OB is 10–30% overlap.

Normal | Edge to Edge | Deep Bite | Open Bite

Vertical overbite of the upper teeth over the lower. Ideal OB is 10–30% overlap.
Study: Effects of Crowding in the Lower Anterior Segment

Study found that anterior crowding of 3mm or more serves as an individual host factor for periodontal disease.

Progression of Periodontal Disease
The Role of Oral, GI and Pulmonary Pathogens in Atherosclerosis

Without Good Periodontal Health, You Can't Have Good General Health

Malocclusion and Patient Health Connection
The Etiology and Prevalence of Gingival Recession

Causes of Recession:
- Trauma. See Malpositioned Teeth, Inflammation and Tobacco Consumption
- 1 site, with Recession
- 88% of people 65+
- 50% of people 18 to 64 years of age

Clinical Implications:
Dentists should be knowledgeable about the etiology, prevalence and associating factors of gingival recession, as well be prepared to educate the appropriate treatment indication and be able to discuss. Treatment for gingival recession include gingival grafting, guided tissue regeneration and orthodontic therapy. Such treatments typically result in esthetic improvement, reduction in sensitivity and a decreased risk of developing caries.

Gingival Cleft: Mosby’s Definition

An A Cleft of the marginal gingiva; may be caused by improper brushing, food debris or tooth-brushing, a breakthrough to the surface of pocket formation, or faulty tooth positioning. The cleft resembles a V-shaped notch.
Non-carious Class V Lesions: What’s Really Going On?
Nichole Dicke, LDH, BS

Abfractions Are Non-carious Class V Lesions
The term abfraction refers to a non-carious Class V lesion with an etiology that includes tooth flexion and occlusal stress.

Malocclusion and Premature Wear
Poorly aligned teeth can create abnormal lateral force and stress on surrounding periodontal structures:
- Worn-down shortened teeth
- Poor root support, tooth mobility and eventually tooth loss
- Chipping, recession, abfraction
Look Familiar?

Recession and Abfraction Improvements

Short Term vs. Long Term Solutions:
Providing Patients with Options

<table>
<thead>
<tr>
<th>CONDITIONS</th>
<th>SHORT TERM TREATMENTS</th>
<th>LONG TERM ORTHODONTIC SOLUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abfractions</td>
<td>Class II orthodontic partial occlusal adjustments</td>
<td>Uplifting teeth to correct the vertical alignment and take teeth out of trauma.</td>
</tr>
<tr>
<td>Anterior Vertical Fracturing</td>
<td>Occlusal adjustments</td>
<td>Contributing to malocclusion. Usually end to end, anterior crossbite, deep bite.</td>
</tr>
<tr>
<td>Posterior crowned Pulp Fracture Tooth</td>
<td>Occlusal adjustments</td>
<td>Contributing to malocclusion by taking teeth out of trauma. Providing canine guidance or group function.</td>
</tr>
<tr>
<td>Grinding</td>
<td>Night guards</td>
<td>Proper occlusion by moving teeth and taking teeth out of trauma. Providing canine guidance or group function.</td>
</tr>
<tr>
<td>Gingival Recession</td>
<td>Orthodontic adjustments</td>
<td>Uplifting teeth to correct the vertical alignment and take teeth out of trauma.</td>
</tr>
</tbody>
</table>
Gingival Grafting

Treatment for Non-carious Class V Lesions (Abfractions)

Standard GP Treatment
1. Wait-and-Watch
2. Class V Buccal Composites

Controversial GP Treatment
1. Occlusal Adjustments
2. Occlusal Splints

Class V Buccal Composites

- Low retention rate: After 2 years, 1/3 of the composites were lost
- Patients blame doctor for poor workmanship
- Most dentists do not like performing these types of restorations
ADA Definition of Evidence Based Dentistry

Summary—3 Realm Approach

1. Science  
2. Clinician’s Judgement  
3. Patients’ Needs/Preference

“External clinical evidence can inform, but can never replace individual clinical expertise.” — Dr. David Sackett


2. Frantsve-Hawley, et al. Using the Best Evidence to Enhance Dental Hygiene Decision making: JDH vol 89 Sup 1 Feb 2015

Improved Periodontal Charting

Aligned Teeth = Health

Permission to use?
Recognizing Malocclusion/Malpositioned Teeth Is Paramount to Patient Health

- Malocclusion and abnormal tooth position are now recognized as potential contributors to the disease process when they cause occlusal traumatism.
- Excessive functional stress may initiate inflammatory changes in the periodontium and thus enhance destructive bacterial processes.

Implementing Ortho into Every Day Dentistry

Clinical Protocol: TX Planning
- PERO
- ORTHO
- RESTORATIVE*
*Restorative takes precedence if active decay/pathology/pain
Why Discuss Orthodontics?

Professional responsibility, AAP/ADHA guidelines
Advising on the latest advances in dentistry
Treat an orthodontic problem with an orthodontic solution

“ING” Conversation Starters: This Concerns Me Because…

• Your gums are receding
• Your teeth are chipping
• The enamel is thinning
• Your teeth are shifting
• Your teeth are wearing
• How is Dr. ______ going to fix this in 10, 20 years?
• “Your teeth are colliding rather than sliding”

“Show and Tell”
Malpositioned teeth causing malocclusion

"ING" Words:
- Chipping, receding, shifting
- Hard and soft tissue damage
- Tooth loss and costly dentistry: surgery, implants

Take your teeth out of trauma

Proper Tooth Alignment Can Lead To

• Solid foundation
• Proper occlusion
• Decreased risk of occlusal trauma and abnormal wear
• Healthier teeth and periodontium
• Motivated patients
• Easier periodontal maintenance
• And... Beautiful smiles

Action Item: Be an Ortho Detective — Is This Condition Related to Malpositioning?

Try an "ING" or Two!
PART II:

• The Hygienist’s Role in Implementing Ortho in the Dental Practice
• How to implement ortho into clinical practicality
• Specific verbiage to engage patients to value your “prevention plans”
• Specific Role plays
• “6 Words to avoid” from the hygiene chair… can you guess what they are?

Thank You…

Transforming people’s lives by improving the journey to a healthy, beautiful smile

Contact lgueits@aligntech.com