
PERIODONTAL MAINTENANCE
SUPPORTIVE THERAPY
SECONDARY PERIODONTAL PREVENTION

•CONTINUOUS PLAQUE ACCUMULATION

- •CONTINUOUS INDIVIDUAL PLAQUE CONTROL
- •CONTINUOUS PROFESSIONAL PLAQUE CONTROL
- •PERIODONTAL MAINTENANCE

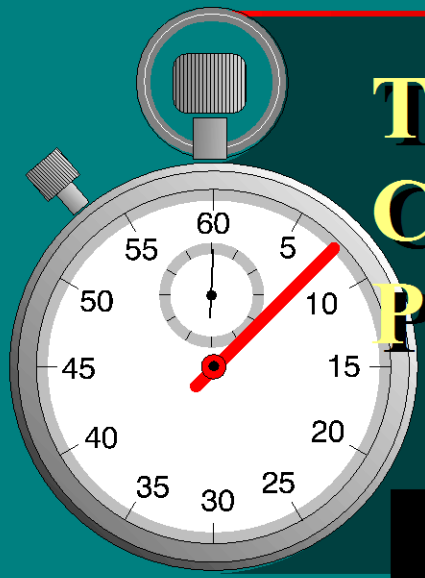
WITHOUT EFFECTIVE PERIODONTAL MAINTENANCE THE PERIODONTAL ATTACHMENT LOSS FURTHER PROGRESSES

THE BASIC PRINCIPLE OF PERIODONTAL MAINTENENCE - SUPPORTIVE THERAPY

- *SUCCESSFUL COMPREHENSIVE PERIODONTAL THERAPY*
- *GOOD PATIENT MOTIVATION*
- *RECALL PROGRAMME FOR 1,5-3-6 MONTHS BASED ON THE PATIENT'S INDIVIDUAL NEED*
- *EACH TIME ISNTRUMENTATION, MOTIVATION AND INSTRUCTION*

TIME SEQUENCE OF THE CAUSE-RELATED PERIODONTAL TREATMENT

- PERIODONTAL DIAGNOSTICS
- PERIODONTAL EMERGENCY
- PROFESSIONAL ORAL HYGIENE
- INDIVIDUAL ORAL HYGIENE
- CAUSE-RELATED PERIODONTAL SURGERY
- CORRECTIVE PERIODONTAL SURGERY
- GUIDED TISSUE REGENERATION
- PERIODONTAL REHABILITATION
- PROSTHODONTIC THERAPY
- PERIODONTAL MAINTENANCE



TIME SEQUENCE OF THE CAUSE-RELATED PERIODONTAL TREATMENT

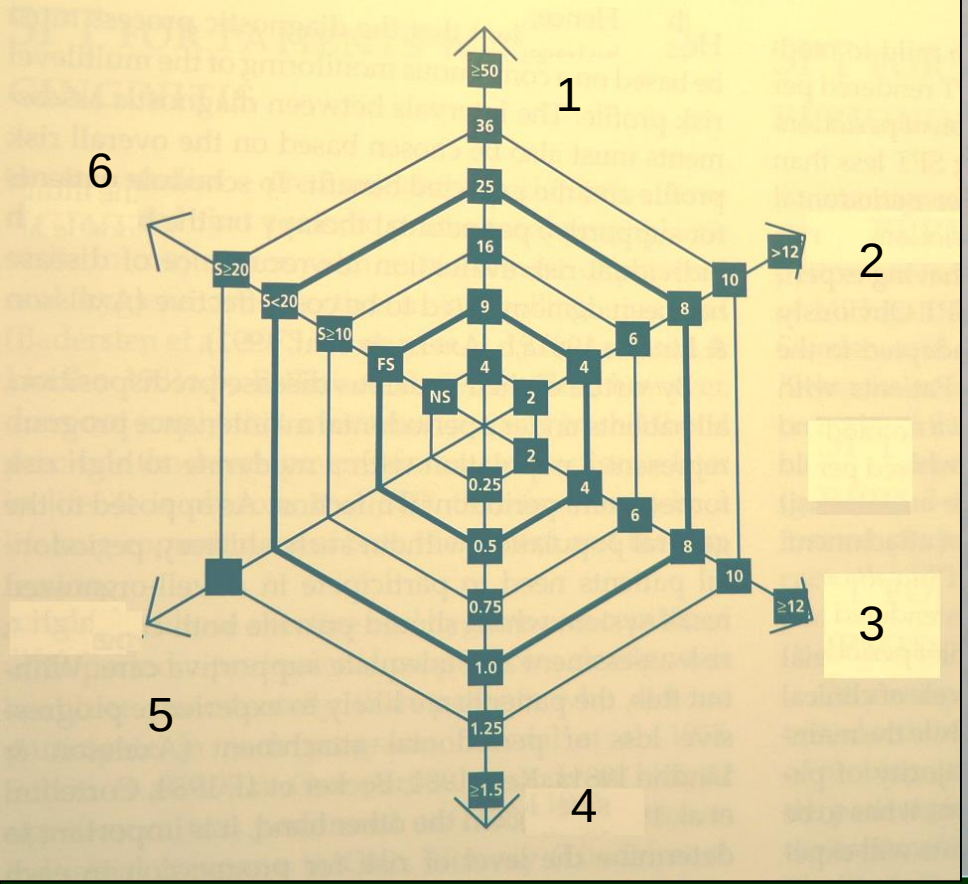
- PERIODONTAL DIAGNOSTICS
- PERIODONTAL EMERGENCY
- PROFESSIONAL ORAL HYGIENE
- INDIVIDUAL ORAL HYGIENE
- CAUSE-RELATED PERIODONTAL SURGERY
- CORRECTIVE PERIODONTAL SURGERY
- GUIDED TISSUE REGENERATION
- PERIODONTAL REHABILITATION
- PROSTHODONTIC THERAPY
- PERIODONTAL MAINTENANCE

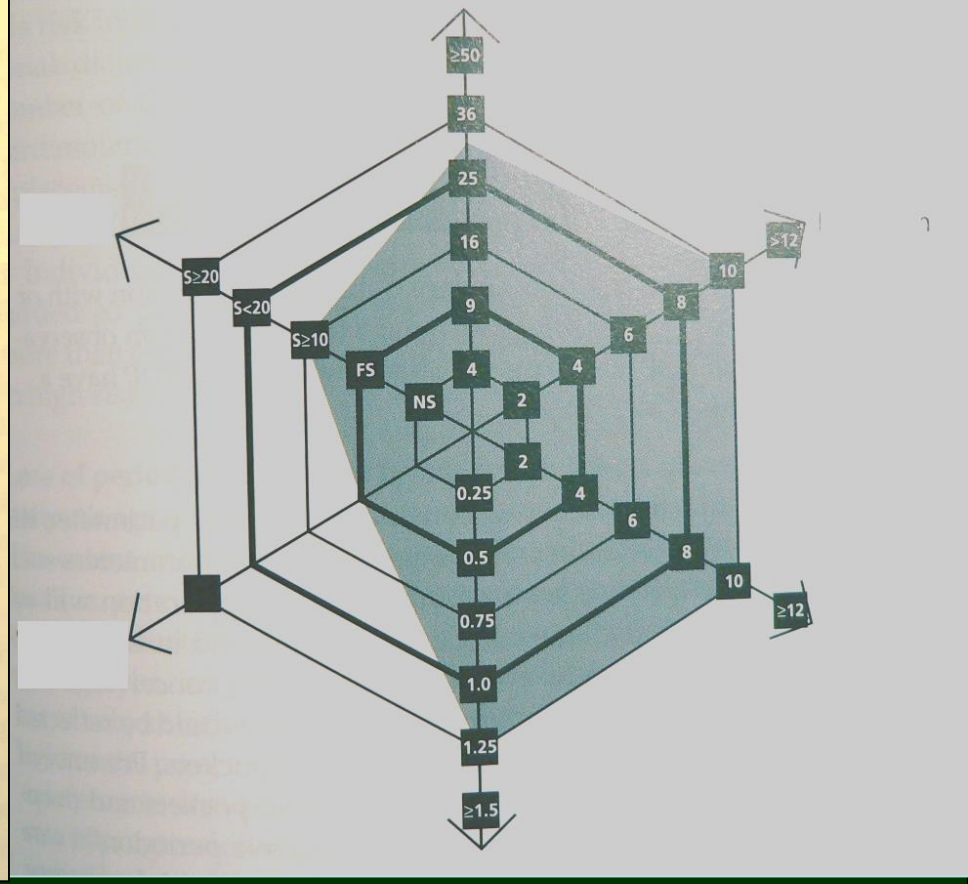
THE MAJOR GOALS OF PERIODONTAL SUPPORTIVE THERAPY

1. TO ANTICIPATE FURTHER ATTACHMENT LOSS
2. TO SUPPORT PERIODONTAL REGENERATION
3. TO PRESERVE HEALTHY PERIODONTAL ENVIRONMENT FOR THE LONG TERM

RISK FACTORS IN THE ETIOLOGY OF DESTRUCTIVE PERIODONTAL DISEASE

- **Oral hygiene**
  Local plaque retentive factors
  Bacterial specificity
  Systemic immune status
  Diabetes mellitus
  Tobacco smoking
  Osteoporosis
  Etnic background
  Age
  Diet
  Genetics
- Stress
  Social-economics





RISK ANALYSIS

1 - BOP

2 – 5mm< number of pockets

3 – number of missing teeth

4 – bone loss/age

5 – systemic/genetic factors

6 – environmental risk factors

THE DUTIES OF PERIODONTAL RECALL

1. REPEATED MOTIVATION
2. SYSTEMIC REGULAR MECHANICAL PROFESSIONAL SCALING AND POLISHING
3. IMMEDIATE THERAPY IF NEEDED

IT IS TO BE CHECKED DURING A RECALL

ORAL HYGIENE

1. PLAQUE - DISCLOSING
2. CALCULUS – SUPRA-AND SUBGINGIVAL
3. IATROGENIC FACTORS – RTG

IT IS TO BE CHECKED DURING A RECALL

PERIODONTAL STATUS:

1. GINGIVITIS – BLEEDING - BOP
2. FURTHER ATTACHMENT LOSS
3. POCKET DEPTH
4. GINGIVAL RECESSION
5. FURCATION INVOLVEMENT
6. MUCOGINGIVALI PROBLEMS

PERIODONTAL STATUS:

1. GINGIVITIS – BLEEDING - BOP
2. FURTHER ATTACHMENT LOSS
3. POCKET DEPTH
4. GINGIVAL RECESSION
5. FURCATION INVOLVEMENT
6. MUCOGINGIVALI PROBLEMS

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

1. individual motivation
2. patient’s skill
3. the speed of plaque accumulation
4. the speed of calculus formation
5. plaque retentive factors
6. anatomic factors
7. toothbrush abuse or damages

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

INDIVIDUAL MOTIVATION
patient's skill
the speed of plaque accumulation
the speed of calculus formation
plaque retentive factors
anatomic factors
toothbrush abuse or damages

REDUCED PREDICTABLE HEALTHY PERIODONTIUM

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
PATIENT'S SKILL
the speed of plaque accumulation
the speed of calculus formation
plaque retentive factors
anatomic factors
toothbrush abuse or damages


97 5 22


97 5 22

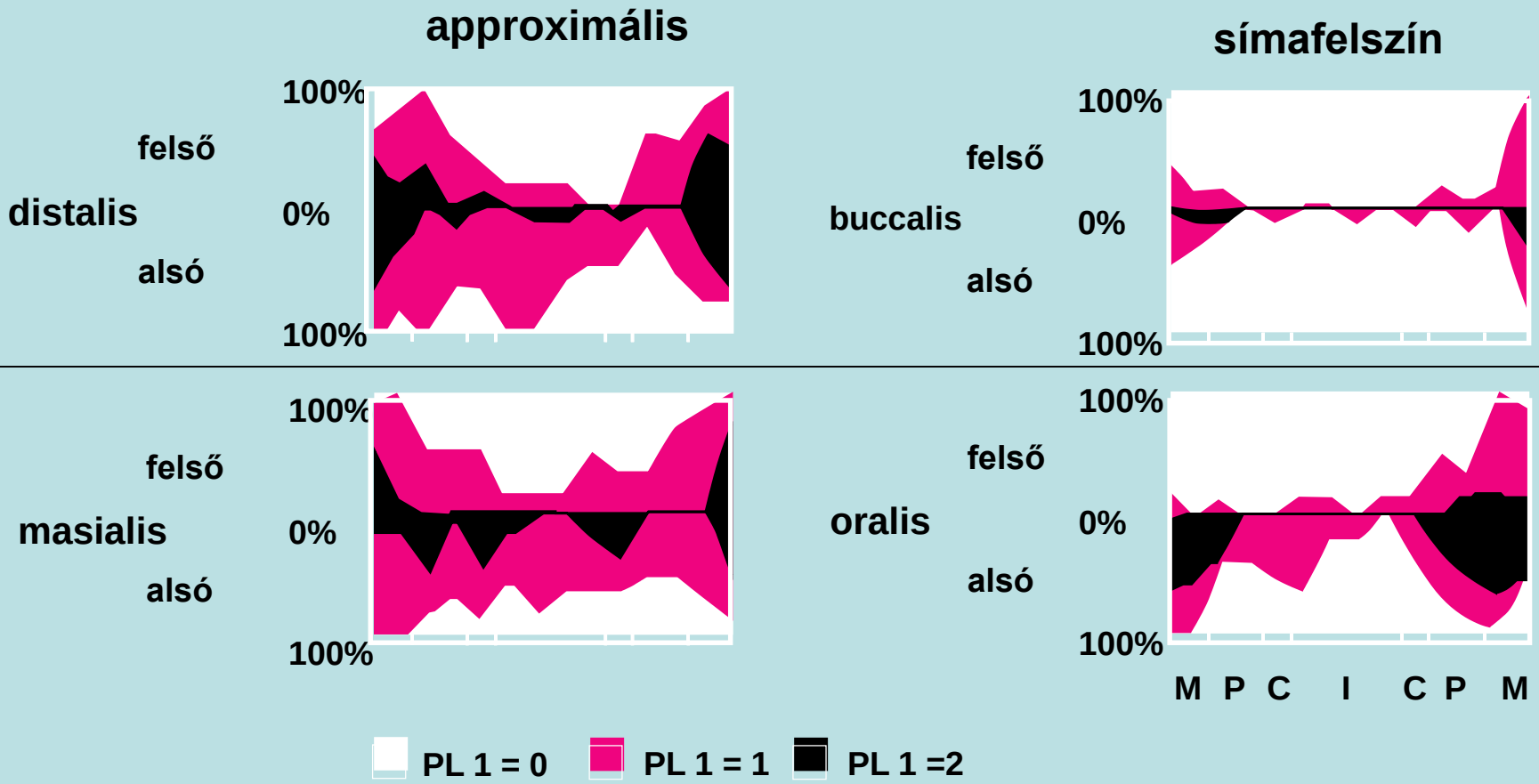

97 5 26

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
patient's skill
THE SPEED OF PLAQUE ACCUMULATION
the speed of calculus formation
plaque retentive factors
anatomic factors
toothbrush abuse or damages

Plaque distribution 12 hours after tooth brushing



Lang et al. 1973

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
patient's skill
the speed of plaque accumulation
THE SPEED OF CALCULUS FORMATION
plaque retentive factors
anatomic factors
toothbrush abuse or damages

WITHOUT ANY PROFESSIONAL ORAL HYGIENE IN THE PAST SEVERAL YEARS

WITHOUT ANY PROFESSIONAL ORAL HYGIENE IN THE PAST SEVERAL YEARS

regular continuous professional oral hygiene

regular continuous professional oral hygiene

1999 -10-07

40 DAYS

1999-11-11

2000 -06-13

2000 -06-13

2000-10-10

regular continuous professional oral hygiene

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
patient's skill
the speed of plaque accumulation
the speed of calculus formation
PLAQUE RETENTIVE FACTORS
anatomic factors
toothbrush abuse or damages

regular continuous professional oral hygiene


99


96 10

regular continuous professional oral hygiene

regular continuous professional oral hygiene

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
patient's skill
the speed of plaque accumulation
the speed of calculus formation
plaque retentive factors
ANATOMIC FACTORS
toothbrush abuse or damages

DENTALIS

MUCOGINGIVALIS


00 6 23


98 5 27


99


99 10 21


99 8 10

THE FREQUENCY OF RECALL IS DETERMINED BY

plaque related factors

individual motivation
patient's skill
the speed of plaque accumulation
the speed of calculus formation
plaque retentive factors
anatomic factors
TOOTHBRUSH ABUSE OR DAMAGES

TOOTH ABRASION

THE FREQUENCY OF RECALL IS DETERMINED BY

PERIODONTAL STATUS RELATED FACTORS

1. SUSCEPTIBILITY TO GINGIVITIS
2. SUSCEPTIBILITY TO ATTACHMENT LOSS
3. THE SPEED OF PROGRESSION
4. GENERAL IMMUNE STATUS
5. PLAQUE BACTERIAL FLORA
6. CARIES ACTIVITY
7. OCCLUSION

THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

SUSCEPTIBILITY TO GINGIVITIS
susceptibility to attachment loss
the speed of progression
general immune status
plaque bacterial flora
caries activity
occlusion




THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
SUSCEPTIBILITY TO ATTACHMENT LOSS
the speed of progression
general immune status
plaque bacterial flora
caries activity
occlusion


Aggressive generalized periodontitis


THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
susceptibility to attachment loss
THE SPEED OF PROGRESSION
general immune status
plaque bacterial flora
caries activity
occlusion

THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
susceptibility to attachment loss
the speed of progression
GENERAL IMMUNE STATUS
plaque bacterial flora
caries activity
occlusion

HIV POSITIVE

THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
susceptibility to attachment loss
the speed of progression
general immune status
PLAQUE BACTERIAL FLORA
caries activity
occlusion

Suspected periodontal pathogens :

Aggregatibacter actinomycetemcomitans,
Tennerella forsythia
Campylobacter rectus,
Eubacterium nodatum,
Fusobacterium nucleatum,
Peptostreptococcus micros,
Porphyromonas gingivalis,
Prevotella intermedia,
Prevotella nigrescans,
Streptococcus intermedius
certain Treponema species

THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
susceptibility to attachment loss
the speed of progression
general immune status
plaque bacterial flora
CARIES ACTIVITY
occlusion


96 10 1


96 10 1

THE FREQUENCY OF RECALL IS DETERMINED BY

periodontal status related factors

susceptibility to gingivitis
susceptibility to attachment loss
the speed of progression
general immune status
plaque bacterial flora
caries activity
OCCLUSION

THE FINAL RESULTS OF RECALL-PROGRAM

- THE CURED AGGRESSIVE PERIODONTITIS CAN BE CONTROLLED ONLY BY 4-6 RECALLS/YEAR
- WITHOUT GOOD INDIVIDUAL ORAL HYGIENE THE RECALL BY ITSELF WILL NOT SUCCEED
- THE PROGNOSIS OF CHRONIC PERIODONTITIS IS BETTER
- THE MAJORITY OF PATIENTS AFTER ACTIVE PHASE OF THERAPY NEVER RETURNS TO CHECK-UP


98 4 29


99 1 27


98 10 27


98 4 29

regular continuous professional oral hygiene

regular continuous professional oral hygiene


Generalized aggressíve periodontitis
1997.9.17
2004 10.17
2010. 01.21.
2010. 01.21.
2010. 01.21.

1974 40 years

1975

1990

1996

2015 82 year

regular continuous professional oral hygiene

Tissue maturation

Tissue maturation


03 10 22


03 10 22


99 10


99 4 21


98 9 28


97 10 14


99 9 28


98


98 5 27


98 5 27


96 10 1


96 11 27


97 10 16


97 10 28


96 10

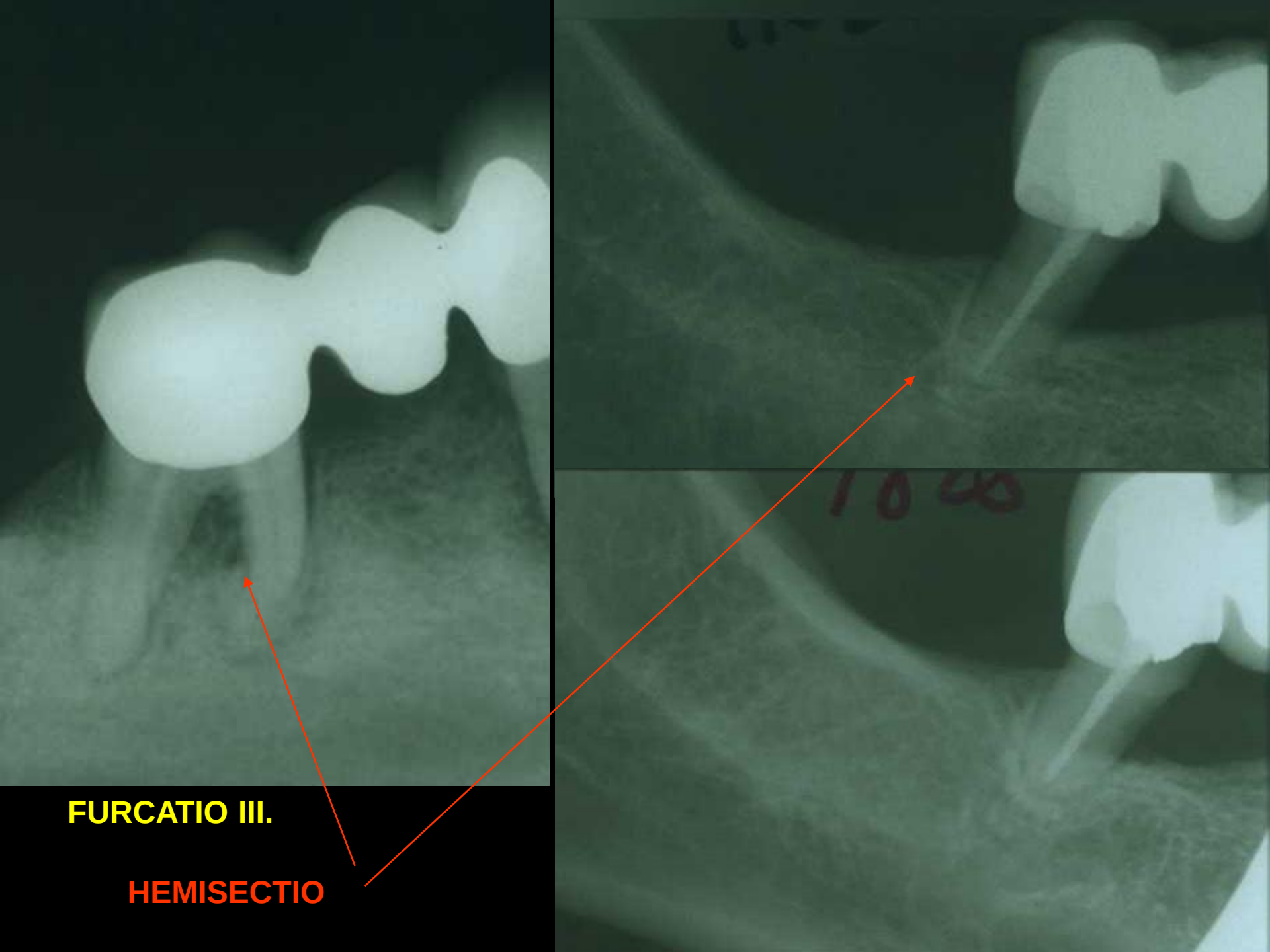

2009. 9.28


2011. 3. 9


2012. 11.8.


2012.12..8


98 9 24



FURCATIO III.

HEMISECTIO



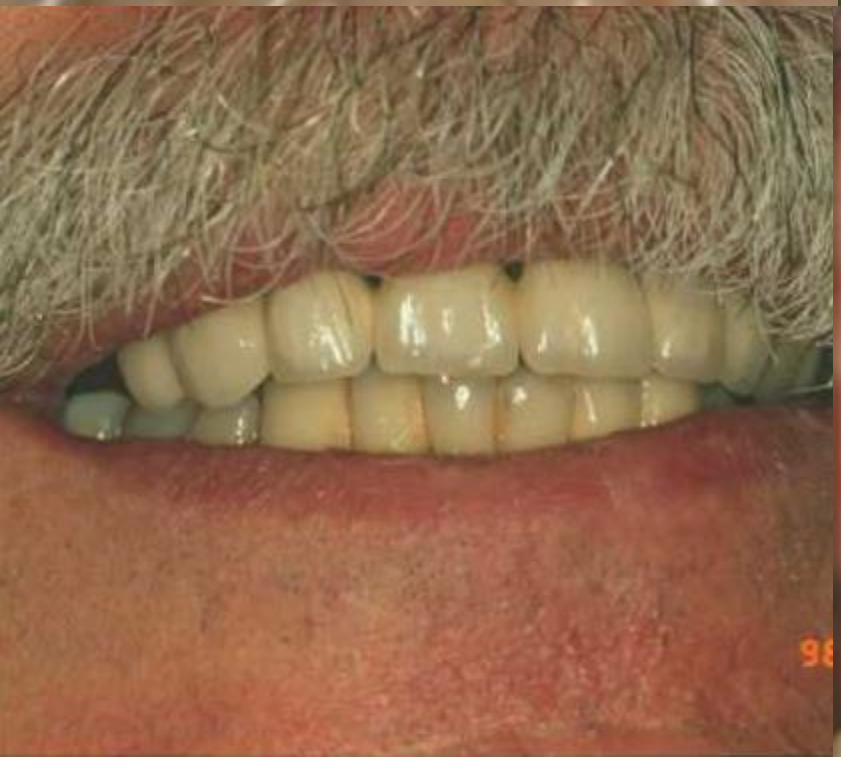
1989

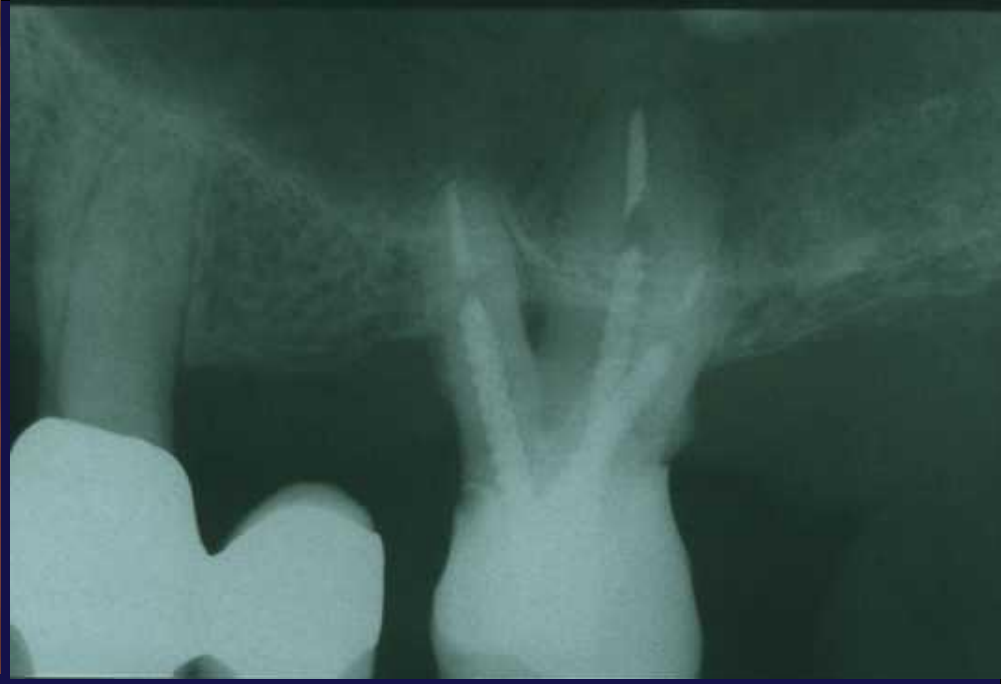
2003


97 11 11


1989


1998





At least four

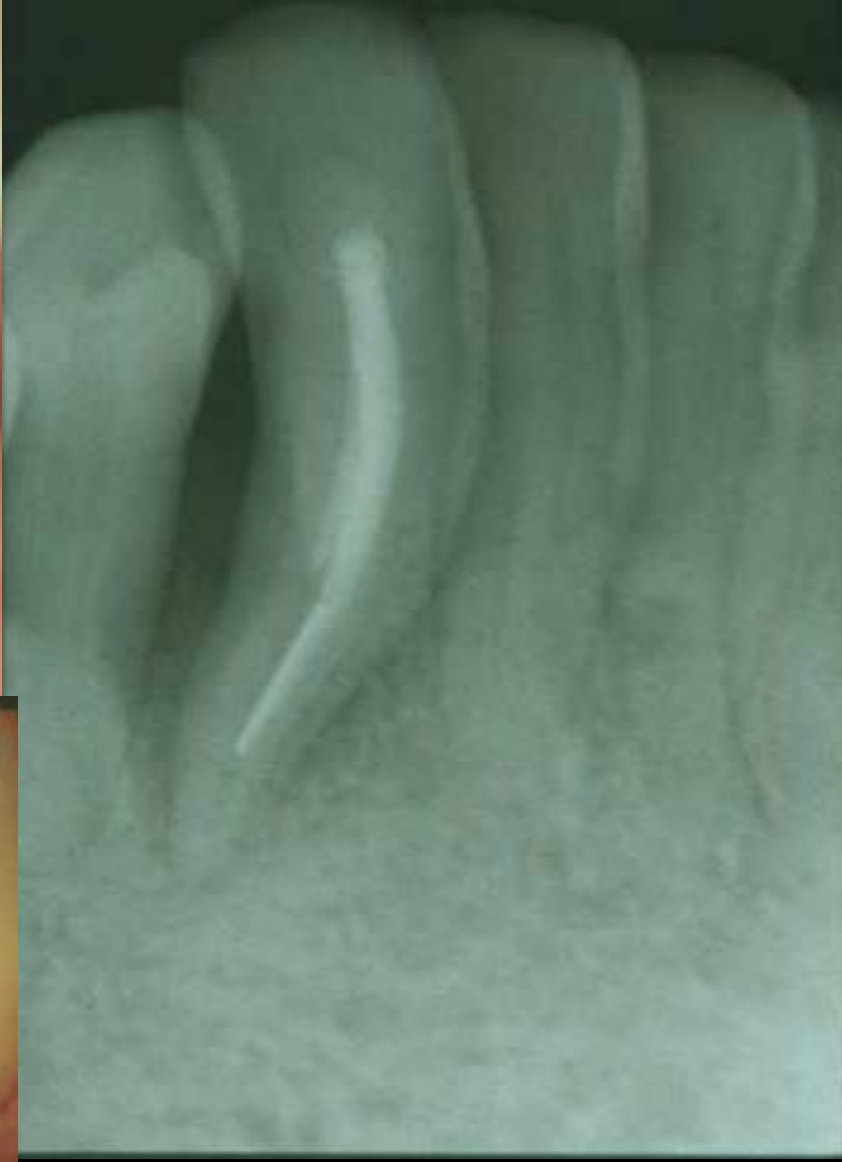
recall /year

1985 – 2016

THE MOST IMPORTATNT GOAL IS THE ANTICIPATE THE ACTIVE OUTBURST OF DISEASE ACTIVITY


96 10 3 1


97 1 29

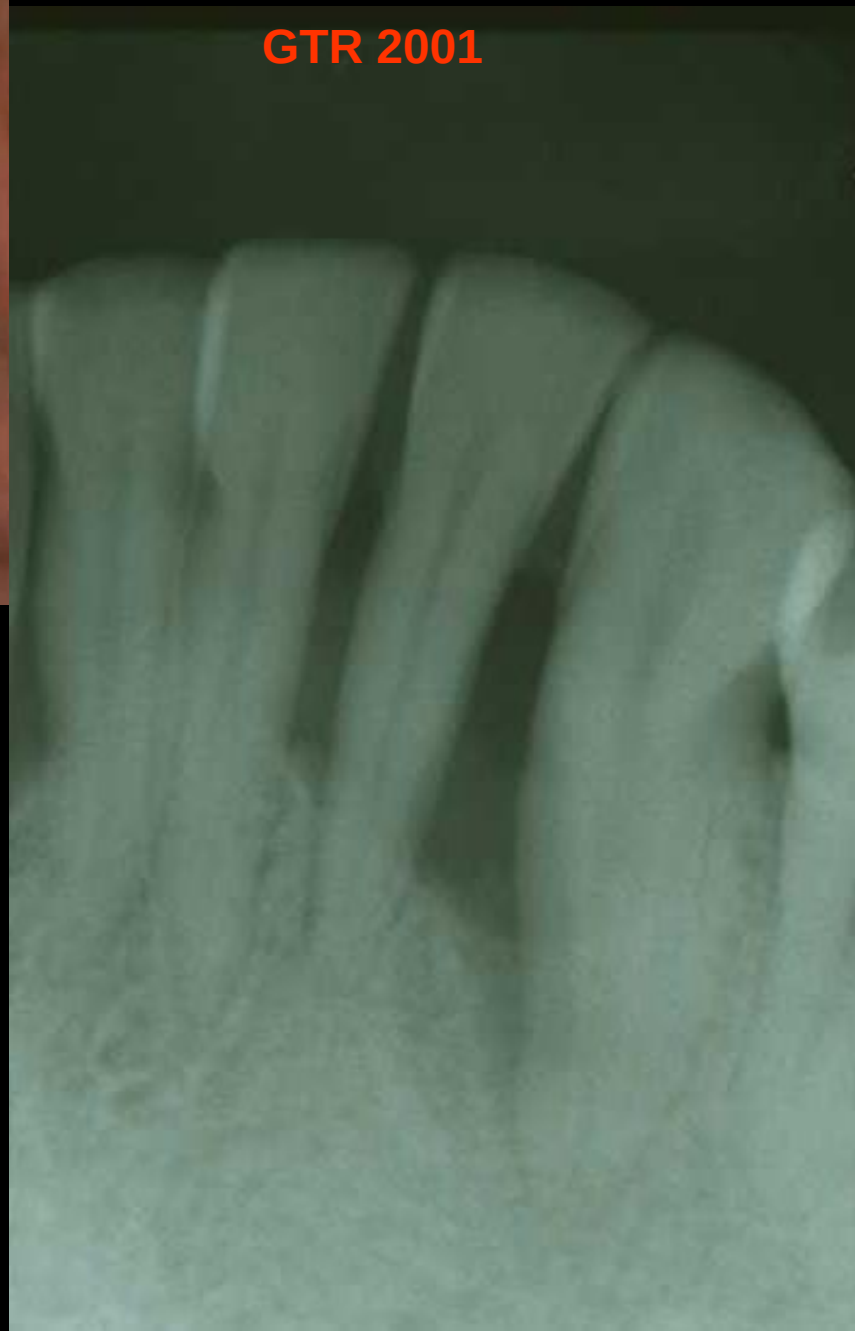


GOOT RESORPTION


98 4 10

GTR 2001

GTR 2001



2004 03 21




1996-12-11

2018. 03.21

1996-12-11

2004. 03.21

1996 10 -31

THE PERIODONTAL MAINTENENCE MIGHT BY COMBINED WITH SEQUENTIAL ACTIVE TREATMENT PHASES

2004-3-21

THE FINAL RESULTS OF RECALL-PROGRAM

- THE CURED AGGRESSIVE PERIODONTITIS CAN BE CONTROLLED ONLY BY 4-6 RECALLS/YEAR
- WITHOUT GOOD INDIVIDUAL ORAL HYGIENE THE RECALL BY ITSELF WILL NOT SUCCEED
- THE PROGNOSIS OF CHRONIC PERIODONTITIS IS BETTER
- THE MAJORITY OF PATIENTS AFTER ACTIVE PHASE OF THERAPY NEVER RETURNS TO CHECK-UP

J Clin Periodontol 2004; 31: 749–757 doi: 10.1111/j.1600-051X.2004.00563.x
Printed in Denmark.

Journal of Clinical Periodontology

The long-term effect of a plaque control program on tooth mortality, caries and periodontal disease in adults

Results after 30 years of maintenance

P. Axelsson[1,2], B. Nyström[2] and J. Lindhe[1]

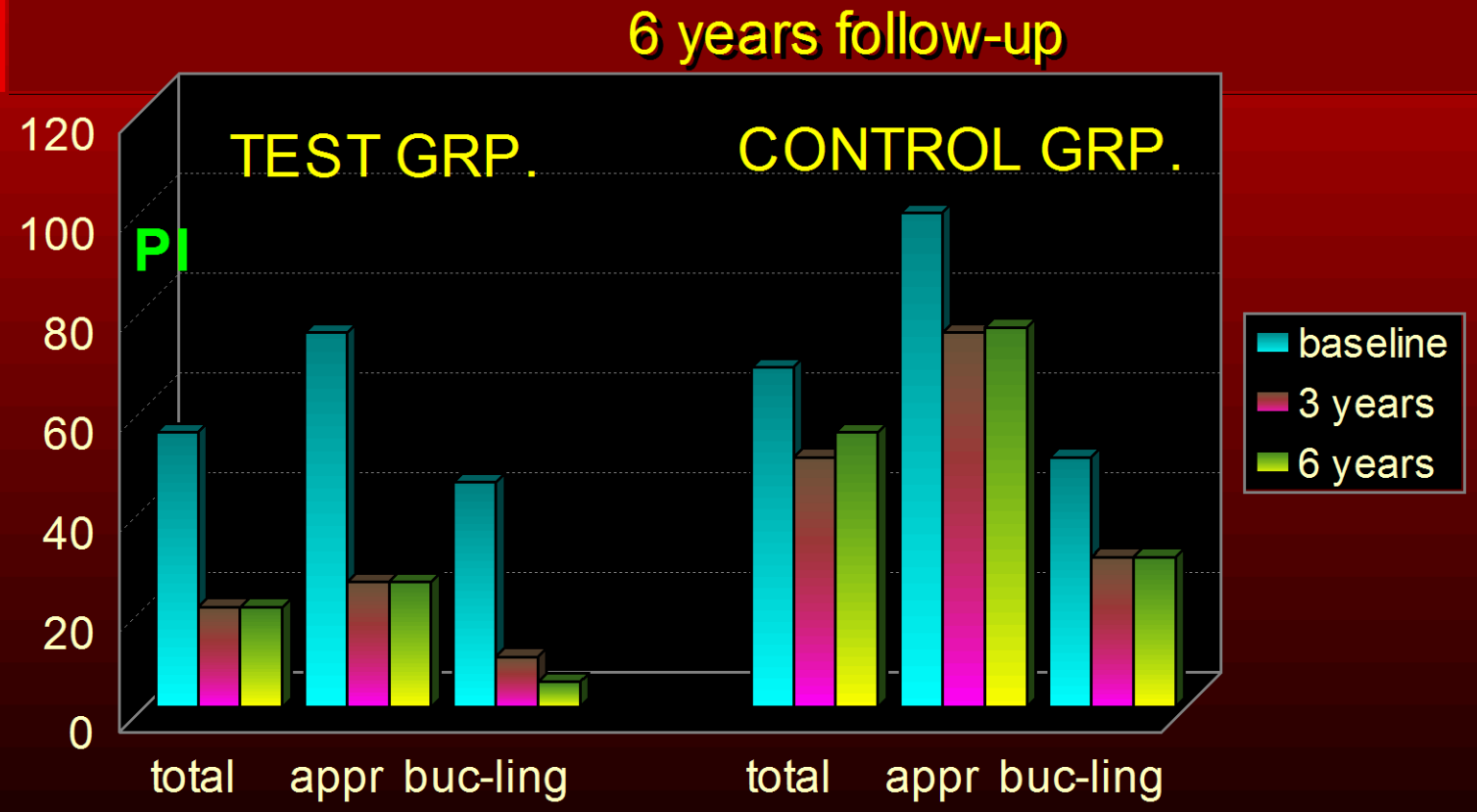
[1]Department of Periodontology, The Sahlgrenska Academy at Göteborg University, Gothenburg, Sweden; [2]Department of Preventive Dentistry, Public Dental Health Service, Karlstad, Sweden

Axelsson P, Nyström B, Lindhe J: The long-term effect of a plaque control program on tooth mortality, caries and periodontal disease in adults. Results after 30 years of maintenance. J Clin Periodontol 2004; 31: 749–757. doi: 10.1111/j.1600-051X. 2004.00563.x. © Blackwell Munksgaard, 2004.

Goal

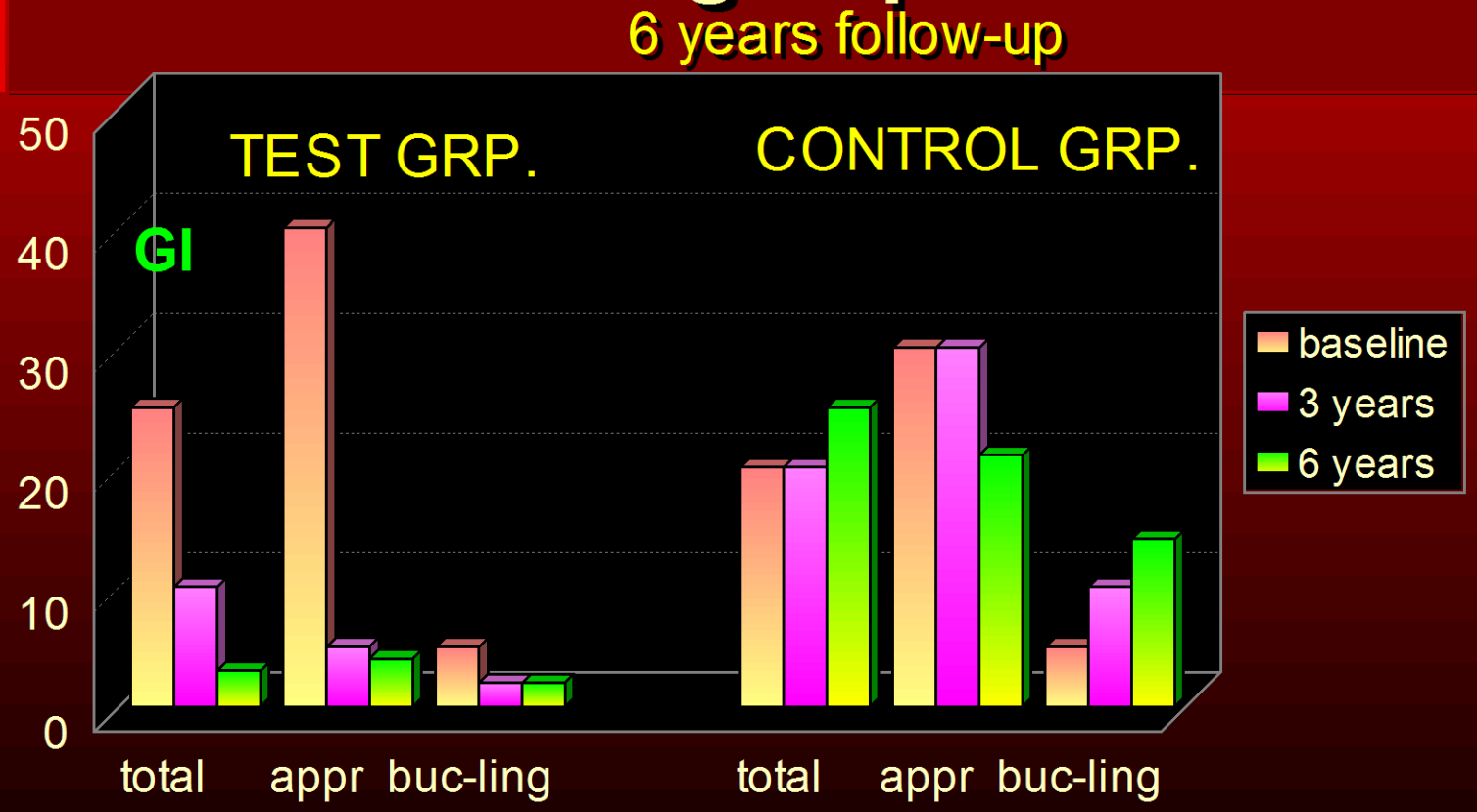
- 500 persons
- Follow-up 1972 and 2002,
- 51–65 years at baseline

ORAL HYGIENE IN THE MONITORED AND NON-MONITORED GROUPS



Axelsson & Linde J. Clin. Perio 1981

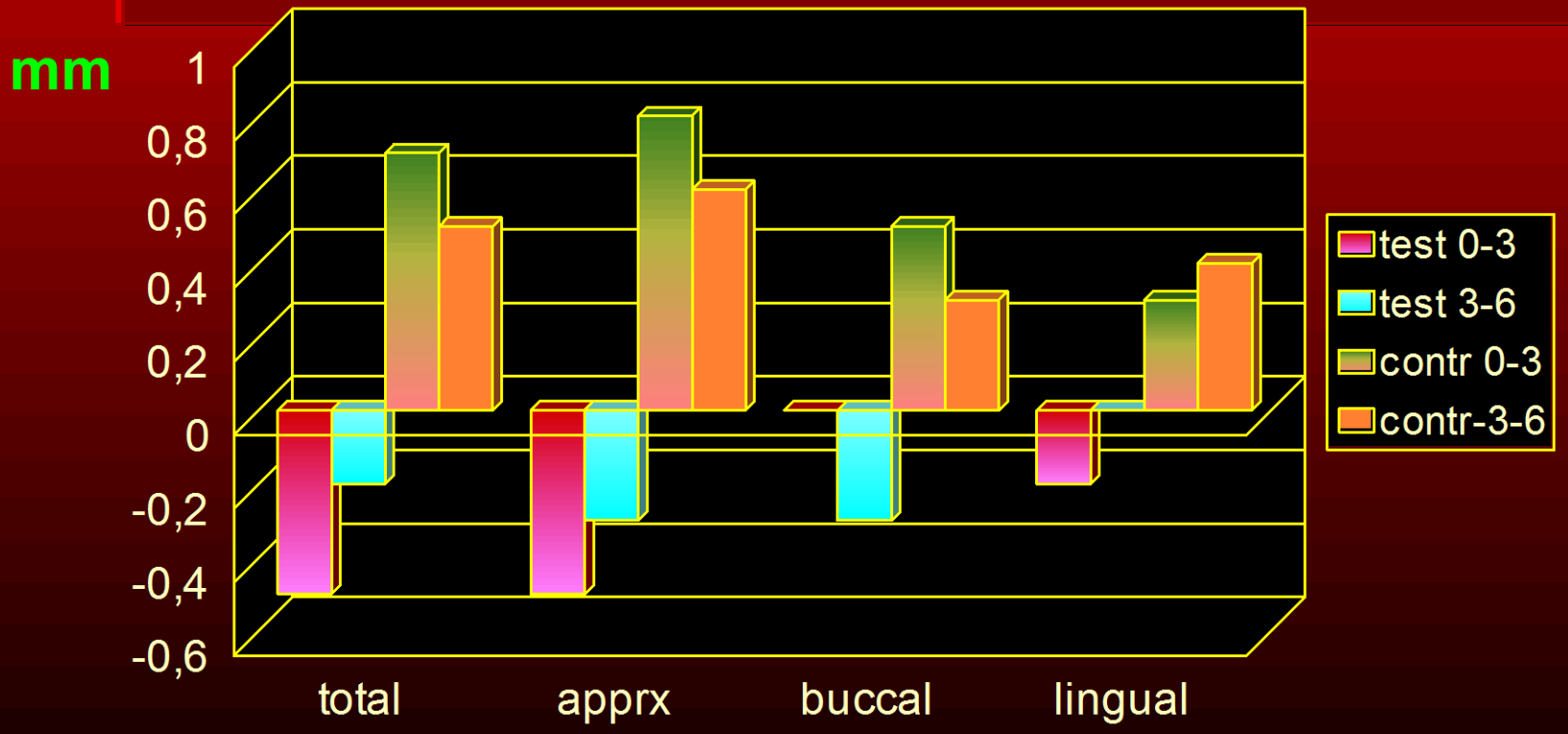
Gingivitis in the monitored and non-monitored groups



Axelsson & Linde J. Clin. Perio 1981

MEAN ATTACHMENT LOSS IN THE MONITORED AND NON-MONITORED GROUPS

6 YEARS FOLLOW-UP



Axelson & Lindhe J. Clin. Perio 1981

Table 1. Number of subjects in the three age groups

	Age (1972) (years)	1972	1987	2002
Group 1	20–35	156	137	133
Group 2	36–50	134	116	100
Group 3	51–65	85	64	24
All		375	317	257

Table 2. Reasons for "dropout"

Group	Died	Moved	Lack of interest	Total
1	2	19	2	23
2	7	24	3	34
3	40	18	3	61
All	49	61	8	118

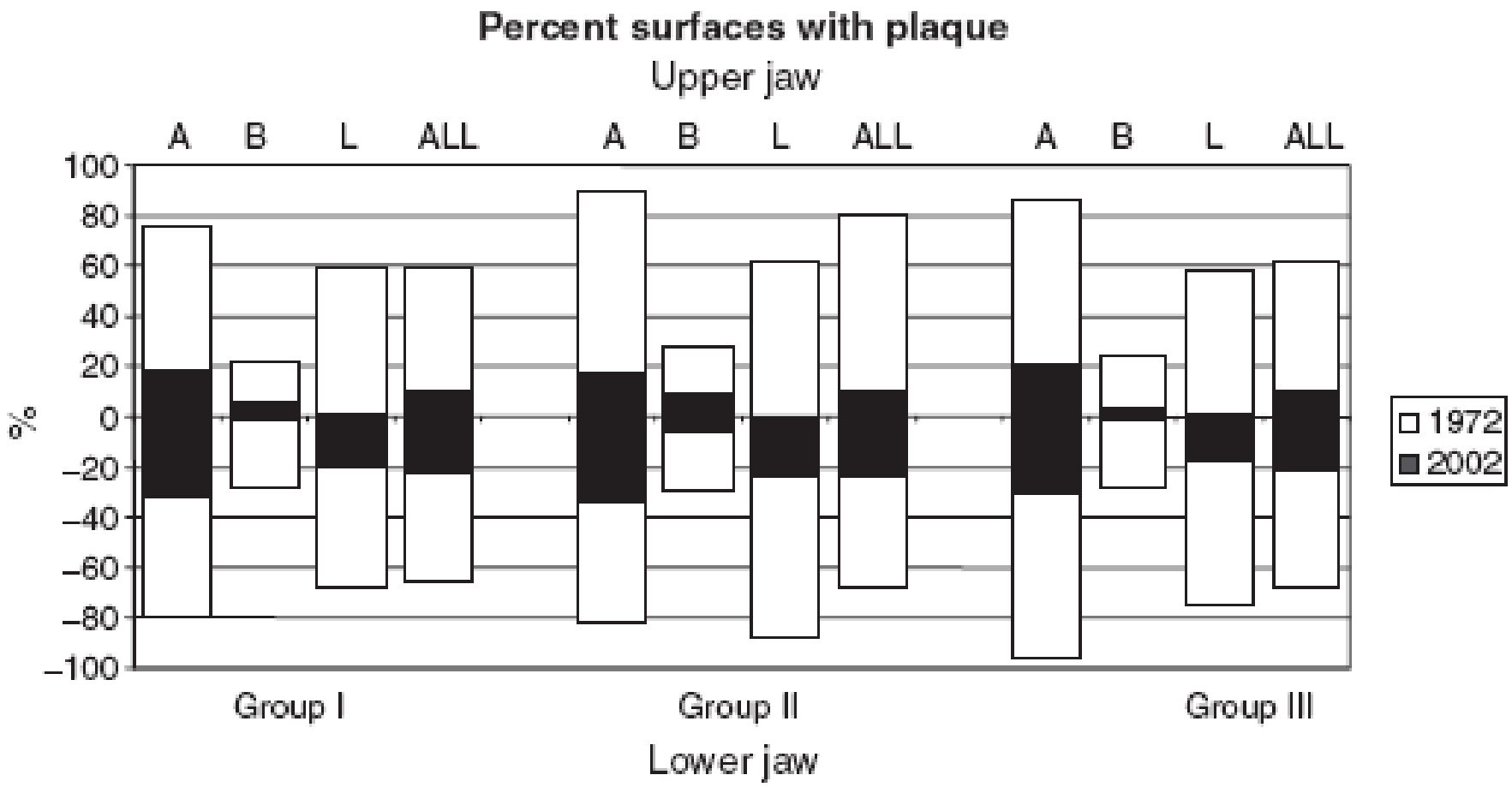


Fig. 3. Percentage of disclosed plaque on approximal (A), buccal (B), lingual (L) and mean values for (all) tooth surfaces in the maxilla and mandible in 1972 and 2002 in age groups 1–3.

Table 5. Reasons for teeth that were lost between 1972 and 2002 in the 257 subjects that returned for the 30-year follow-up examination

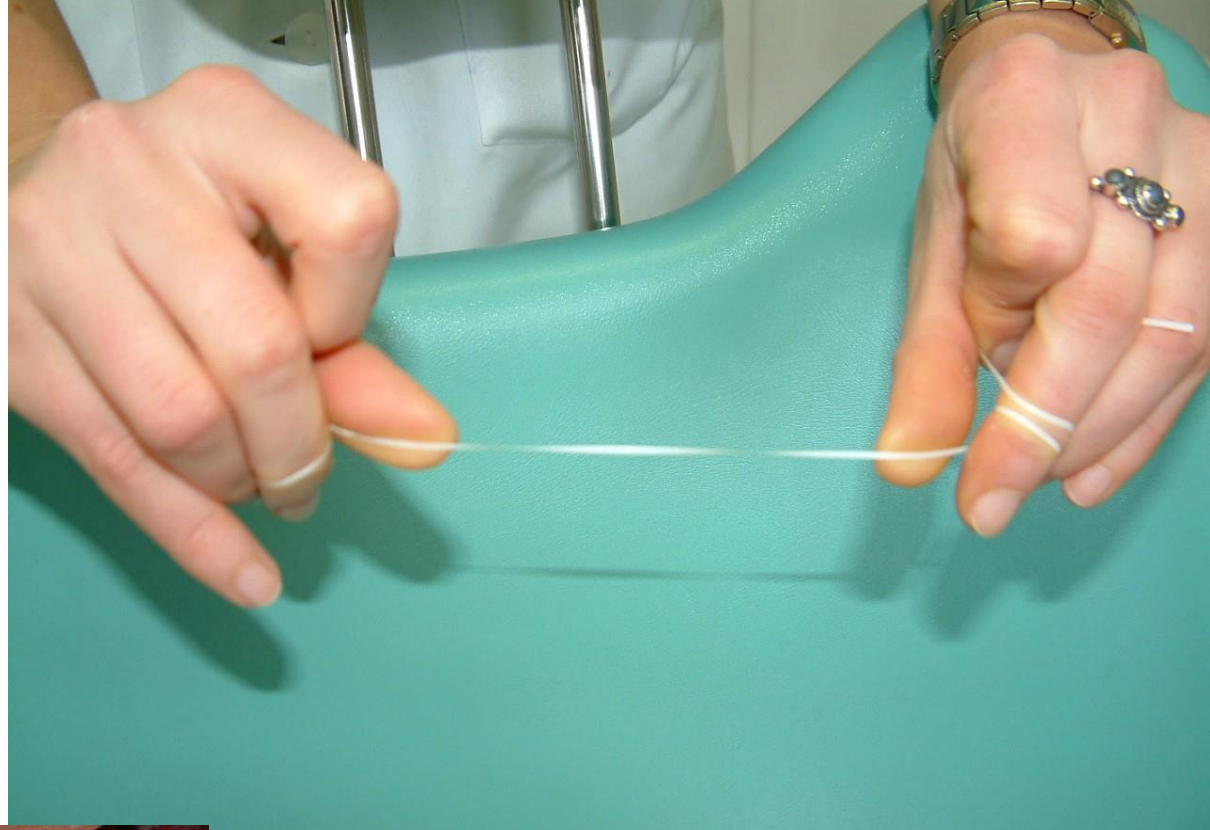
Reason	Root fracture	Root resorption	Caries	Trauma	Perio	Endo	All
Group 1 ($n = 133$)	31	6	4	6	2	9	58
Group 2 ($n = 100$)	49	4	3	2	4	10	72
Group 3 ($n = 24$)	28	2	5	0	3	5	43
All subjects ($n = 257$)	108	12	12	8	9	24	173

Dental floss ???
Approximal tooth brush

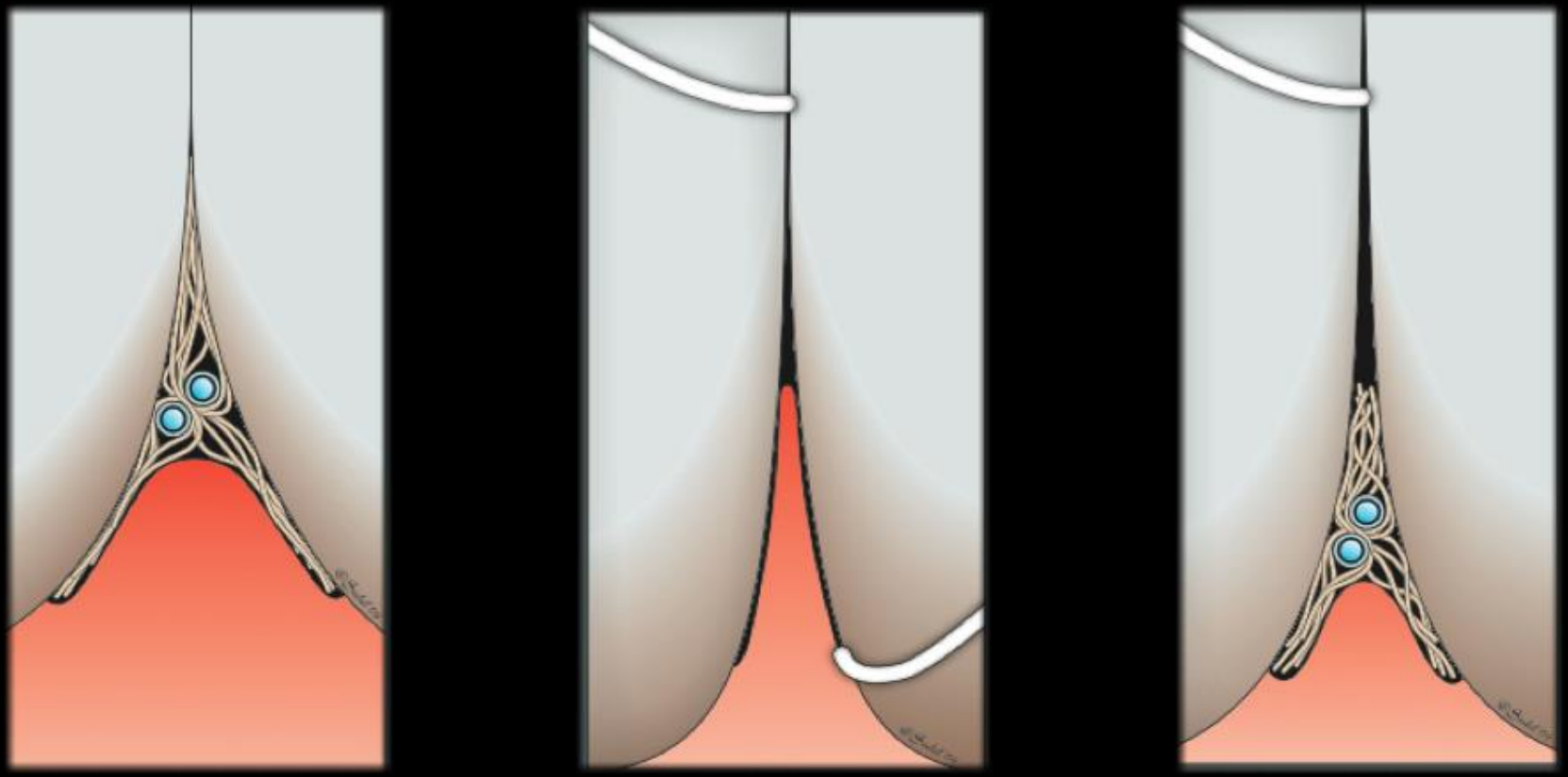
- Very important to keep the approximal spaces clean


Oral-B
Superfloss
Spezial-Zahnseide
Fil dentaire spécial
• Entfernt Zahnbeläge und Speisereste aus Zahn-Zwischenräumen
• Elimine la plaque dentaire et les restes d'aliments dans les espaces interdentaires
MINT


TePe
Soft
dental tape
2 m / 2,2 yd



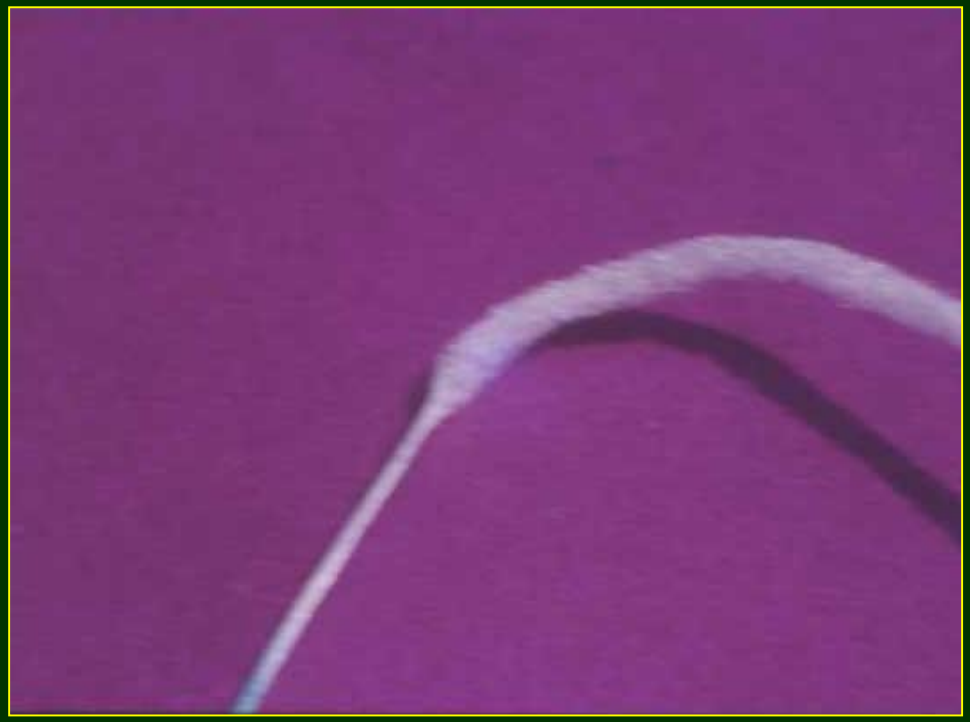
Indication



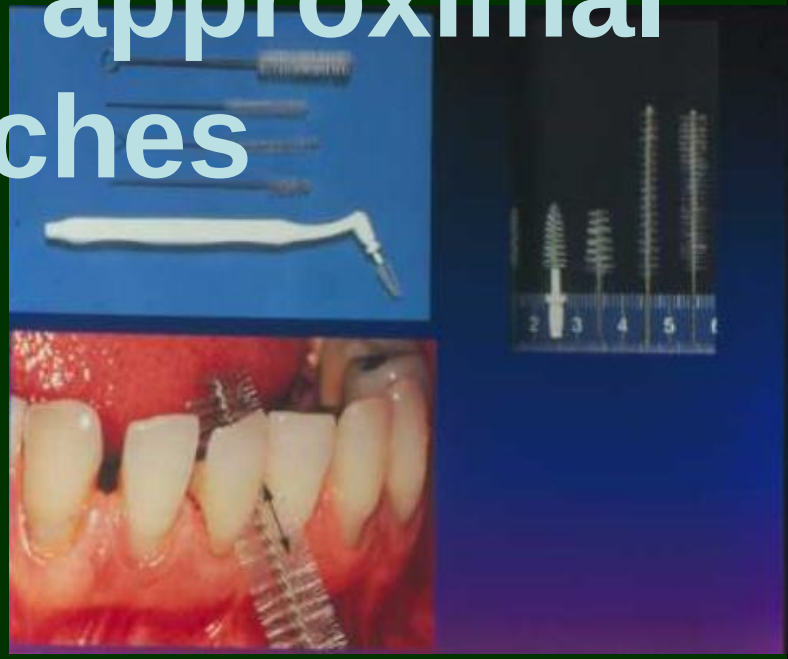
Tight contact

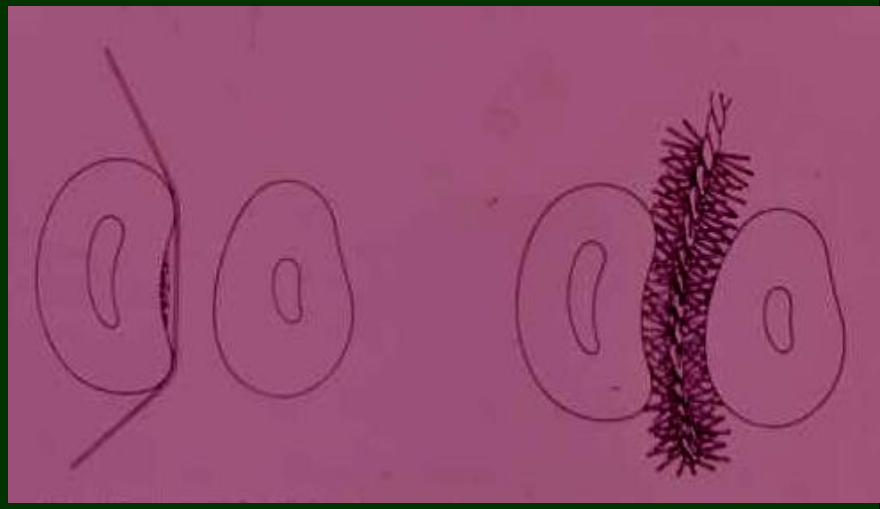
SUPER FLOSS

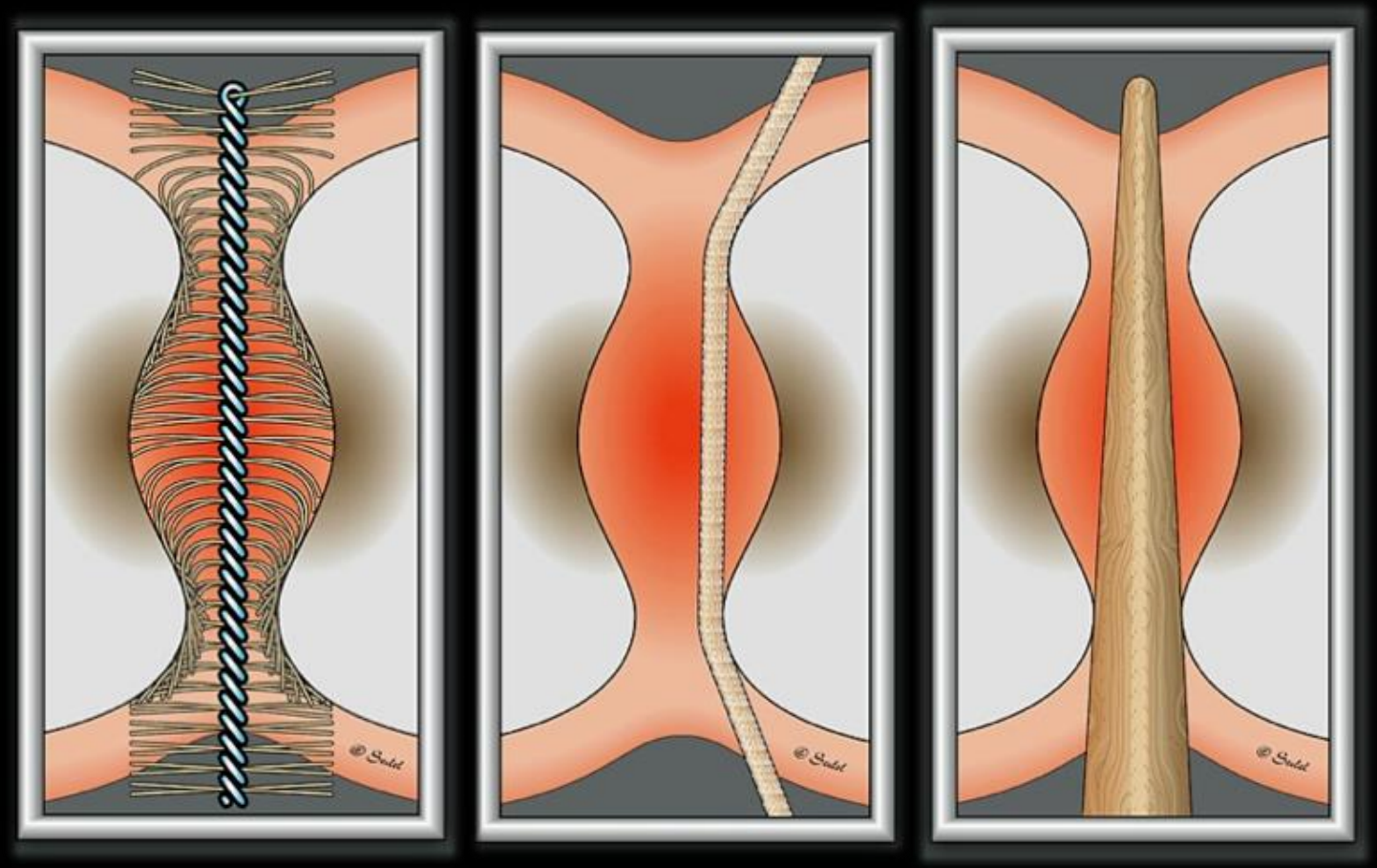
- - ideal for retorations

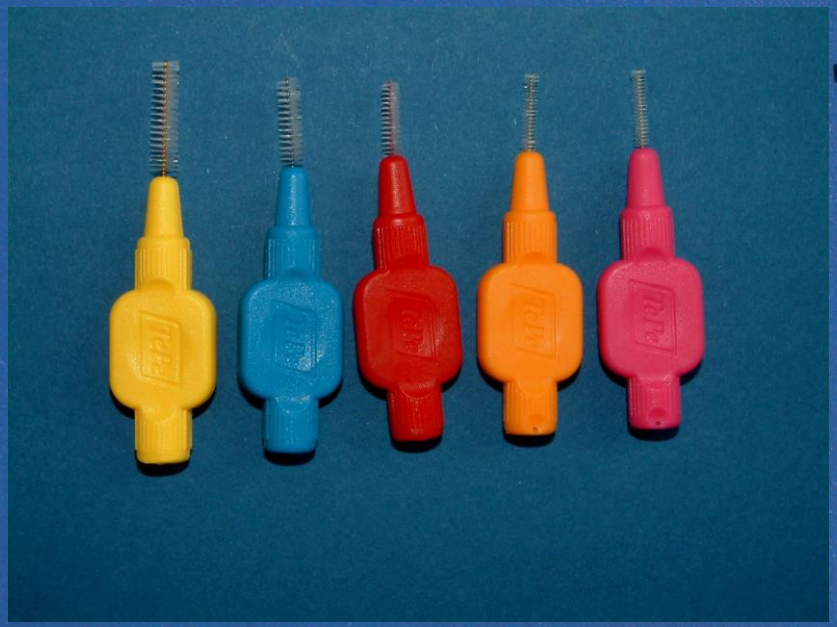


In those cases the dental floss will not help approximal tooth brusches

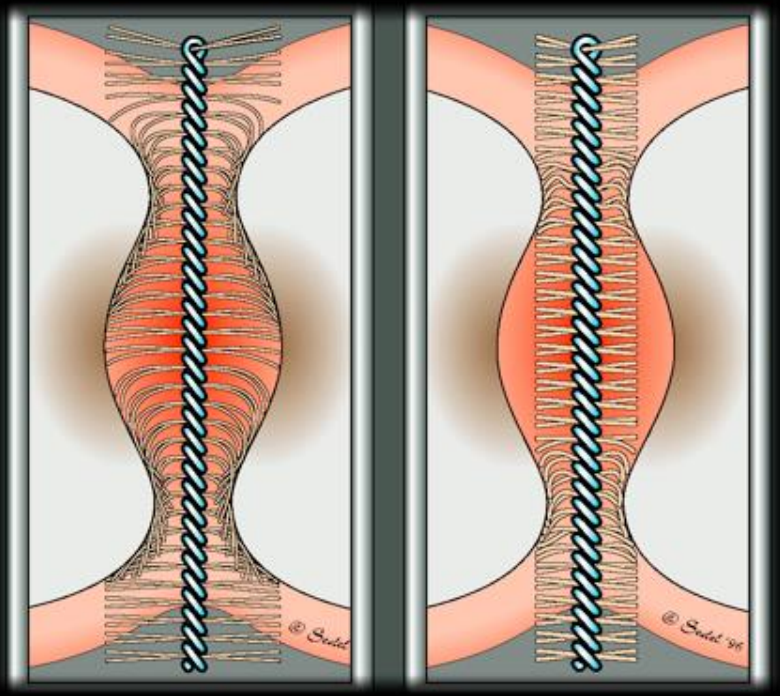


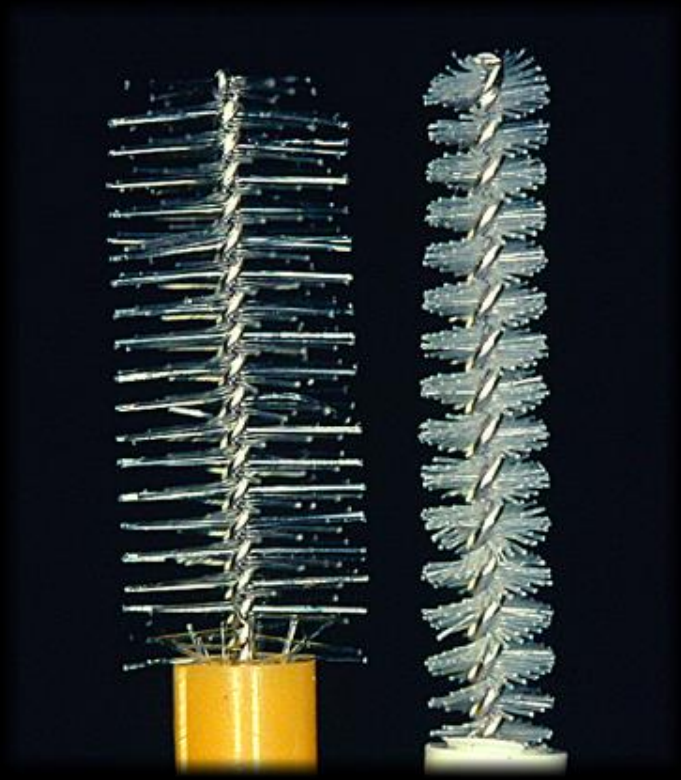


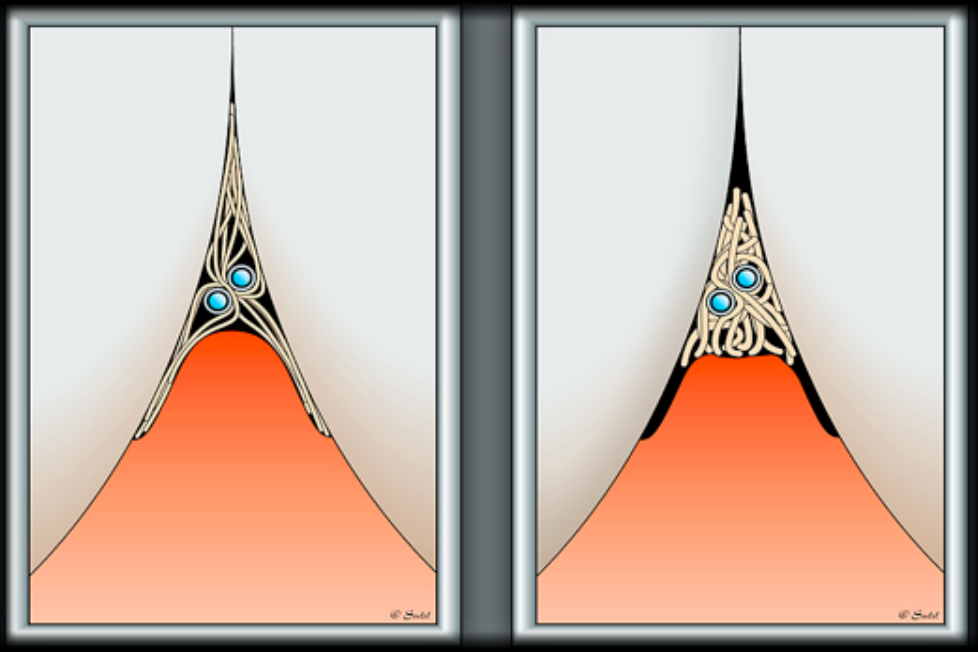


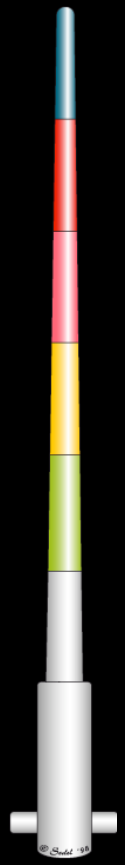



EXTRALIGHT

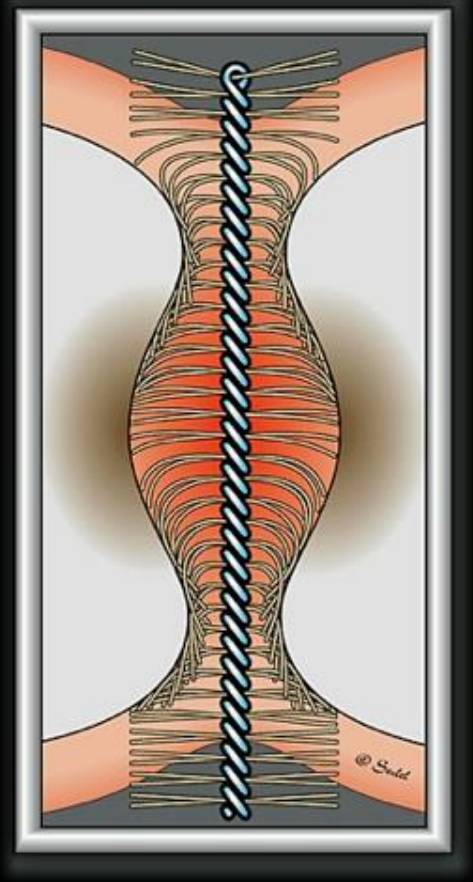








Easy insertion



Adequate space acquvisition

"umbrella effect"

Furcation III tunnel plaque control





1983


1990


1999


2002


2008


2008


2010


2010

Bridge 33 year later with questionable marginal adaptation and its correction



PROVISIONAL
SPLINTS ????


1998
2001
PROVISIONAL
SPLINTS ????
2009
2012


2014


2015


2015


2016