
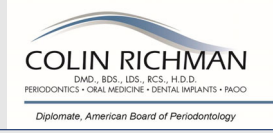



Mitigating - Managing Periodontitis + Peri-Implantitis.
Diagnostics and Therapeutics.
State of the Art - Standard of Care (2024 and beyond).



Teeth Implants

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1

Traditional Flap Surgical Periodontitis Therapy

■ **Longevity study** (in our office)

1. > 20 years, consecutive patients, consistent findings
2. Consistent alternating PMT;
3. Daily use of an inter-dental aid
4. Daily use of stannous fluoride, or a similar agent
5. Gi. <0.4; Pi. < 0.4
6. Intact dentition; no pending treatment (supervised neglect)
7. No mobility or minimal fremitus – occlusal guard, if indicated
8. One providing primary care dentist – One periodontist
9. Patient satisfied with value of care and practice – optimism
10. No major medical or uncontrolled metabolic diseases

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2

Stuff



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3

'Passionately Striving for Excellence in Comprehensive/Interdisciplinary Dental Care'



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4

L.D. Pankey
"The goal of my practice is simply to help my patients retain their teeth all of their lives if possible..... in maximum comfort, function, health and esthetics"

Consequence - enhanced quality of life in the senior years.
Physical, social, emotional – **Literature based.**

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5



"Promoting good health and wellness, healthy, active and **Productive Ageing!**"
Caribbean Senior Games

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6

Appropriate Periodontal Treatment is Successful – 92%

Key words

Journal of Clinical Periodontology
 Key words: Maintenance care – periodontitis
 Accepted for publication August 10, 1983

- Extremely advanced periodontitis
- 14 years
- 1969
- SRP +surgical elimination of deep pockets
- PMT Q 3-6 month
- No age discrimination
- Few sites lost most attachment ?RPPD
- No better recent long-term studies (SRP)

Long-term results for advanced periodontitis

JAN LINDHE AND STURE NYMAN
 Department of Periodontology, Faculty of Odontology, University of Gothenburg, Gothenburg, Sweden

Colin Richman DMD; www.integrateddentalseminars.net

7

JAN EGELBERG

Periodontics
 THE SCIENTIFIC WAY
 Synopses of Human Clinical Studies

THE JOURNAL OF
EVIDENCE-BASED DENTAL PRACTICE

PERIODONTICS
 Throw away journals – opinion based.
 Antimicrobial Host Response Therapy
 Periodontics
 A Modern Way to Manage Disease

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8

Take Home Message – 4 Themes
 'Periodontitis/Peri-implantitis, the Diseases'

Infection - Inflammation
 Multi-rooted teeth
 Plaque control is essential
 Interdental disease



Note Icon Designations

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Achieving predictable, satisfying, consistent 'Big Case Dentistry'



Essential Diagnostic Records

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10

PROGRAM


Examination, Diagnosis and Treatment Planning
Therapeutic Considerations
Disease Control
*Enhanced Root Surface Debridement (ERSD)
and Pocket Reduction Therapy (PRT)*
Maintenance Periodontal/Peri-implant Therapy
Discussion

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Gingivitis (mucositis):
Gingival inflammation without alveolar
bone loss

Periodontitis (peri-implantitis):
Gingival inflammation with
alveolar bone loss



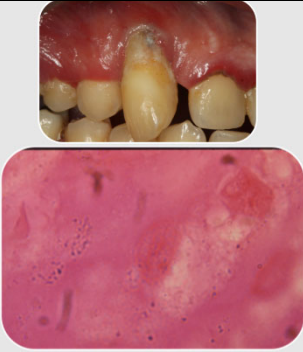
Examination

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12

Theme 1

Periodontitis +
Peri-implantitis
=
Infection
+
Inflammation




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Etiology-Disease Defined as an Infection

Bacterial etiology
Immune response
Bacterial products in tissues
Possible invasion of tissues by bacteria
Destruction of tissues

RUBOR (redness) CALOR (heat)
DOLOR (pain)




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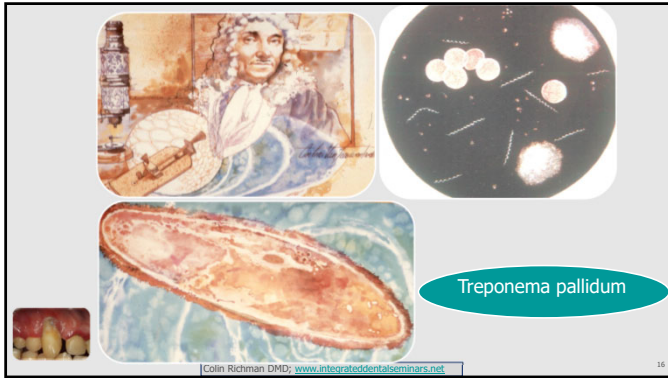
In **1683**, Anthony van Leewenhoek noted that although he cleaned his teeth by rubbing them with salt
“Yet notwithstanding, my teeth are not so cleaned thereby, but what there sticketh on growth between some of my front ones and my grinders “A LITTLE Batter”. (**Plaque**)
He collected this ‘White Matter’, mixed it with rainwater, examined it microscopically and exclaimed
“I then most always saw, with great wonder, that in the said matter there were many “little living animalcules” very prettily moving”
He observed Spirochetes and Motile rods 328 years ago

- Ongoing Spirochetal research-2011

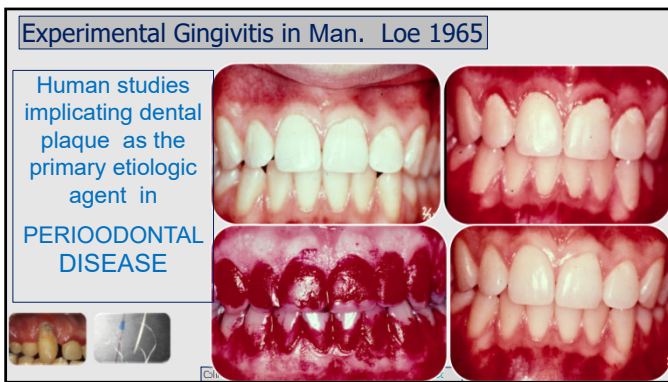


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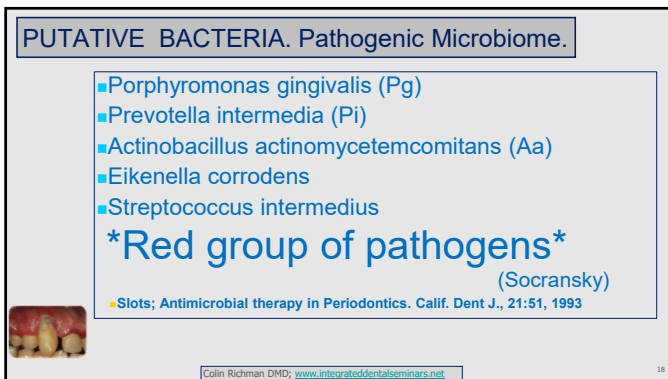
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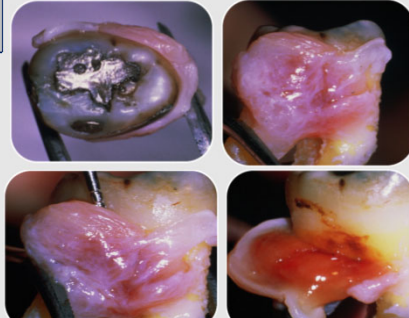


17




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Significance of Probing Depth



7 mm




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19

19

9" x9"
=
81 sq. inches



Generalized Periodontitis Patient-< 81 sq. in.
Tissue invasion - Infection/Inflammation



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20

20

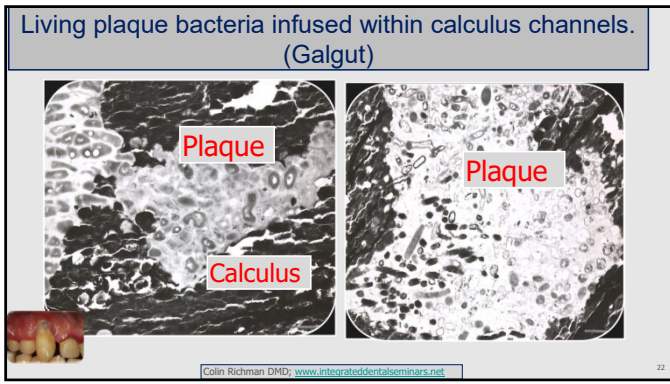


Dob_s

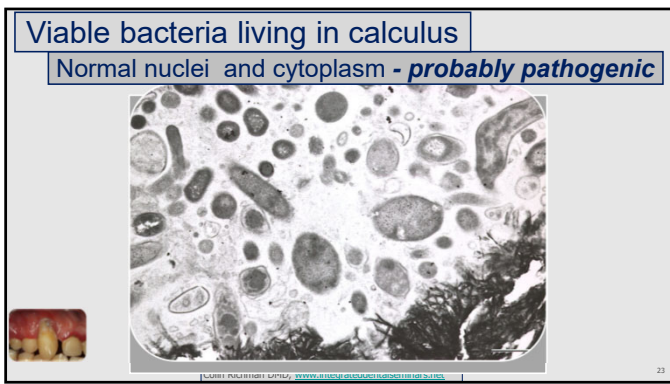
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Perio-Systemic Link/s

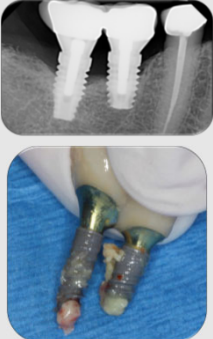
inflammation.
Incriminating data continue to appear!

Heart
Lungs
Vessels
Bacteremia
Pregnancy
Stroke
Dementia
R. arthritis

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...and how about the Perio-Systemic Link for Peri-Implantitis – latest strong data – ALZHEIMERS!



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Theme 2: Multi-rooted teeth



Long-term studies
Hirschfield – 21 years, McFall 12 years
>30 EB Long Term Studies.



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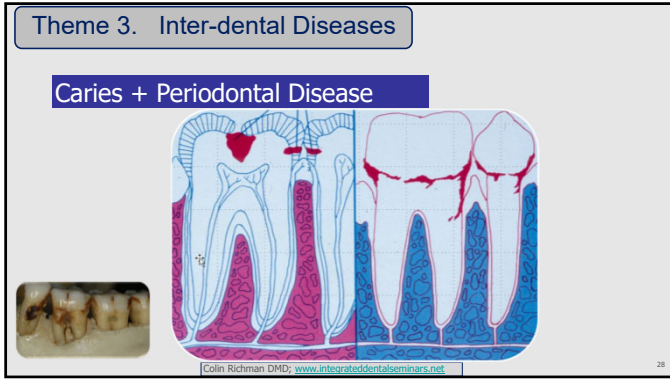
Dead tooth collection



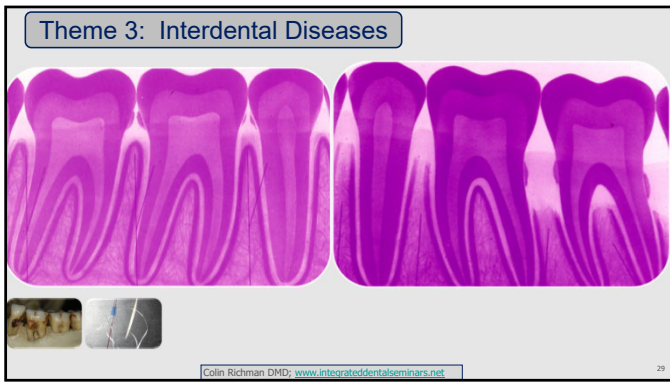
Amputated body parts



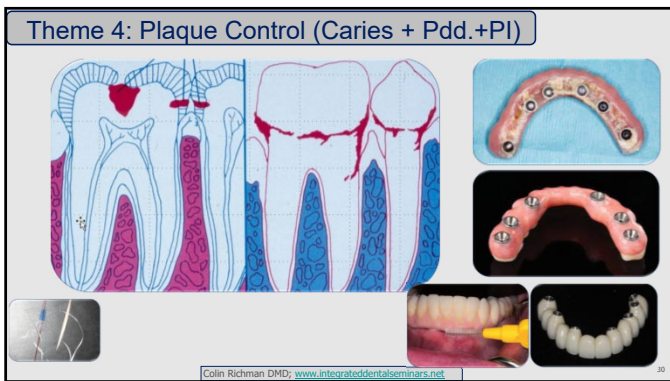
27



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29



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PROGRAM

Examination, Diagnosis, Treatment Planning
Therapeutic Considerations
 Disease Control
*Enhanced Root Surface Debridement (ERSD) and
 Pocket Reduction Therapy (PRT)*
 Maintenance Periodontal/Peri-implant Therapy
 Discussion


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**Insert this narrative into your medical/dental history,
 Warning Signs of Periodontal Disease (www.perio.org).**

Periodontal disease/s are often silent, meaning symptoms may not appear until the disease has progressed to advanced stages.

1. Red, swollen, or tender gums or other pain in your mouth
2. Bleeding while brushing, flossing, or eating hard food
3. Gums that are receding or pulling away from the teeth, causing teeth to look longer than before
4. Loose or separating teeth
5. Sores in your mouth
6. Persistent bad breath
7. A change in the way your teeth or appliances fit together when you bite
8. Share with **physician colleagues**



Examination

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**Biologically Driven Comprehensive/Interdisciplinary
 Dental Care includes**

DATA -Examination, Diagnosis, Etiology, Treatment Planning
Biology, include Perio., Endo, mucosal, etc.
Structural - Teeth 
Myo-functional – Components working in harmony
Esthetic

Kois, Spear, Levine.

Examination


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Pocket Depth vs. Bleeding on Probing

Pocket depth: Historical record of tissue destruction - *periodontal infection + caries*


Bleeding on probing: Dynamic indicator of ongoing *periodontal infection inflammation*



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Periodontal Charting + re-Evaluation (SRP)



BOP

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Floss

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BOP-EIBI. Eastman Interdental Bleeding Index



Lactona Sticks: 215/692-9000

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BoP and tooth survival

1. Norwegian, males, 50-year study
2. Constant BoP. – 70% more attachment loss than healthy sites
3. No BoP. long-term 99.9% survival over 50 years
4. Long term GI > 2, 63.4% survival rate over 50 years.

Schatzle, Loe Lang Anerud J CI P 2004. Clinical course of chronic periodontitis

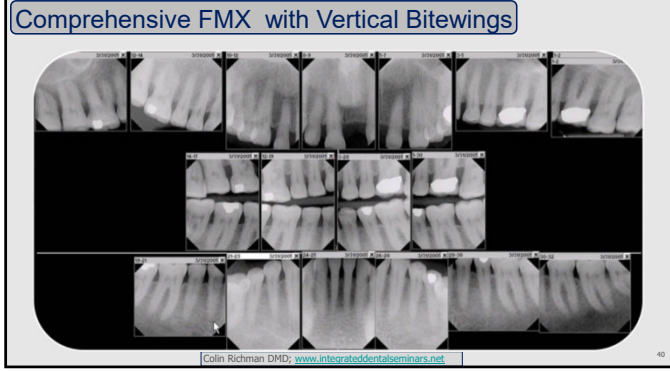
Colin Richman DMD: www.integrateddentalseminars.net Examination 38

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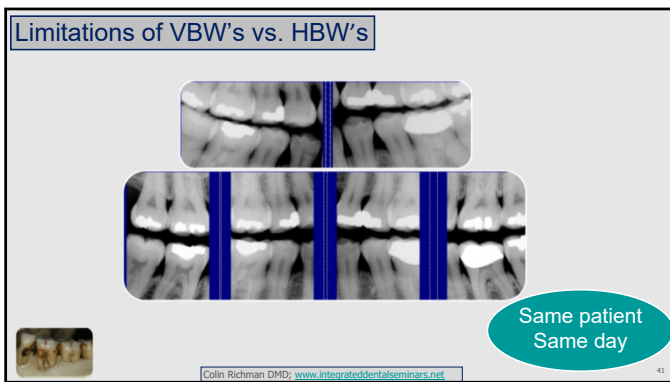
RADIOGRAPHIC EXAMINATION

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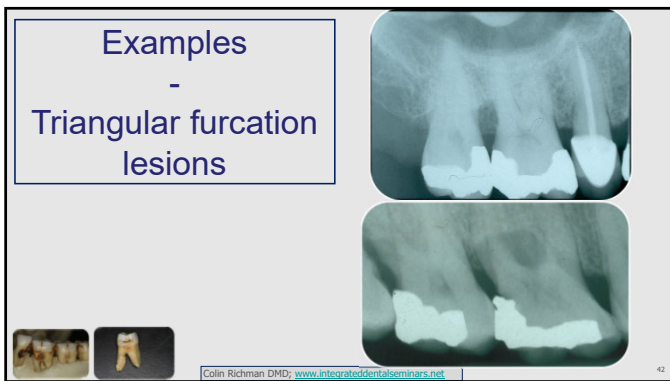
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Furcation defect
radiographic calculus
angular bony defect
furcation defect.

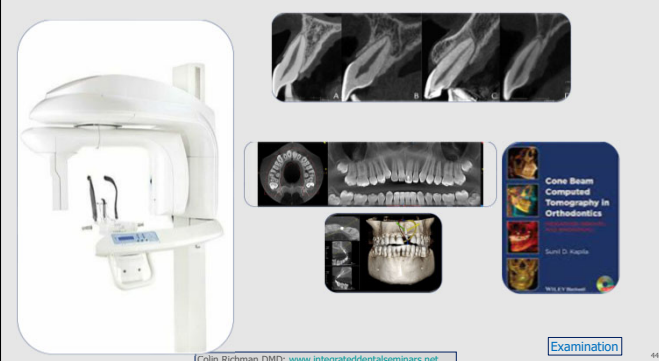
Surgical case.
Pocket Reduction
Therapy



(Anderegg) Comparison of Pre-surgical and Surgical Measurements of Molar Furcations (Anderegg)



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Examination

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■ EXAMINATION

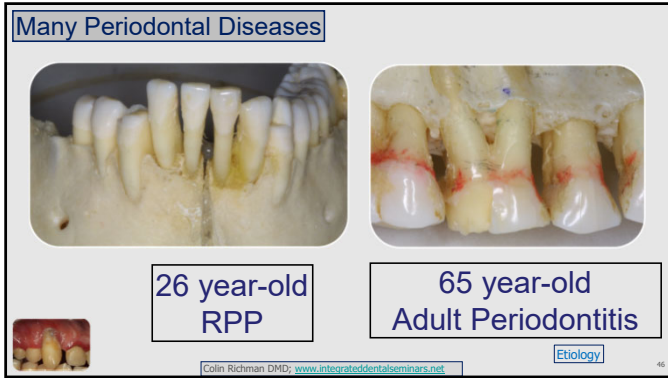
■ **Etiology - DIAGNOSIS**

■ TREATMENT PLAN

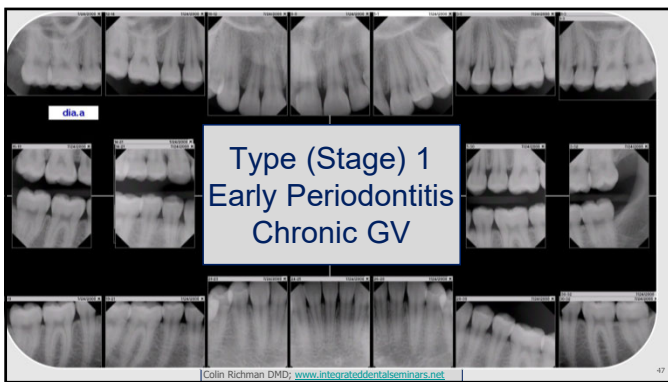


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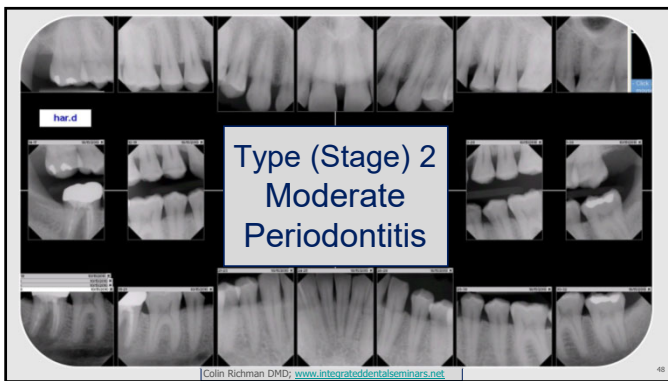
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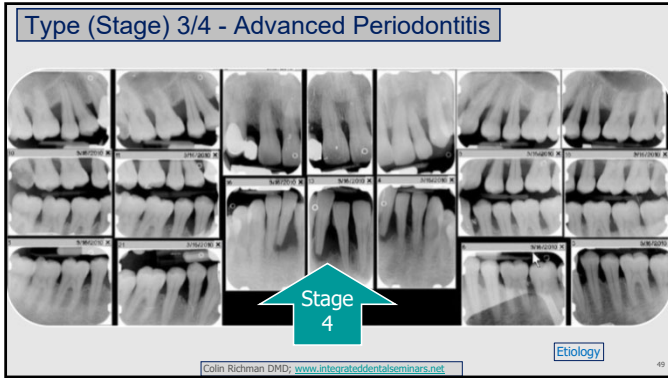
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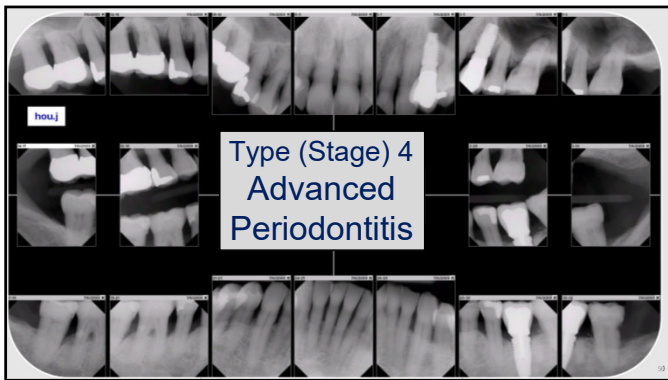
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**EXAMINATION - DIAGNOSIS
TREATMENT PLANNING**

Predictability vs. risk
-
**Short term vs. long term
Treatment Plan in the 4th
Dimension**

	Low	Moderate	High
PERIODONTAL	●	●	●
BIOMECHANICAL	●	●	●
FUNCTIONAL	●	●	●
DENTOFACIAL	●	●	●

Kois: Risk profile

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Treatment Planning

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Histology Periodontitis (NIDR 2016)

Healthy (left panel) and periodontal disease (right panel) gingival tissue taken from biopsies of study participants. Large numbers of immune cells (dark purple) are

Immunology/Chronic diseases.

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Comprehensive Interdisciplinary Dental Care

- Diagnostics**
 - Data, analysis, etiology, pathogenesis, treatment plan, treatment presentation
- Disease control**
 - OHI/Microbial evaluations/Occlusal evaluations
 - SRP/Selected Extractions/Occlusal adjustments
 - Re-evaluation
- Reconstructive Dentistry**
 - Tooth/Teeth, Bridges, partials, crowns, implants
 - Periodontal: pocket reduction, regeneration, normal periodontal architectural configuration
 - Esthetic enhancement
- Phase 3 - Maintenance**
 - Professional and patient

Phase One
Phase Two
Phase Three

Treatment Planning

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Saving teeth versus Implant replacement.

Saving Teeth	Replacement implants.
History of Periodontitis	Highly caries susceptible
Proprioception, retention of some teeth	Crown, endo, FCL with bone removal
Maintaining vertical dimension	Tooth is a liability to a comprehensive reconstruction with DI.

Treatment Planning

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- Treatment Planning – 4 Categories. (Kois, Spear, Levine).
- What type of case is this?
- Must include: Diagnosis, Etiology-Pathogenesis, Management.

- Biology: All non-tooth structures, including periodontium, mucosal surfaces, intra-oral and extra-oral including periodontitis susceptibility.
- Structure: Structural integrity of teeth, including endo and caries susceptibility.
- Myo-function.
- Esthetics.
- Medical.

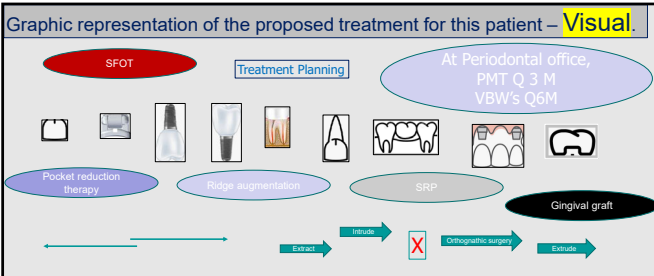


Comprehensive Interdisciplinary Treatment Planning – all dentists, generalists or specialists.

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Graphic representation of the proposed treatment for this patient – **Visual.**



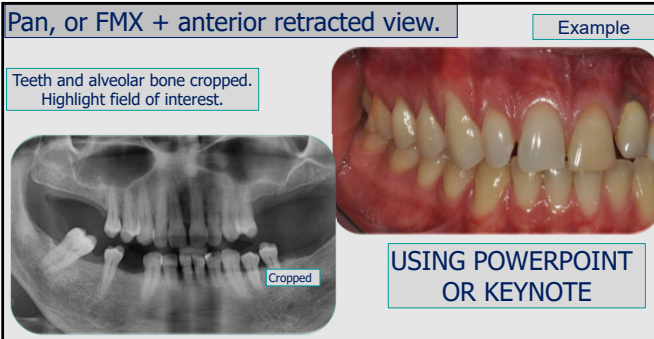
A graphic representation of your proposed treatment plan is valuable for:

- Interdisciplinary case planning and commitment;
- Patient education and communication;
- Insurance company and other third-party communication;
- Records and Medico-legal issues.

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Pan, or FMX + anterior retracted view. Example

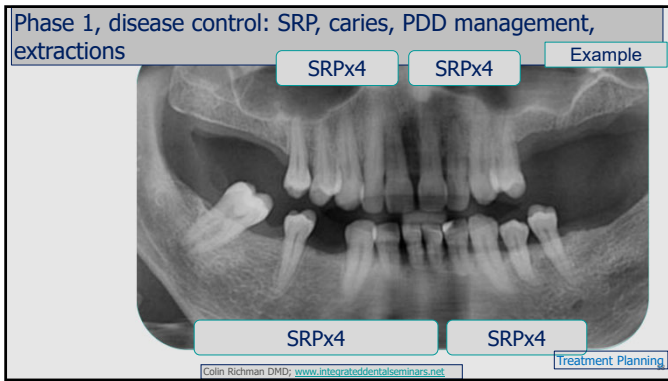
Teeth and alveolar bone cropped. Highlight field of interest.



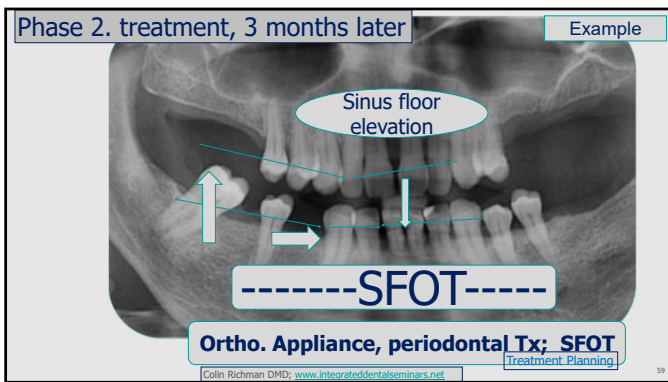
USING POWERPOINT OR KEYNOTE

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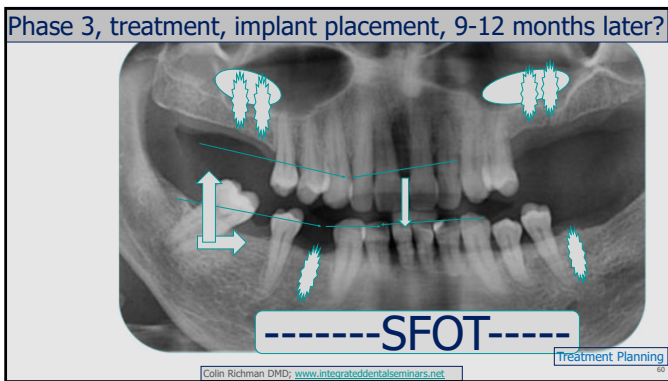
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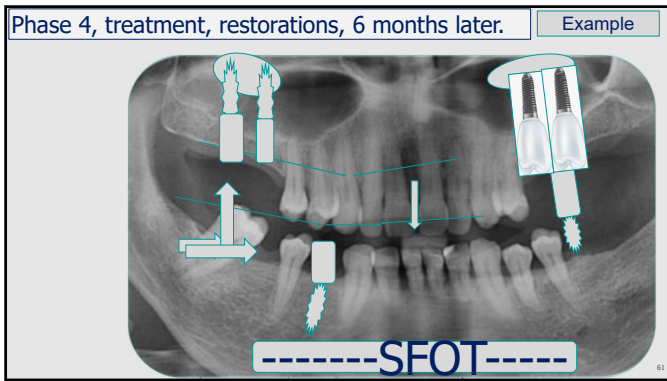
58

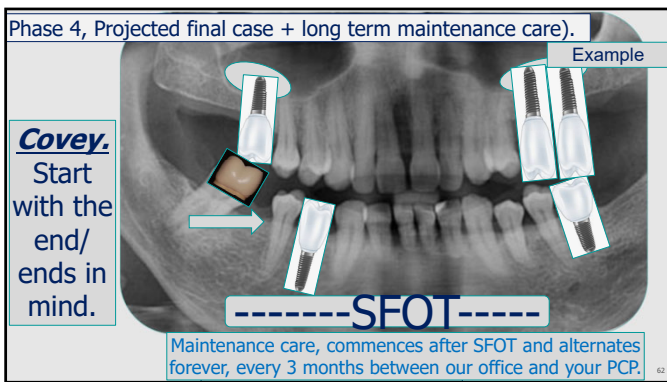


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Eliminate the (biologic) **ETIOLOGY**

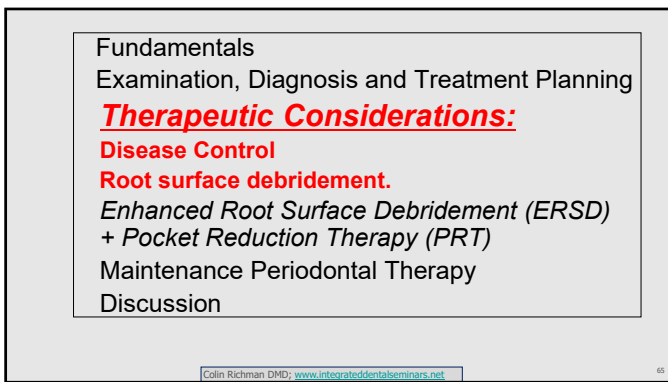
- Plaque
- Calculus
- Occlusal disharmonies
- Occlusal instabilities
- Local factors

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63



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65



66

Richman's Home Care Protocol
5 activities in a 24- hour cycle

WEBSITE

Sonicaire – 2.5 minutes per arch, start lingual
 Braun Oral B – 2.5 mins. per arch, start lingual
 Sensodyne disclosing solution prior to cleaning
 Dental Tape (Glide)
 Interdental Sticks and/appropriate Interdental Brush
 “the biggest thing you can **shove** into the embrasure space, except 6-11” “anticipate embrasure space opening as tissue shrinks”
 Use of gauze or a baby's wash cloth for gingival massage/debridement.

Carwash - Detailing

Disease control

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Enhance oral hygiene efficiency for long-term success.
 Otherwise, dentistry has a **POOR** prognosis!

Same for Implants




Lactona Interdental Sticks/Brushes: 888/522-8662

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Lab. to make cleansable restorations
 Wide embrasure spaces
 Long term predictable success



Teeth + Implants.

Disease control

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Form + Function



Tension: **Esthetics** (Immediate/ short term, wants/needs vs. **Cleansability** (long term predictability) vs. **Food Impaction** (patient)



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Eastman Interdental Bleeding Index - EIBI

Lactona Interdental Sticks/Brushes: KleenTeeth.




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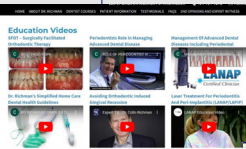
71

Oral hygiene products. Search Amazon.com Richman's preferences, minimal supporting data.

- o Picksters, size 4, Size 5 or Size 6 or
- o TePe Interdental Brushes, Size 5 or 6.
- o Para Pointed Wooden Toothpicks. 12 pack.
- o Baby's washcloth or 4x4 unfilled gauze pads
- o Braun Oral B double headed brush.
- o Oral B Satin Dental Tape or
- o Amazon basics dental flossers, adult.
- o Amazon kids flossers.
- o Paradontax toothpaste and rinse.
- o Para triple headed toothbrush.



Education Videos

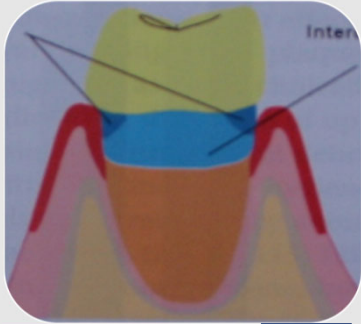


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Tooth brushes
<1.5 mm
Sub-gingival penetration

ID brush/floss
<3.5 mm
Sub-gingival penetration

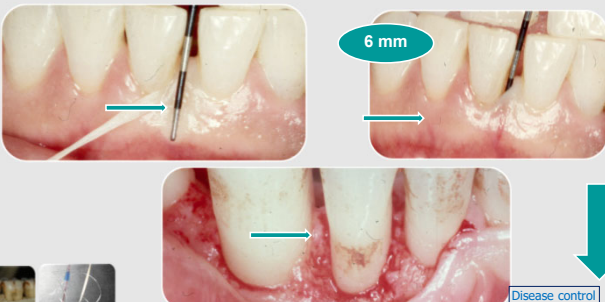


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Floss Limitations

Fractured Calculus. Lee Sheldon DDS




6 mm

Disease control 74

74

Human Learning – Benjamin Franklin



How about an immediate load implant placement into this patient?

Tell me and I forget!
Teach me and I may remember!
Involve me and I Learn!



Disease control 75

75



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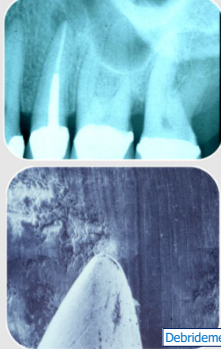
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Limitations of SRP

- Furcation defects
- Over-contoured restorations
- Angular bony defect
- Deep sub-gingival calculus
- Previously burnished calculus




Debridement

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Root Proximity, Physical Access




Debridement

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Time Constraints



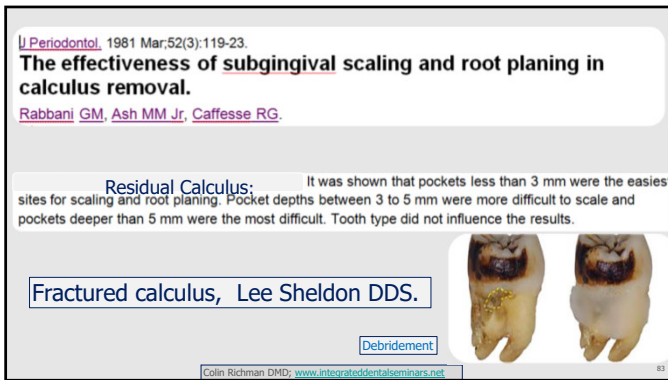
Debridement

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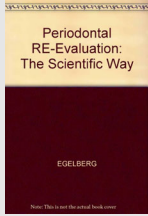
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Periodontal
RE-Evaluation:
The Scientific Way
EGELBERG

Full mouth charting
Probing depths,
Furcations,
Mobility,
BOP
Suppuration

Ideal, 6 weeks.

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85

With appropriate treatment anticipate


Decreased inflammation pain,
tenderness, swelling,
Less mobility
Elimination of halitosis
Enhanced esthetics
Enhanced dental longevity/predictability

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86

6 weeks following efficient SRP

Pockets 4-6 mm – 1 mm reduction
Pockets 7-12 mm – 2 mm reduction
50% due to resolution of gingival edema +
marginal recession
50% due to gain of soft tissue attachment apex
of the pocket



(Short Term Effects of Initial Periodontal Therapy – Hammerlee (91); Ramfjord (80, 91)
Cobb Lit review 2002, 4-6mm pockets -1.3mm -1mm greater for >7mm PD

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The Journal of the American Dental Association

Articles & Issues CE For Authors For Readers For Advertisers ADA Members

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Previous Article July 2013 Volume 141, Issue 7, Pages 508-524 Next Article

Systematic review and meta-analysis on the nonsurgical treatment of chronic periodontitis by means of scaling and root planing with or without adjuncts

LDA ???
Chemo-therapeutics
Arestin, Atridox,
Periochip, Periostat

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Disease Masking: A Hazard of Nonsurgical Periodontal Therapy

Henry Greenwell, DMD, JD, MSD
Associate Professor and Director of Graduate Periodontics, University of Louisville, Louisville, Kentucky

Nabil F. Bissada, DDS, MSD
Professor, Chairman, and Director of Graduate Periodontics, Case Western Reserve University, Cleveland, Ohio

John R. Dodge, DMD, MS
Private Practice, Boulder, Colorado

End Point of Treatment with LDA's?
Debridement

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Study 2

Gain clinical attachment
0.5 mm <50% patients
Atridox - Arestin

>70% >3 mm CAL
>70% of patients
Regenerative Agents

Debridement

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Evidence. Treatment plan in the 4th dimension

Meta analyses
Systematic reviews.

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AAP guidelines: Management of PDD

“If results of initial therapy do not resolve the periodontal condition,
**Enhanced Root Surface Debridement (ERSD) +
Pocket Reduction Therapy (PRT)**
must be considered to correct anatomic defects”

J Perio. Sept 2006. J Perio; Supp to Vol. 71, #5, May 2000

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PROGRAM

Fundamentals
Examination, Diagnosis and Treatment Planning
Therapeutic Considerations
Disease Control
**Enhanced Root Surface Debridement (ERSD)
and Pocket Reduction Therapy (PRT)**
Maintenance Periodontal Therapy
Discussion

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- Type (Grade) 3 and 4 cases, the majority of time, require **advanced periodontal care**, beyond Scaling and Root Planning.
- Objectives, ERSD, PRT

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ERSD -PRT. Predictability

- Hirschfeld L, Wasserman B. tooth loss in 600 treated patients. *Periodontol* 1978;49:225-237
- Fardal O, Johannessen AC, Lindseth GJ. Tooth loss during maintenance following periodontal treatment in a periodontal practice in Norway. *J Clin Periodontol* 2004;31:550-555.
- Dannewitz B, Krieger JK, Hüsing J, Eickholz P. Loss of molars in periodontally treated patients: A 10-year retrospective study. *J Clin Periodontol* 2007;34:436-446.
- Greenstein G, Greenstein B, Cavallaro J. Prerequisite for treatment planning implant dentistry: Periodontal prognostication of compromised teeth. *Compend Contin Educ Dent* 2007;28:436-446; quiz 447, 470.
- Cortellini P, Stalpers G, Mollo A, Tonetti MS. Periodontal regeneration versus extraction and prosthetic replacement of teeth severely compromised by attachment loss to the apex: 5-year results of an ongoing randomized clinical trial. *J Clin Periodontol* 2011;38:915-924.
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- McFall WT Jr. Tooth loss in 100 treated patients with periodontal disease. A long-term study. *J Periodontol* 1982;53:539-549.
- Becker W, Becker BE, Berg LE. Periodontal treatment without maintenance. A retrospective study in 44 patients. *J Periodontol* 1984;55:505-509.
- Miyamoto T, Kumagai T, Lang MS, Nunn JH. Compliance as a prognostic indicator. II. Impact of patient's compliance to the individual tooth survival. *J Periodontol* 2010;81:1280-1288.
- Goldman MJ, Ross IF, Goleiser D. Effect of periodontal therapy on patients maintained for 15 years or longer: A retrospective study. *J Periodontol* 1986; 57:347-353.
- Chambrone LA, Chambrone L. Tooth loss in well-maintained patients with chronic periodontitis during long-term supportive therapy in Brazil. *J Clin Periodontol* 2006;33:759-764.
- Wood WR, Greco GW, McFall WT Jr. Tooth loss in patients with moderate periodontitis after treatment and long-term maintenance care. *J Periodontol* 1989;60:516-520.
- Tonetti MS, Steffen P, Müller-Campanile V, Suvar J, Lang NP. Initial extractions and tooth loss during supportive care in a periodontal population seeking comprehensive care. *J Clin Periodontol* 2000;27:824-831.

Hundreds more on Pubmed or Google Scholar.

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An Evidence-Based Scoring Index to Determine the Periodontal Prognosis on Molars

Preston D, Miller Jr.,* Mark L, McEntire,* Nicole M, Marlow,† and Robert G, Gellin**

816 Molars, first/second
102 patients
Moderate to severe periodontitis

**Age/Smoking/Mobility/A1C
Furcation/Molar type/ PD**

15 - 40 years

J Perio. Feb. 2014; Vol. 85; No2, 214-225

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Miler-McEntire Periodontal Prognosis Index

Your goal is a score of ≤ 5

Tooth	#	#	#	#	Score	15 Year	30 Year
Date					1	98%	94%
Function					2	97%	93%
Diabetes					3	96%	92%
Mobility					4	95%	91%
Probing Depth					5	93%	90%
Molar Type					6	90%	74%
Smoking					7	86%	66%
Age					8	81%	56%
TOTAL					9	73%	45%
15 Year Prognosis					10	67%	33%
30 Year Prognosis					11	53%	22%

Statistically, a score under 4 means you should never lose a tooth to periodontal disease

Smoking increases your chance of losing teeth to periodontal disease by 246%

Function	ATC Levels	Mobility	Probing (mm)	Molar Type	Smoking	Age
None = 0	$< 8 = 0$	None = 0	$< 5 = 0$	Max = 0	Non-smoker = 0	1 - 39 = 0
1 = 1	6.1 - 7.0 = 1	1 = 1	5 - 7 = 1	Max 1st = 1	Smoker = 4	$> 40 = 1$
2 = 2	7.1 - 8.0 = 2	2 = 2	8 - 10 = 2	Max 2nd = 2		
3 = 3	8.1 - 9.0 = 3	3 = 3	$> 10 = 3$			
T = 3 (through 4, through)	$> 9.1 = 4$					

Keys to Success:

- Brush, floss, clean your teeth and tongue daily
- Complete recommended treatment
- Adhere to the recommended maintenance schedule
- Control your blood sugar (if diabetic)
- Stop smoking or at least cut back to under 5/day

Fig. 1.1 MMPP (Miller, Levine, Fava 2017)

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survival rates ranged from 98% to 96%.

middle scores (scores 4-6), the 15-year survival rates ranged from 95% to 90%, and, for molars with higher scores (scores 7-10), the survival rates ranged from 86% to 67%.

An Evidenced-Based Scoring Index to Determine the Periodontal Prognosis on Molars

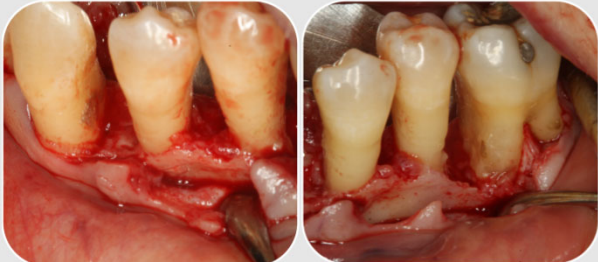
Preston D. Miller Jr.,* Mark L. McEntire,* Nicole M. Marlow,[†] and Robert G. Gellin*

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Fractured calculus following scaling and root planning.

Lee Sheldon DDS.



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ERSD - PRT

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The effectiveness of subgingival scaling and root planing in calculus removal
The effectiveness of subgingival scaling and root planing in plaque removal
Scaling and root planing effectiveness: the effect of root surface access and
The clinical effectiveness of open versus closed scaling and root planing on
Scaling and root planing vs. conservative surgery in the treatment of chronic
The effectiveness of scaling and root planing with curets designed for deep
The effectiveness of scaling and root planing with and without adjunct antibiotic
Scaling and root planing efficacy in subclinical teeth


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< Goooooooooooooogle >
Previous 1 2 3 4 5 6 7 8 9 10 Next

Grade ¾ cases
Radiographic bone loss
Radiographic calculus
Angular (vertical bony defects
Radiographic furcation defects

100


Limitations SRP - Deep Pockets - ERSD



www.integrateddentalseminars.net ERSD -PRT

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Root Surface Access



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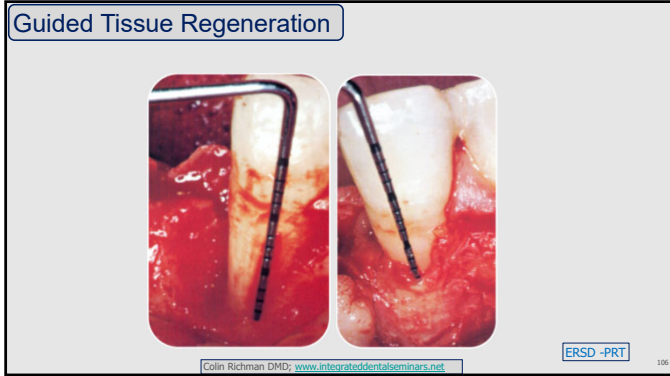
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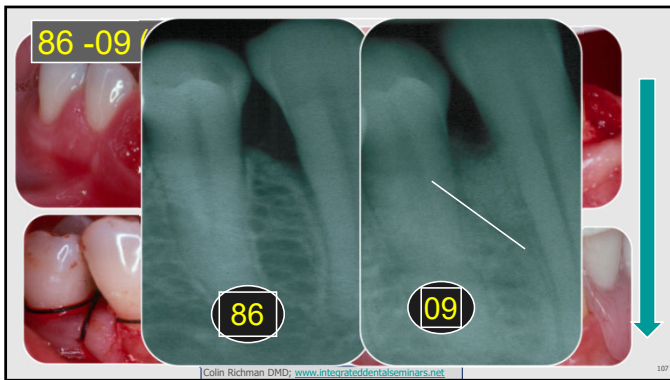
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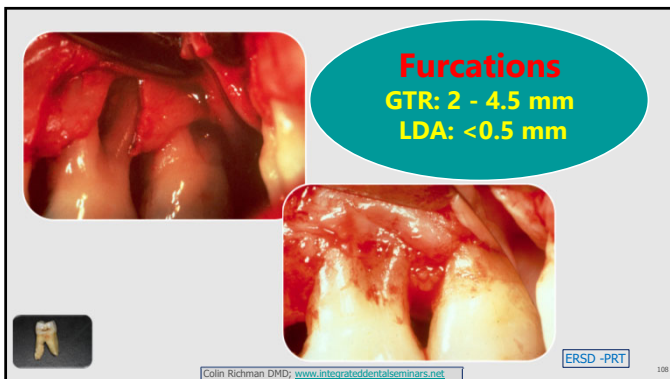
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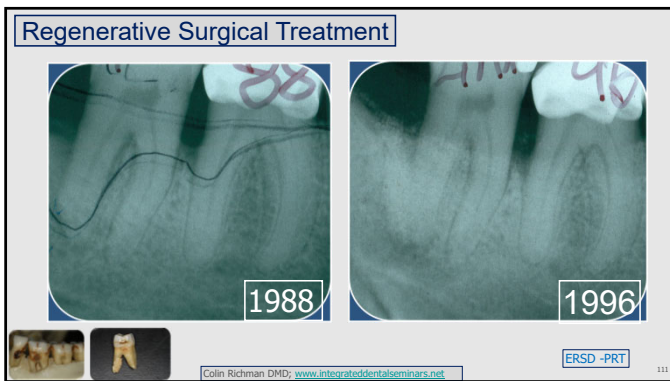
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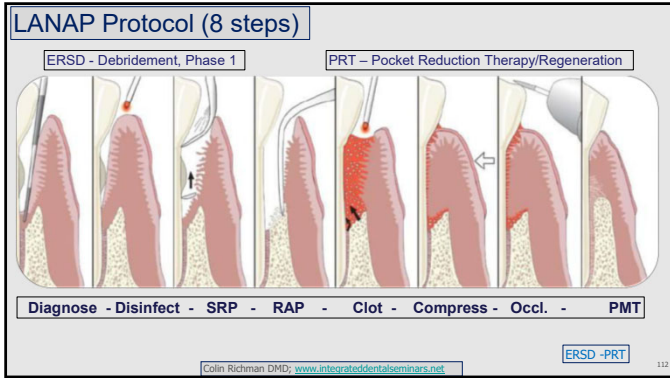
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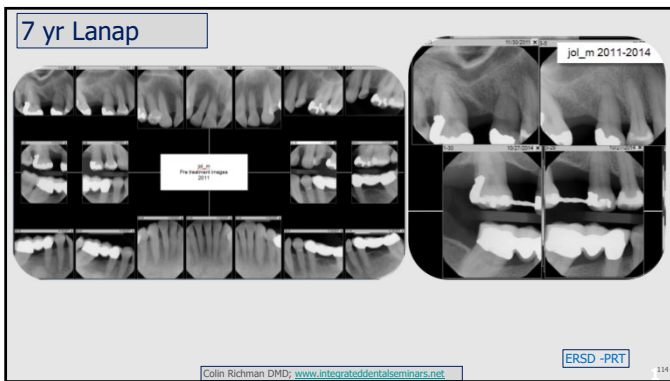
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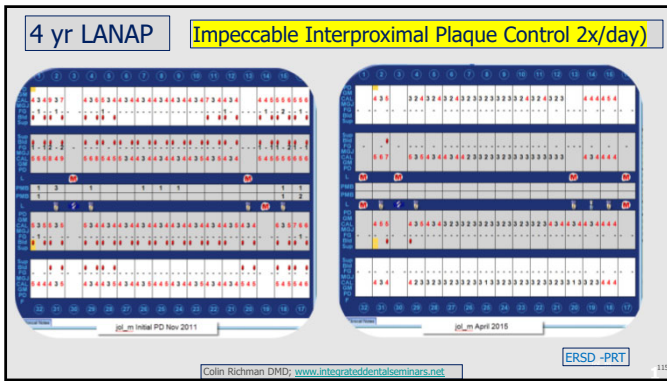
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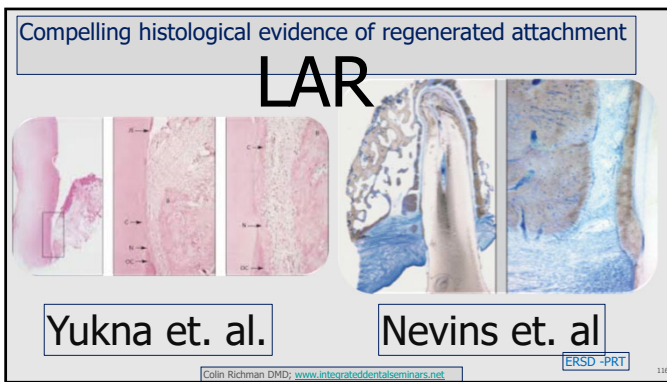
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LASERS IN PERIODONTICS

Effectiveness of LANAP over time as measured by tooth loss

Lloyd V. Tilt, DDS, MS

107 moderate to advanced periodontitis (Type 3/4)
Compared with other long-term definitively treated periodontitis patients
6.7 year follow up
Equivalent results - tooth loss + periodontal stability
Reduced post-operative mobility

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Courtesy Dr Lin Kim, Periodontist, California



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ERSD -PRT

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Horizontal lines for notes.

Relative to Dental Implants.

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Horizontal lines for notes.

Implant Disease Risk Assessment IDRA—a tool for preventing peri-implant disease

<https://doi.org/10.1111/clr.13585>

History of periodontitis

Enter the % of sites with a history of periodontitis. The history of periodontitis can be evaluated by assessing the presence of periodontal bone loss on radiographs, or by measuring periodontitis in a percentage of teeth that have been lost due to periodontitis. The patient may also be able to provide the measure for tooth loss.

Number of sites with BOP

Enter the number of teeth and implant sites with probing depths of 5 mm or more.

PD>5mm

Enter the number of teeth and implant sites with probing depths of 5 mm or more.

% Alveolar bone loss

Enter the % of sites with alveolar bone loss at the worst affected tooth site. The estimation of the loss of alveolar bone is performed in either panoramic radiographs or which the most tooth site affected is given estimated as 1/4 the root length or an oblique radiograph in which the worst site affected is estimated as one. On oblique radiographs 1 mm is considered to equal to 10% bone loss.

Periodontitis susceptibility

Enter the Stage and Grade according to the 2017 World Workshop on Classification of Periodontal Diseases (see reference Table 1A and 1B).

Supportive Periodontal Therapy (SPT)

Enter the compliance and supportive care frequency of the patient. Options are Compliance with SPT, local interval 3 months, local interval 6 months, casual periodics no supportive therapy.

Restorative margin (RM) to bone (mm)

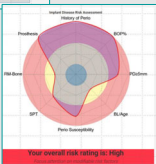
Enter the distance from the restorative margin of the implant supported prosthesis to the bone crest in mm. This is determined from a radiograph made at the time of restoration. If a radiograph of the time of prosthesis delivery is not possible a radiograph should be taken at the time of examination and risk assessment. If there are multiple implant restorations choose the one with the least distance from the restorative margin to the bone crest.

Implant Prosthesis

Enter an assessment of prosthesis-related factors. Options are cleanable gear for both supra- and sub-implant margins, gear fit with supra- and sub-implant margins, occlusal contact and cleanable.



www.ircohe/IDRA/



Your overall risk rating is High

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Horizontal lines for notes.

Laser Assisted Peri Implantitis Procedure - LAPIP

3 MILLION implants are placed in the US each year!!
10% failure rate - 300,000 fixtures going to need LAPIP treatment.

Peer reviewed data indicates the failure rates are much higher—closer to 50%. Peri-mucositis isn't even in the data sets.

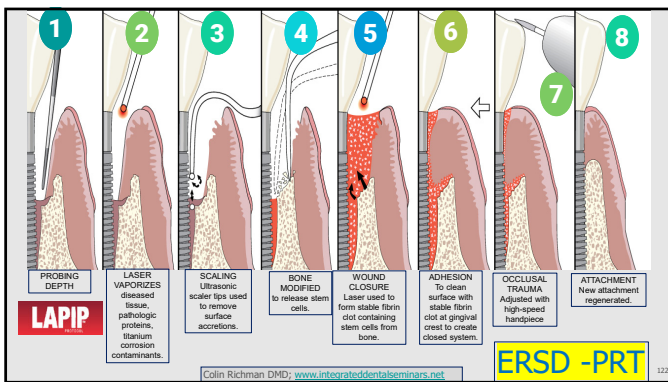


IMHO

**Biology Overrides Technology.
Technology Facilitates Biology.**

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Advantages of LAPIP vs. Flap and Graft (GTR)



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ERSD -PRT

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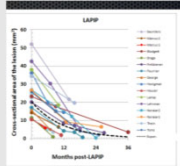
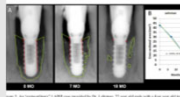
123

The Literature, LAPIP

Pulsed Nd:YAG Laser Treatment for Failing Dental Implants Due to Peri-implantitis.

Diana Nicholson¹, Eric Rhoades², Brenton, OR, Charles Bagg³, Newmarket, NH
 Larry Hochstetler⁴, Colorado Springs, CO, James Frazier⁵, Seaside Beach, SC
 John George⁶, Pittsfield, MA, Robert Gregg, III⁷, Alton, Houston⁸, Gilbert, AZ
 Bruce Blument⁹, Scottsdale, AZ, William Lemp¹⁰, Miami, FL, Neal Lerner¹¹, New York, NY
 Eric Linder¹², Woodliff Lake, NJ, Darwin McCarthy¹³, Tom McCawley¹⁴, Ft. Lauderdale, FL
 Randy McCann¹⁵, Tulsa, OK, Ed Marano¹⁶, Vanley, PA, Kirk Norman¹⁷, Birmingham, IL
 Peter Rabjohn¹⁸, N. Miami Beach, FL, Maurice Sabenz¹⁹, Atlanta, GA
 Steve Sandner²⁰, Harrisburg, VA, Rochelle Seaman²¹, Honolulu, HI
 David Thiel²², Overland Park, KS, Michael Tuma²³, Cincinnati, OH, George Vanna²⁴, Agawam, MA,
 David M. Harari²⁵

1. Institute for Advanced Laser Dentistry, Carlin, CA 95930
 2. Private Dental Practice
 3. Bio-Medical Consultants & Associates, Inc., Pasadena CA 91109



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Laser-Assisted Peri-Implantitis Implant Protocol (LAPIP™)
Retrospective Analysis of 222 patients from a Private Practice

General Dentistry | May 2020

- 94% of implants with peri-implantitis saved with the LAPIP protocol
- 11% required 2 treatments
- 7% required 3 treatments
- 6% of implants were removed

Gary Schwarz, DDS | OMS & David Harris, PhD

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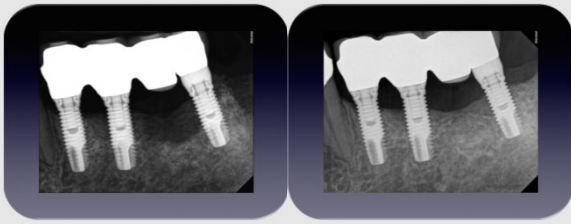
Cases- Strauss

Pre-Op. Bone loss of 7-8mm **Post-Op. Bone GAIN 4-5mm**

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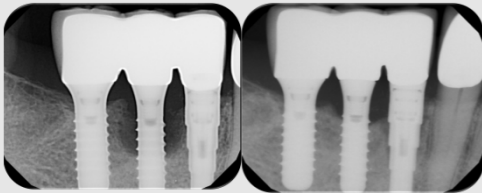
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Dr Neal Lehrman, NY.



127

Dr. Robert Levine

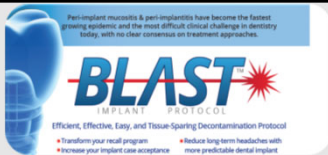


Full mouth LAPIP treated -2014
 FMX 2018, excellent bone healing in the defect
 Patient still smokes - compliant every 3 months.

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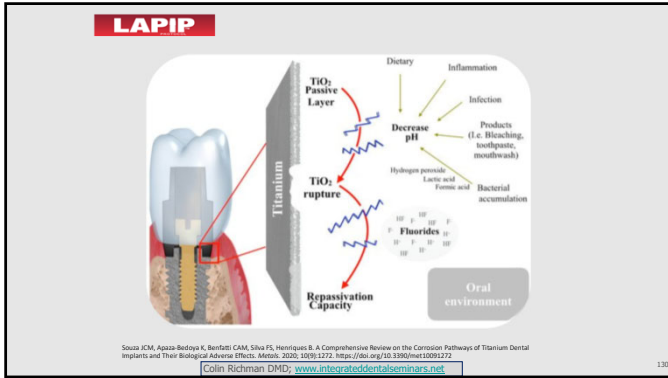


- Benefits of Laser pocket disinfection or LPD to the patient:
- Bacterial reduction (less is better),
- Reduction of inflammation,
- Inducement of collagen formation (fibrosis),
- Activation of growth factors,
- Nd:YAG laser as a possible adjunctive treatment of oral malodor (halitosis)
- The use of an Nd:YAG laser to treat hypersensitive dentin has a long history of investigation, with published reports dating at least from 1993

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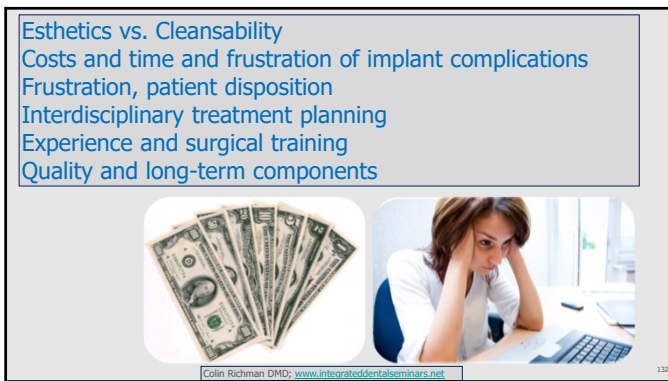
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Supra gingival margins, Titanium or Zirconium to enable removal of cement if final restoration is cemented.



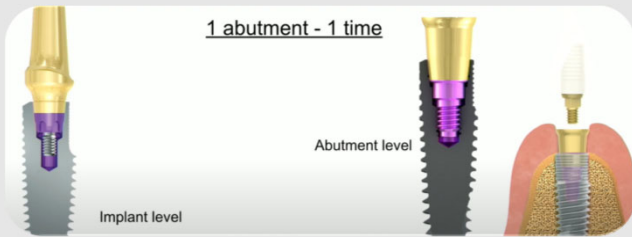
Zero Bone Loss Concepts. Tomos Linkevicius

Colin Richman DMD; www.integrateddentalseminars.net

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One Abutment One time.



Zero Bone Loss Concepts. Tomos Linkevicius

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Ceramic polish ability. Note sub-gingival emergence contours

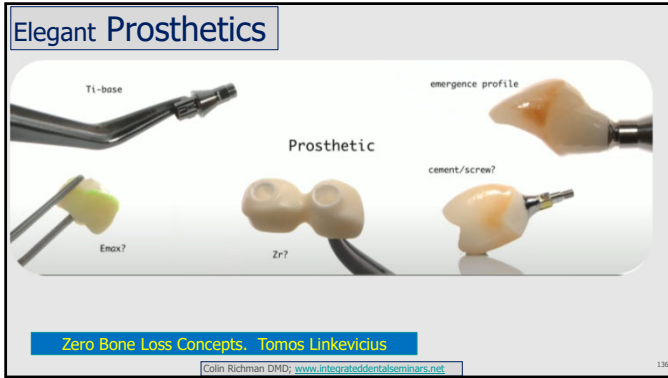


Zero Bone Loss Concepts. Tomos Linkevicius

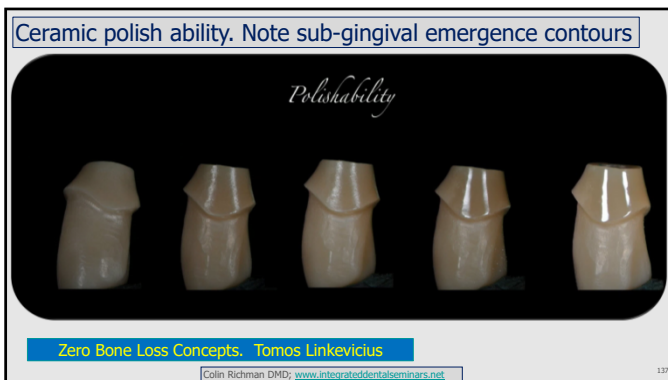
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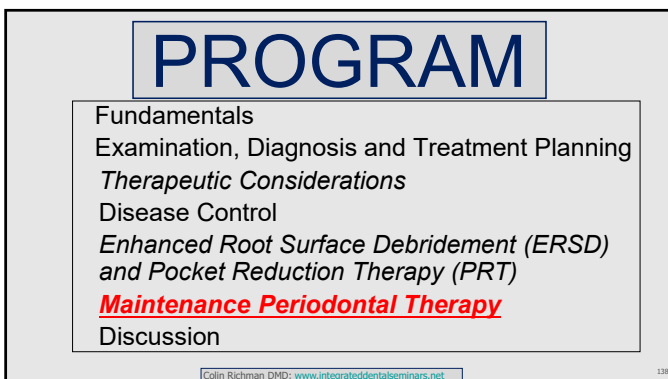
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Periodontal +
Peri-implant
Maintenance
Therapy
(PMT – PIMT)



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I ask myself, "What went wrong?"



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Journal of Clinical Periodontology 1984; 11: 504–514
Key words: Maintenance care – periodontal disease – periodontal therapy – plaque control.
Accepted for publication August 10, 1983



**Long-term maintenance of patients treated
for advanced periodontal disease***

JAN LINDHE AND STURE NYMAN
Department of Periodontology, Faculty of Odontology, University of Gothenburg, Gothenburg, Sweden

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Key words:

- Extremely advanced periodontal disease
- 14 years
- 1969 – no regenerative technologies
- SRP +surgical elimination of pathological pockets
- PMT every 3-6 month***
- No age discrimination for success
- Few sites lost most attachment
- 16 teeth lost in 7 patients (61 treated)

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PMT-PMT

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Paradontax / Listerine Toothpaste and Oral Rinse

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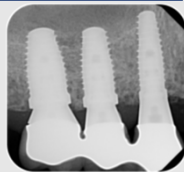
PMT-PMT

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Long-term *implant* prognosis in patients with/without a history of chronic periodontitis, 10-year prospective study

- History of periodontal disease
- With/without smoking
- >risk of biological complications
- Lower survival rates with implants



PMT Essential

Lang et al. Clin Oral Impl Res 2003

PMT-PMT

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STAGING	GRADING	TREATMENT (MAY INCLUDE)
Stage 1. Early Gingivitis, and localized Early Periodontitis	Grade 1. Early to moderate risk, good prognosis predicted for all teeth	OHI, OEA, SRP, Re-eval.
Stage 2. Moderate Localized or Generalized Early to moderate Periodontitis. Dentition mostly intact	Grade 2. Moderate risk, good prognosis predicted for most teeth	OHI, OEA, SRP. Possible Localized PRT and/or Localized LANAP/GTR.
Stage 3. Severe Localized or Generalized Moderate to severe Periodontitis. Dentition mostly intact	Grade 3. High risk. Prognosis may be guarded to poor for some teeth.	OHI, OEA, SRP, Re-eval, PRT, LANAP, GTR
Stage 4. Advanced Localized or Generalized Includes missing teeth and at risk teeth		OHI, OEA, SRP, Re-eval, PRT, LANAP, GTR


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In conclusion

- Fundamentals
- Examination, Diagnosis and Treatment Planning
- Therapeutic Considerations*
- Disease Control
- Enhanced Root Surface Debridement (ERSD) and Pocket Reduction Therapy (PRT)*
- Maintenance Periodontal Therapy
- Discussion

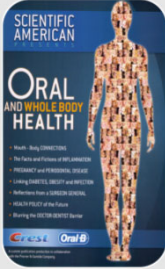
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Take Home Message – 4 Themes
‘Periodontitis, the Disease’

- Infection - Inflammation 
- Multi-rooted teeth 
- Plaque control is essential 
- Interdental disease 

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Perio-Systemic Links



Every organ system in the body is negatively impacted by inflammation. Periodontitis is a major contributor to systemic inflammation. Incriminating data continue to appear!

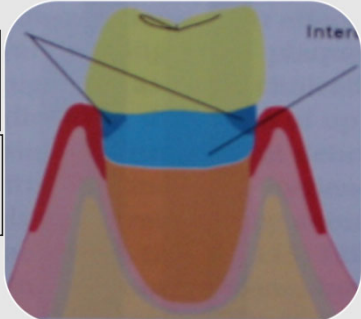
**Heart
Lungs
Vessels
Bacteremia
Pregnancy
Stroke
Brachial Artery
Dementia
R. arthritis**

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**Tooth brushes
<1.5 mm
Sub-gingival penetration**

**ID brush/floss
<3.5 mm
Sub-gingival penetration**

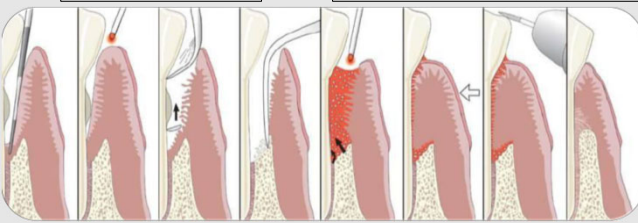


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ERSD - Debridement, Phase 1

PRT - Pocket Reduction Therapy/Regeneration



**Perioscopy
LANAP
Flap surgery**

**LANAP
Flap surgery
Resect/ Regenerate**

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Journal of Clinical Periodontology
Early View
Online Version of Record before inclusion in an issue

ORIGINAL ARTICLE

Wide Restorative Emergence Angle Increases Marginal Bone Loss and Impairs Integrity of the Junctional Epithelium of the Implant Supracrestal Complex: A Preclinical Study

Franz J. Strauss, Jin-Young Park, Jung-Seok Lee, Lucia Schiavon, Rawen Smirani, Sonja Hitz, Jennifer G. M. Chantler, Nikos Mattheos, Ronald Jung, Dieter Bosshart, Jae-Kook Cha, Daniel Thoma

Version of Record online: 09 October 2024

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18. Hirschfeld L, Wasserman B. A long-term survey of tooth loss in 600 treated periodontal patients. *J Periodontol* 1978;49:225-237.

19. Fardal O, Johannessen AC, Linden GJ. Tooth loss during maintenance following periodontal treatment in a periodontal practice in Norway. *J Clin Periodontol* 2004;31:550-555.

20. Dannewitz B, Krieger JK, Hüsing J, Eickholz P. Loss of molars in periodontally treated patients: A

21. Chace R Sr., Low SB. Survival characteristics of periodontally-involved teeth: A 40-year study. *J Periodontol* 1993;64:701-705.

22. McFall WT Jr. Tooth loss in 100 treated patients with periodontal disease. A long-term study. *J Periodontol* 1982;53:39-349.

23. Becker W, Becker BE, Berg LE. Periodontal treatment without maintenance. A retrospective study in 44 patients. *J Periodontol* 1984;55:509-509.

24. Miyamoto T, Kumagai T, Lang MS, Nunn ME. Compliance as a prognostic indicator. II. Impact of patient's compliance to the individual tooth survival. *J Periodontol* 2010;81:1280-1288.

25. Goldman NJ, Ross IF, Goteiner D. Effect of periodontal therapy on patients maintained for 15 years or longer. A retrospective study. *J Periodontol* 1986; 57:347-353.

26. Chambrone LA, Chambrone L. Tooth loss in well-maintained patients with chronic periodontitis during long-term supportive therapy in Brazil. *J Clin Periodontol* 2006;33:759-764.

27. Wood WR, Greco GW, McFall WT Jr. Tooth loss in patients with moderate periodontitis after treatment and long-term maintenance care. *J Periodontol* 1989;60:516-520.

28. Tonetti MS, Steffen P, Muller-Campanile V, Suvan J, Lang NP. Initial extractions and tooth loss during supportive care in a periodontal population seeking comprehensive care. *J Clin Periodontol* 2000;27:824-831

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Courtesy Dr Lin Kim Periodontist, California

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Perio- Plastic Surgery
Surgically Facilitated
Orthodontic
Treatment (SFOT)
Etc. Etc.



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'Passionately Striving for Excellence in
Comprehensive/Interdisciplinary Dental
Care'



Evaluation Sheet

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COLIN RICHMAN
Periodontal Tissue Bio-engineer
Diplomate, American Board of Periodontology

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