Welcome to the Greater New York Dental Meeting

Greater New York Dental Meeting™
Executive Headquarters
200 West 41st Street, Ste. 1101, New York, NY 10036
Tel. (212) 398-6922, Fax. (212) 398-6934
E-mail: victoria@gnydm.com
www.gnydm.com
Sponsored by New York County & Second District Dental Societies

All programs and exhibits are held at the Jacob K. Javits Convention Center (unless otherwise indicated) 11th Avenue between 34th and 39th Street, New York City

General Registration Hours
Friday, November 29 12:00 Noon - 4:30 P.M.
Saturday, November 30 8:00 A.M. - 4:30 P.M.
Sunday, December 1 - Tuesday, December 3 8:00 A.M. - 5:30 P.M.
Wednesday, December 4 8:00 A.M. - 4:30 P.M.

Exhibit Hall Hours
Sunday, December 1 - Tuesday, December 3 9:30 A.M. - 5:30 P.M.
Wednesday, December 4 9:30 A.M. - 5:00 P.M.

COURSE REGISTRATION
Pre-registration is required for all continuing education courses with the exception of the “Live” Dentistry and Affiliated Groups. Your seat will be held for 15 minutes after the start of the course; after that, those without tickets will be seated according to space availability. When the room is filled, no additional people will be admitted due to fire department regulations. If you have not pre-registered, please be prepared to select an alternate session to attend.

Tickets
Tickets are required for all courses excluding Live Dentistry. Tickets for all functions can be purchased at all general registration booths located in the Registration Area on the Upper Level in the Crystal Palace and online.

6 Days of Education Seminars, Hands-on Workshops & Essays
Friday - Wednesday

4 Days of Exhibits
Sunday - Wednesday

FREE “Live” Dentistry
Hi-Tech 450 Seat Arena

SUNDAY
9:45 - 11:45
VOCO America, Inc.
Drs. Ron Kaminer & Marc Geissberger
Restorative

12:00 Noon - 4:30 P.M.
Philips Sonicare
Dr. Gerard Kugel
Whitening

3:00 - 5:15
3Shape
Dr. Sundeep Rawal
Digital

MONDAY
1:30 - 2:45
First Fit
Drs. Frederick E. Solomon
Cyrus Tahmasebi
Digital

SUNDAY
9:45 - 11:45
Shofu
Dr. Ron Kaminer
Restorative

1:30 - 2:45
Align I Invisalign I Itero
Drs. Karla Soto & Christian Coachman
Restorative

TUESDAY
9:45 - 12:00
Millennium
Dr. Sundial Thanik
Laser

2:00 - 4:15
Glidewell
Dr. Justin Chi
Digital

WEDNESDAY
9:45 - 12:00
Apa / CareCredit
Drs. Michael Apa
Aesthetic

2:00 - 4:15
Benco / Vatech
Dr. Aeklayya Panjali
Implant

Celebrity Luncheon Speaker

John Quiñones
Monday, December 2nd
12:00 - 2:00 - Ticket 4010
$125.00

3D Printing & Digital Dentistry Conference
Dental Laboratory Technicians Programs
Sleep Apnea Symposium
Oral Cancer Symposium

Buy a Bundle and Save with GNYDM’s CE Passport

Obtain more CE Credits and save money by purchasing one of our Education Bundles.

The GNYDM CE Passport Bundle includes Seminar and Essay courses.

When purchasing a bundle, attendees can register for as many Seminars and Essay courses as they want during all six days of the show.

Registration for all courses is required.

$595.00
$895.00

$595.00
$895.00

The GNYDM CE Passport Bundle allows an individual to take unlimited* seminars and essays.

*Excludes Workshops, Botox & Fillers, Sleep Symposium and Invisalign

5th Annual Global Orthodontic Conference
3rd Annual Pediatric Dentistry Summit
12th Annual INVISALIGN® - GNYDM EXPO
4 Days of Programming: Sunday - Wednesday

Botox and Facial Fillers Seminar & Workshop

Over 1,700 Exhibit Booths
Periodontology 1966 – 2019: A 53 year contrast with many questions still to be answered

Paul A. Levi, Jr., D.M.D.
December 1, 2019

Disclosure

I have no relevant financial relationships (in the last 12 months) to disclose.

Dr. Irving Glickman

"Dentistry's mission under its franchise must be clearly defined as primarily the preservation of the health of the natural structures through the prevention of disease and deformities, and secondarily the repair of destroyed tissue the replacement of lost parts and the correction of developmental anomalies."


RESEARCH

Is and always has been the hallmark of the discipline of periodontology

The prevalence of bone loss in patients at Tufts categorized by age, gender, BMI, smoking and systemic disease

A retrospective study

- To determine the relationship between radiographic alveolar bone loss and age
- To assess correlations between self reported systemic conditions, gender, tobacco use and radiographic alveolar bone loss
- We evaluated postero-anterior bitewing radiographs for ≥2.5 mm bone loss from the CEJ
Questions still to be answered

As smoking is a strong risk factor for periodontitis...

WHY is there a greater prevalence in bone loss in past smokers than present smokers in the age cohorts 45-64?

WHY did non-smokers have a greater prevalence of bone loss than present and past smokers in the age cohorts of 55-59?

Conclusions

- There is a great likelihood of individuals developing bone loss as a result of periodontitis and systemic conditions as they age.
- Question: is the bone loss a result of inflammation and is the inflammation helping to precipitate the systemic conditions?
- Although only 12% of patients in the age range of 25-29 years exhibited RBL, thirty years later the prevalence was 64%.
- The emphasis of thorough and consistent plaque removal by young patients and emphasizing the importance of regular professional hygiene maintenance therapy for all ages is a major part of preventive dentistry.
Prevention & predictability
Always begin with a comprehensive examination

Observe your patient's dental hygiene techniques before doing your intraoral examination!

A complete examination transcends the years!
Essential for decision making and periodically updated:
- Radiographs
- Periodontal Chart
- Photos
- Diagnostic Casts

Let's look at this new patient to our clinic

<table>
<thead>
<tr>
<th>Age group</th>
<th>15-19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence</td>
<td>1.36076</td>
<td>6.701</td>
<td>11.882</td>
<td>23.834</td>
<td>31.897</td>
<td>41.799</td>
<td>51.890</td>
<td>64.989</td>
<td>81.890</td>
<td>100.89</td>
</tr>
</tbody>
</table>

- A 42 y/o African American male (42.5% prevalence for bone loss Carney's study.)
- Is being treated for schizophrenia with clozapine and benzotropine.
- Reported smoking 1 pack of cigarettes per day from 1998 until 2008
- Presently he claims to smoke, "1.2 cigarettes sometimes".

Chief concern:
"It's been a long time, and I want my teeth cleaned."

- It was explained politely that a comprehensive examination must be done first.
- Before the intraoral charting and examination a toothbrush and dental floss is handed to the patient to demonstrate his technique; however...

...this is what is seen!

So he's correct, he does need hygiene therapy before you do his examination.

Courtesy: Tony Sleek, U. Maryland
Now your examination can be completed and a diagnosis made.

The diagnosis is: "severe gingivitis"

Because there is no bone/attachment loss.

One more of the mysteries of periodontology!

Question still to be answered

WHY, if inflammation through the production of cytokines, IL-1α, IL-1β, TNF-α, cause bone loss, and most young individuals have periodontal inflammation (gingivitis) is bone loss not significantly seen until after the ages of 25-29 (from 5%-12%)?

And in the 42 y/o male, why didn't he escape bone loss with the severe degree of inflammation?

Prognostication

- The act of foretelling the future
- Understanding Risk

Can we predict this woman's dental future?

Chief Complaint:
“I want to smile like I used to when I was younger.”
Dentistry's mission is to prevent not just repair

"I want to smile again."

What happened in 33 years?

Who is responsible?
She attended her "regular" dental appointments.

The basics of how to prevent and treat dental infections, including caries and periodontal diseases, have not changed; although, some of our techniques have changed.

Three essential factors for health:
- Patient motivation
- Patient techniques: ability & understanding
- Accessibility to the tooth with smooth roots subgingivally

The way I was taught 53 years ago 1962-1966 as a predoctoral student at Tufts:

"Oral Physiotherapy"
- Uses an extra hard natural bristle brush (Lactona) with Charter's or Stillman's technique
- No use of dental floss taught in dental school
- Interproximal brushes did not exist for us
- Rubber tips were used ("stimulate the gums")
- Philosophy of etiology of periodontal disease
  - Bacteria was secondary
  - Calculus on teeth caused irritation of surrounding gingiva which became secondarily infected by oral microbiota

Lactona toothbrushes

1966 taught at Tufts

Techniques:
- Charter's
- Stillman's

Theory:
- Stimulate the gingiva, remove debris (Food, germs, etc.)

Extra Hard Natural Bristle toothbrush

Patient dental hygiene therapy

- Factors for successful therapy:
  - Using thorough techniques supra and subgingivally
  - Being consistent with removing plaque daily (Once or twice varies with patients)
  - Having a plan to completely reach all teeth and all surfaces
  - Using devices that are specific for the patient's needs
The Effect of the Bass intrasulcular tooth brushing technique on the reduction of gingival inflammation

The bristle tips enter into the gingival crevice and remain connected to the tooth surface in the gingival sulcus while the handle is moved in a short back and forth motion.

Hypotheses:

1. Teaching a (Bass) Stationary Bristle Tip Technique (SBT), an intrasulcular technique, is more effective in reducing or preventing subgingival inflammation as evidenced by bleeding on probing (BOP) than allowing people to brush their teeth without instruction, which is usually a scrub technique.

2. A toothbrush which is used for three months or greater is ineffective in subgingival inflammation control.

Methods and materials:

- 48 subjects with diagnosed with gingivitis were recruited.
- They received a Oral B straight cut multifilament toothbrush (Oral B SAP # 60205086 indicator SBT). The brushes were photographed and were randomly assigned to a group (N=24 per group).
- The first group was instructed to brush with the Bass (SBT) technique and the other group received no brushing technique instructions and were told to “brush the way you normally would.”
- All subjects were observed for their brushing technique initially and 85% were using a scrubbing motion.

The research demonstrated the effectiveness of an intrasulcular brushing technique using the “SBT”

Short vibratory back and forth strokes, do not scrub, and “Feel the bristles in the gum crevice”.

Results + Conclusions

- The SBT group showed significant reductions in BOP and plaque scores than the NSBT both at 4 and 12 weeks. There was no statistically significant differences in toothbrush area (deformation) among groups.
- The SBT group was statistically significantly more effective in reducing subgingival inflammation and plaque over time.
- The toothbrushes in the NSBT group deformed more than the ones in the SBT over time; however this was not statistically significant.
**Results: BoP and plaque per group**

<table>
<thead>
<tr>
<th>Group</th>
<th>0%</th>
<th>1%</th>
<th>3%</th>
<th>5%</th>
<th>7%</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BoP Baseline</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Plaque keiving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BoP 1 month</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>BoP 2 month</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Results: Toothbrush deformation per group**

<table>
<thead>
<tr>
<th>Toothbrush Deformation</th>
<th>0%</th>
<th>1%</th>
<th>3%</th>
<th>5%</th>
<th>7%</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 1**

**Table 2**

**Standardized photos over 12 weeks**

**Toothbrush deformation**

<table>
<thead>
<tr>
<th>SBT</th>
<th>SSBT</th>
<th>NSBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>baseline</td>
<td>4 weeks</td>
<td>12 weeks</td>
</tr>
<tr>
<td>baseline</td>
<td>4 weeks</td>
<td>12 weeks</td>
</tr>
</tbody>
</table>

**Differences between the Bass, Modified Bass and Stationary Bristle Techniques**

**Toothbrush head placement**

1. **Original Bass**: overloads gingiva. "Stationary Bristle Tip Technique" emphasizes placing all toothbrush bristles on the tooth and aiming for the middle of the tooth before reaching the gingival crevice.

2. "Modified Bass Technique": states that the bristles should be placed 1/3 on the tooth and 1/2 on the gingiva.

3. **Original Bass**: angles toothbrush bristles 45° to the tooth, "Stationary Bristle Tip Technique" aims slightly toward the gum crevice, and the patient feels the bristle tips enter into the gingival crevice.

**THE EFFECT OF THE BASS INTRASULCULAR TOOTHBRUSHING**

**CONCLUSION**

Based on the present study, BI is more effective in reduction of BoP than the techniques used by individuals brushing with no instructions. The deformation in the NI group from baseline to 12 weeks was greater than that observed in the BT group. Furthermore, this study illustrates the importance of motivational interviewing and consistent technique instruction with an intrasulcular technique to patients. Future multicenter studies with longer follow-up time are recommended to confirm the current findings.

**THE PATTY AND PAUL LEVI RESEARCH AWARD**

Research Award

Application

Recipient History

WHAT IS AWARDED

A $10,000 one-time award to a predoctoral student.

WHO IS ELIGIBLE?

Eligibility is restricted to predoctoral students being reviewed by a predoctoral faculty member in a dental school who has a predoctoral research program. Immediate family members of the American Dental Association Board of Directors, officers, and committee members are not eligible to apply for the award. Please note that the research project described in the winner's statement must or should be a predoctoral student or students with the predoctoral faculty mentor as principal investigator.

HOW TO APPLY

Candidates may apply by June 30th through the link below.

Applicant must apply by the deadline and provide a statement of intent.
PERIODONTAL SURGERY AND CONCEPTS 1971-1980

1. For pocket reduction
2. To increase attached gingiva

Periodontology 1966-1980

- Irving Glickman: The “unembellished gingivectomy
- Henry Goldman and others: The apically positioned flap
- Sullivan and Atkins: Free Gingival Grafts to widen the zone of gingiva
- Jay Seibert: Free gingival onlay grafts and root coverage free gingival grafts
- Occlusion: “The lifeline of the periodontium” II, Glickman

Periodontal surgery 1960s-1980s

1) Repair --- Gingivectomy, apically positioned flaps before the 1980s
2) Reattachment --- Reimplantation of an avulsed tooth Before the 1980s
3) New Attachment --- Root coverage procedures Began in the late 1970s
4) Regeneration --- GTR Began in the mid 1980s

Regenerative therapy: A. Melcher, Toronto 1967

Repair

Healing of a wound that does not fully restore the architecture or function of a part.

ScRp, GV, Flap procedures

These procedures continue to be basic in today's therapy.

Unembellished Gingivectomy

Repair 1971

Kirkland periodontal surgical knife

Six months post surgery
Flap/Osseous Surgery 1970 - Repair

Pre-treatment
Note: heavy calculus

Following initial phase (pre-surgical preparation) therapy

Flap/Osseous Surgery 1970 - Repair

Flap/Osseous Surgery 1970 - Repair

Flap / Osseous 1970-1971

"Better to have your teeth a little longer than no longer" I. Glickman

Gingival Graft 1972-1978

- Six year-old male
- Absence of attached gingiva
tooth #24
- No recession; however, the
gingival margin is at cementoenamel junction
- Concern by dentist and family that recession would
continue
- Orthodontic therapy is planned for the future
- Therapy followed for almost six years
Gingival Graft 1972-1978
Five years, seven months post-surgery

Pre-op 12-11-1972

Note:
The gingival margin remains at the CEJ.

08-12-1978

Chronic periodontal abscess 1974

Patient history
- 49 year old female
- Generalized moderate chronic periodontitis
- No contributory medical history
- Presents with a twelve millimeter pocket along the facial aspect of the mesiofacial root tooth #3
- Presence of purulence when probing
- No pain
- Moderate gingival enlargement

Stage III, Grade B periodontitis
Periodontal abscess with pre-existing deep periodontal pockets

Stage III, Grade B
12 mm facial pocket along mesiofacial root Tooth #16

Examination 24-01-1974

21-01-1974 21-01-1974
"Free" gingival graft 1998

Gingival graft to improve esthetics and health (allow for plaque control)

- Seventeen year-old male
- Post cleft palate repair as an infant
- Congenitally missing maxillary left central incisor
- Fixed bridge fabricated three years previously
- Difficulty in maintaining plaque control

Epithelialized gingival graft 1998

Post cleft palate repair

Purposes:
1) To deepen vestibule and provide access for plaque removal
2) To provide an adequate dimension of attached gingiva for tooth #11

Partial thickness flap

Bed preparation with a release of the vestibular attachment and the deepening of the vestibule.

03-12-1998

Silk cross-circumferential and interrupted papillary sutures

12-03-1998

Post-operative one week

Adequate zone of gingiva.
Deepened vestibule

10-12-1998

Epithelialized gingival graft four-months post surgery

03-12-1998 to 02-04-1999
4-0 silk used for anchorage of the graft

Cross circumferential sutures are anchored in the vestibular connective tissue

Four weeks post-surgery

Approximately twelve years following surgery

May 2001

As the graft matured it became thicker

Four weeks post surgery ~ Twelve years post-surgery

Additonal techniques for root coverage 1989

- Millers class 1, Cairo class 1 recession
- Technique: double papilla lateral sliding pedicle with a connective tissue graft

Connective tissue graft with double papilla sliding flap for root coverage

Following scaling, root planing and citric acid root preparation first incisions then partial thickness flap

Incision to deepitheliate the margin

Incision to create lateral sliding pedicle flap

Connective tissue graft with double papilla sliding flap for root coverage 1989

Suture the lateral sliding flap to the unflapped gingiva on the mesial 5-0 chromic gut suture
Graft harvested from the palate and sutured with 5-0 chromic gut over exposed root.

Post-operative results.

Occusal management important in the management of patients with periodontal disease.

1. Evaluate the teeth for mobility of teeth and evaluate for occlusal discrepancies.
2. As needed selective grinding to eliminate:
   a. Premature contacts
   b. Non-working side contacts
   c. Protrusive interferences
3. Occlusal guard - (night guard)
   Usually there is evidence of a history of bruxism and/or signs of attrition.

The role of the periodontist

Guided Tissue Regeneration (GTR)

* Dr. Hong Sleman 1971

Next incisions to release the gingiva on the mesial in order that the flap may slide coronally.

Double papilla flap sutured over the graft over the exposed root.
1996 Guided Tissue Regeneration

1. 44 year old male in good physical health except for periodontitis Stage III Grade C
2. Infra bony defect developed approximately two years following a new crown on tooth #4,6.
3. There was an open interproximal contact with a history of food impaction.

Three walled two surface relatively narrow infrabony defect

Three wall infrabony defects are most likely to regenerate. It is somewhat less predictable when two surfaces are involved.

24-01-1996

Other questions yet to be answered

Why is this defect only on the distal and facial of tooth #4,6?

Why is there no bone loss in the furcation of tooth #4,6?

Why is there no bone loss on the mesial of #4,7?

24-01-1996

1996 GTR therapy

1. Full thickness flap from tooth #4,7 through tooth #4,6

2. Scaling, root planing with hand instruments, ultrasonics and rotary bur (Newmeyer—Brassler).

1996 GTR therapy

1. Demineralized freeze dried bone allograft.


Open interproximal contact

After two years 01-24-96

11-02-94 (lnka)
2018 Guided Tissue Regeneration

1. 59 year old female in good physical health
2. Chief concern: My gums are bleeding around my front tooth [#7]
3. The medical history is positive for arthritis and for periodontitis

Treatment Plan:
1. Disease control Rx. Plaque control technique review, scaling and root planing (AIP Dental Hygiene)
2. Guided Tissue Regeneration Tooth #1,2 (Dr. Lavi 26-09-2018)

Guided Tissue Regeneration Tooth #1,2

26-09-2108

GTR Surgery 26-09-2018

Full thickness flap: left tooth 2-1-1.2 and from 1-1-1.1 palatal
Odontoplasty to expose the palatal root and the palatal groove

GTR Surgery 26-09-2018

Mineralized freeze dried bone and Dymamatrix
collagen membrane palatal

Mineralized freeze dried bone and Dymamatrix
collagen membrane palatal
Tooth #1.1 is fractured and non-treatable.

Immediate implant

Atraumatic extraction

*Berlex System

Bone graft and provisional crown

...and secondarily, the repair of destroyed tissue, the replacement of lost teeth, and the correction of developmental anomalies.

Medium to high smile line

Implant Placed
Provisional Crown

ACCELERATED ORTHODONTIC THERAPY
Courtesy of Dr. Samantha Yamamoto

Accelerated Osteogenic Orthodontics

Examination: Careful screening for the correct patient and requires a thorough explanation
Who: Can apply to both adolescent and adult patients
Purpose: Surgical decortication and bone grafting helps to shorten the duration of orthodontic movement
How: Brackets must be cemented prior to corticotomy procedure and the orthodontic appliance wires must be placed immediately after the corticotomy is done

Careful screening is needed for the correct patient
Applies both adolescent and adult patients with a thorough explanation

Flap surgery is done first for this 17 year-old girl

Surgical decortication and bone grafting
This technique helps to shorten the duration of orthodontic movement
Two month post treatment result

¿Questions still to be answered?

Conclusions

The decision of the best therapy for your patients will depend on the literature and your experiences:

1. The *prognosis* of therapy will be determined following a comprehensive examination and...
2. The patient’s initial attitude and their ability for maintenance with dental hygiene and...
3. The patient’s physical health and mental stamina and...
4. Your continuing education to answer the

Our challenge for the future

- Continue to look for the truth with research.
- Continually remember that we are always "practicing".
- Excellent documentation of our therapies and their results, as we did in school, to evaluate our results, learn from our mistakes and understand our successes.
- Read the literature critically to help to answer our challenges.
- We still have a long journey ahead!