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Oral protetikk-terapi

4. For en pasient med periodontal sykdom – når og hvordan?

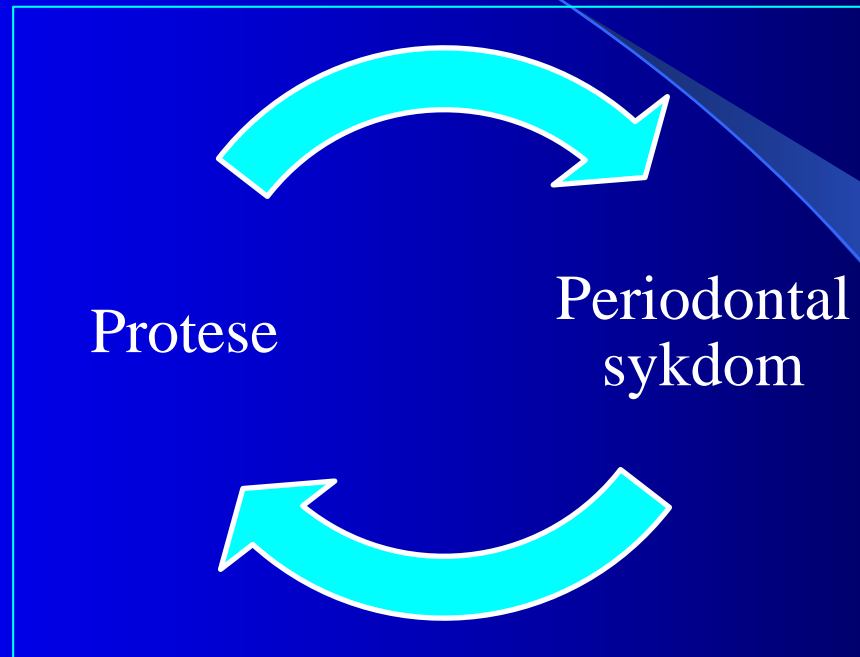
Asbjørn Jokstad
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Sammmenheng i begge retninger

Predisponerer for periodontal sykdom

- Gingivitt
- Marginal Periodontitt
 - Protesevalg?
 - Protседesign?
 - Passform?



Predisponerer for:

- tap av bein
 - Bropilarvalg?
- tap av tenner
 - Protesevalg?

1. Tenner går tapt hovedsakelig pga biofilm-utløst munnhulesykdom
2. Protetikk som erstatter tapte tenner fremmer biofilm
3. Økt biofilm fremskynder munnhulesykdom
4. fortsett til punkt 1



Dr J Valderhaug
(†1999)

Protetikk → perio-sammenheng

Journal of Oral Rehabilitation, 1976, Volume 3, pages 237–243

Periodontal conditions in patients 5 years following insertion of fixed prostheses

Pocket depth and loss of attachment

J. VALDERHAUG and J.M. BIRKELAND *Department of Prosthetics and Dental Institute of Experimental Research, University of Oslo, Norway*

Oral Hygiene in a Group of Supervised Patients with Fixed Prostheses

by
JAKOB VALDERHAUG*
LEIF ARNE HELØE†

THE INJURIOUS EFFECT of dental restorations on the gingiva has been the subject of several histological and clinical investigations. Pathologic changes in the peri-

crowns to the bottom of the gingival crevices was measured.

During the 5 year observation period the patients received periodontal prophylaxis (motivation, instruction, scaling) by a dental hygienist every 6th month. Once a year the patients were recalled for examination of the oral hygiene, the gingival conditions, and for recording of the pocket depth of all the teeth in the jaw which had received the restorations. The location of the crown margins and of the caries lesions on the crowned teeth were also recorded. The incidence of gingivitis, pocket depths, loss of attachment, and variations in oral hygiene was assessed for each surface by paired comparison of the data from the initial observation and from the fifth observation. Possible alterations were evaluated by Wilcoxon matched-pairs ranks test.¹³

- 5 år 1977 & 1976
- 10 år 1980
- 15 år 1993 & 1991
- 25 år 1997

J Clin Periodontol 1993; 20: 482–489
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JOURNAL OF
clinical periodontology
ISSN 0303-6979

Oral hygiene, periodontal conditions and carious lesions in patients treated with dental bridges

A 15-year clinical and radiographic follow-up study

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and A. Jokstad²

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Assessment of the periapical and clinical status of crowned teeth over 25 years

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Department of Prosthetic Dentistry and Stomatognathic Physiology, Dental Faculty, University of Oslo, Oslo, Norway

ABSTRACT

Hvordan kan en protese øke en risiko for periodontale sykdom?

- Materialsammensetning
 - Nedbrytning, friksjon - korrosjon
- Overflaten
 - Biofilmadhesjon
 - Polerbarhet
- Protesens geometri
 - Kontur \leftrightarrow tilgang til renhold
 - Kronekant kvalitet / diskrepans
 - Okklusjon
 - Vevsbelastning
- Mangelfull hjelp til selvhjelp

Hvem er en “perio -pasient”?



1. Indikasjoner på aktiv sykdom?

- Lommedybde?
- Gingival blødning ved sondering?
..spontant?



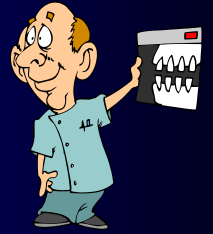
2. Sumscore på risikofaktorer for sykdom?

- Oral hygiene ?
- Mikrobiologi ?
- Plakk- / Gingival – indeks ?
- Beinfeste-tap (klinisk / røntgen) ?



Kategorisering av klinikere før en initiering av protetik-terapi

1. Gjenkjenner aktiv peri –odont /-implant sykdom og behandler adekvat eller henviser
2. Gjenkjenner aktiv peri-odontal /-implantat sykdom, men behandler ikke adekvat eller henviser = “underbehandling”
3. “Gjenkjenner og behandler” peri -odontal /-implantat sykdom, selv om den ikke finnes = “overbehandling”
4. Gjenkjenner ikke aktiv peri -odontal/-implantat sykdom



Periodontale sykdommer og tilstander – 8 grupper

Tidligere 1999 klassifikasjon

- I. Gingivale sykdommer**
 - A. Plakk-indusert gingivale sykdommer**
 - B. Ikke-plakk-indusert gingivale lesjoner**
- II. Kronisk periodontitt**
- III. Aggressiv periodontitt**
- IV. Periodontitt som manifestasjon av systemisk sykdom**
- V. Nekrotiserende periodontale sykdommer**
- VI. Abscesser i periodontiet**
- VII. Periodontitt assosiert med endodontiske lesjoner**
- VIII. Utviklings- eller ervervede deformiteter og tilstander**

Ny 2018 klassifikasjon

Classification at-a-Glance



2018 Classification of Periodontal and Peri-Implant Diseases and Conditions

Periodontal Health, Gingival Diseases and Conditions

- Periodontal Health and Gingival Health
- Gingivitis: Dental Biofilm-Induced
- Gingival Diseases: Non-Dental Biofilm-Induced

Periodontitis

- Necrotizing Periodontal Diseases
- Periodontitis
- Periodontitis as a Manifestation of Systemic Disease
- Periodontal Abscesses and Endodontic-Periodontal Lesions

Periodontal Manifestations of Systemic Diseases and Developmental and Acquired Conditions

- Systemic Diseases or Conditions Affecting Periodontal Supporting Tissues
- Mucogingival Deformities and Conditions
- Traumatic Occlusal Forces
- Tooth- and Prosthesis-Related Factors

Peri-Implant Diseases and Conditions

- Peri-Implant Health
- Peri-Implant Mucositis
- Peri-Implantitis
- Peri-Implant Soft and Hard Tissue Deficiencies

PERIODONTITIS: STAGING

Staging intends to classify the severity and extent of a patient's disease based on the measurable amount of destroyed and/or damaged tissue as a result of periodontitis and to assess the specific factors that may attribute to the complexity of long-term case management.

Initial stage should be determined using clinical attachment loss (CAL). If CAL is not available, radiographic bone loss (RBL) should be used. Tooth loss due to periodontitis may modify stage definition. One or more complexity factors may shift the stage to a higher level. See perio.org/2017wwdc for additional information.

PERIODONTITIS: GRADING

Grading aims to indicate the rate of periodontitis progression, responsiveness to standard therapy, and potential impact on systemic health.

Clinicians should initially assume grade B disease and seek specific evidence to shift to grade A or C.



Three Steps to Staging and Grading a Patient

Step 1: Initial Case Overview to Assess Disease

Screen:

- Full mouth probing depths
- Full mouth radiographs
- Missing teeth

Mild to moderate periodontitis will typically be either Stage I or Stage II

Severe to very severe periodontitis will typically be either Stage III or Stage IV

Step 2: Establish Stage

For mild to moderate periodontitis (typically Stage I or Stage II):

- Confirm clinical attachment loss (CAL)
- Rule out non-periodontitis causes of CAL (e.g., cervical restorations or caries, root fractures, CAL due to traumatic causes)
- Determine maximum CAL or radiographic bone loss (RBL)
- Confirm RBL patterns

For moderate to severe periodontitis (typically Stage III or Stage IV):

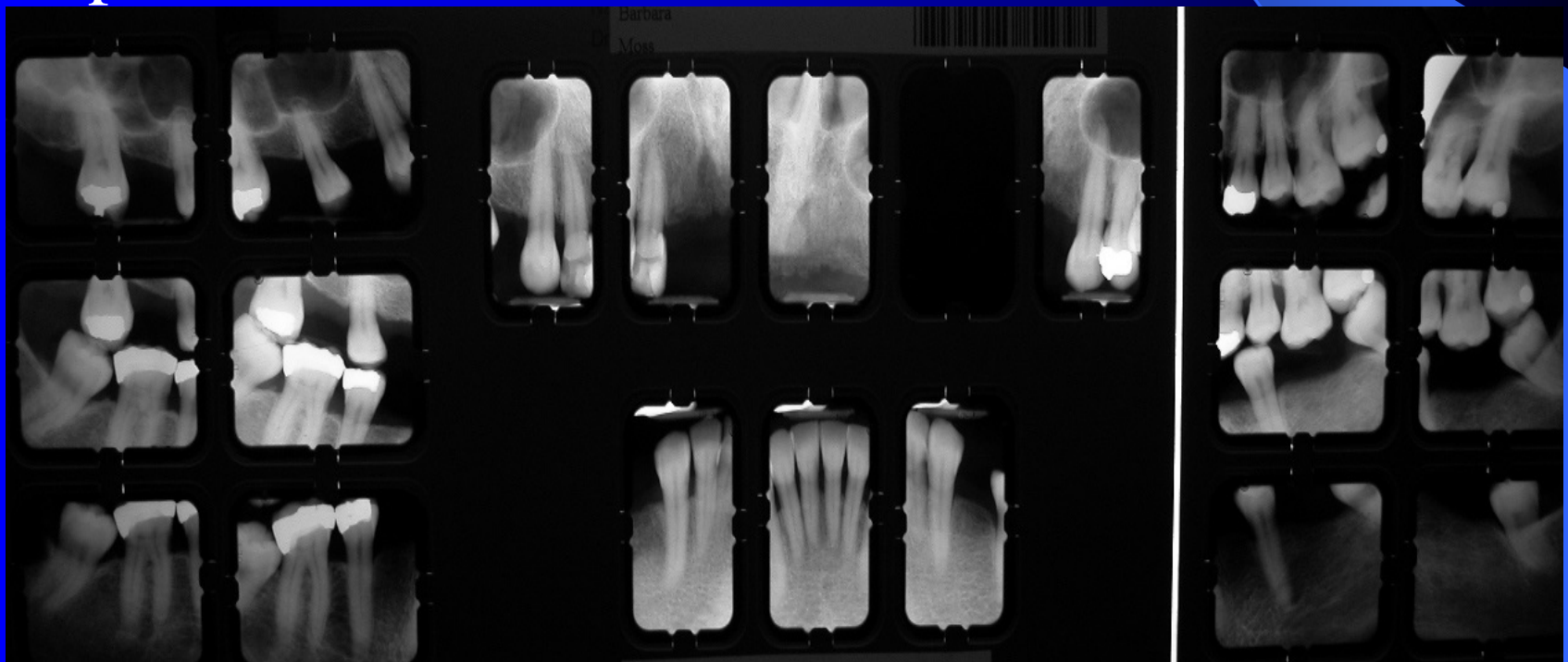
- Determine maximum CAL or RBL
- Confirm RBL patterns
- Assess tooth loss due to periodontitis
- Evaluate case complexity factors (e.g., severe CAL frequency, surgical challenges)

Step 3: Establish Grade

- Calculate RBL (% of root length x 100) divided by age
- Assess risk factors (e.g., smoking, diabetes)
- Measure response to scaling and root planing and plaque control
- Assess expected rate of bone loss
- Conduct detailed risk assessment
- Account for medical and systemic inflammatory considerations

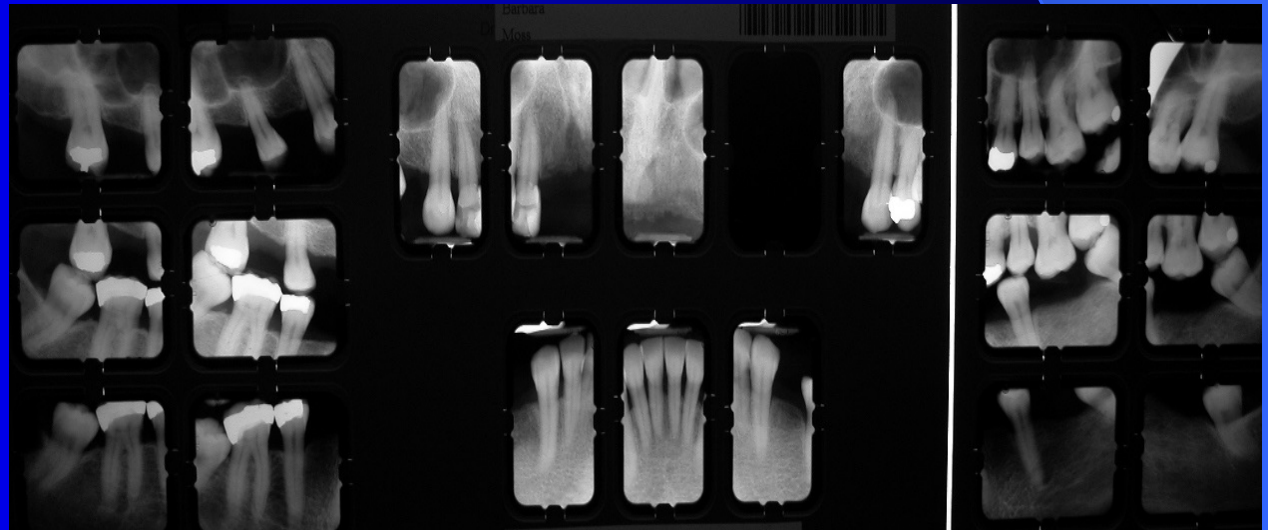
Hvis henvist fra en tannlege før protetikk-behandling, hva ønsker man seg tilbake fra periodontisten?

1. At pasienten kommer tilbake uten en aktiv periodontal sykdom, og uten uønskede tilstander av periodontale vev



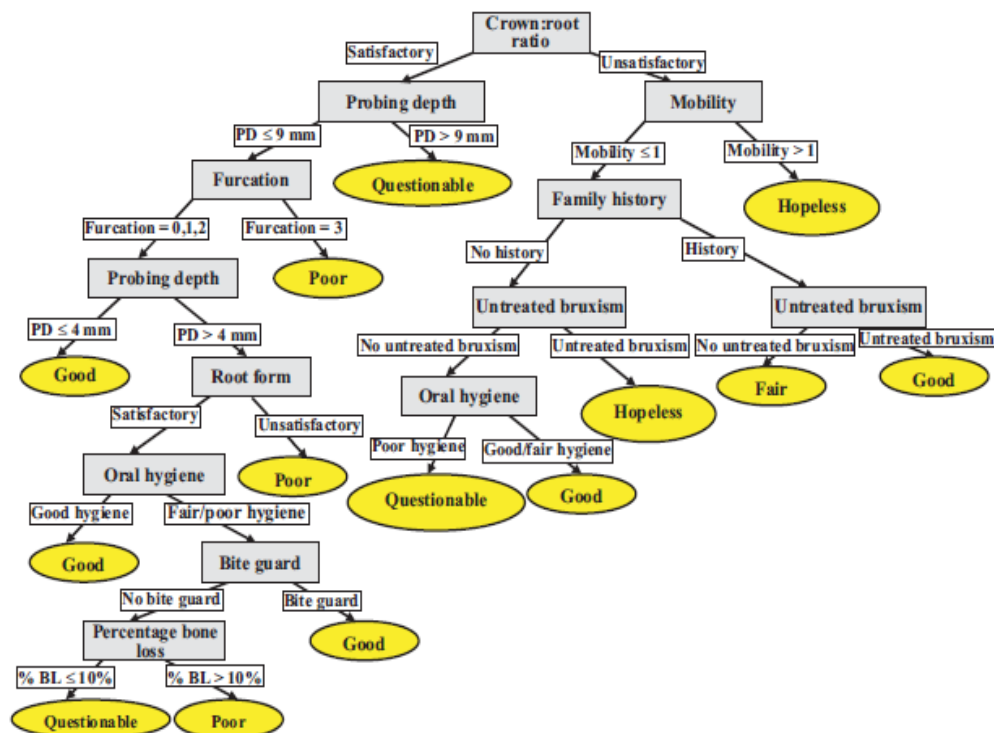
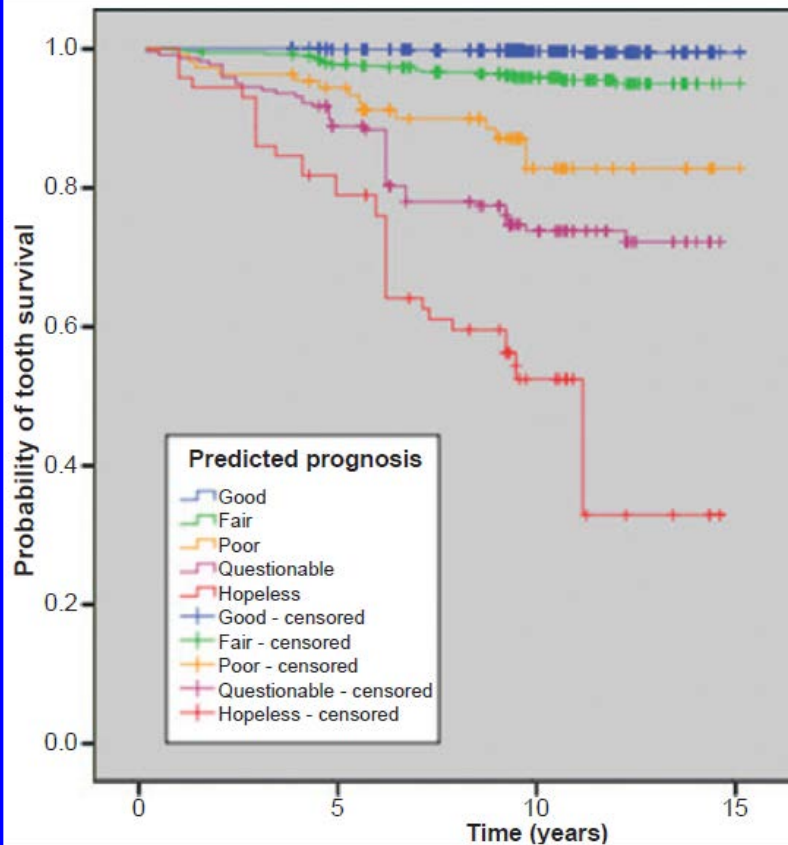
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2. Forslag om hvilke tenner som kan bevares, hvilke som må følges nøye og hvilke som bør ekstraheres?



Development of prognostic indicators using classification and regression trees for survival

MARTHA E. NUNN, JUANJUAN FAN, XIAOGANG SU, RICHARD A. LEVINE, HYO-JUNG LEE & MICHAEL K. MCGUIRE



Predictors of tooth loss during long-term periodontal maintenance: a systematic review of observational studies

Leandro Chambrone¹, Daniela Chambrone², Luiz A. Lima¹ and Luiz A. Chambrone²

¹Department of Stomatology, Division of Periodontics, School of Dentistry, University of São Paulo, São Paulo, SP, Brazil; ²Private Practice, São Paulo, SP, Brazil



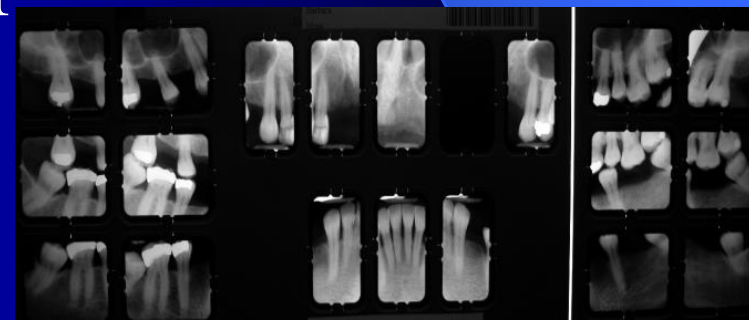
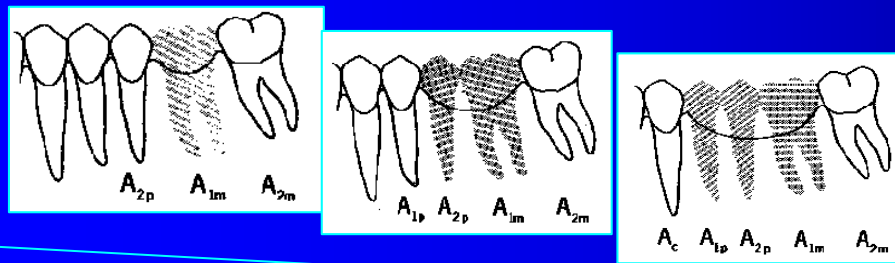
Chambrone L, Chambrone D, Lima LA, Chambrone LA. Predictors of tooth loss during long-term periodontal maintenance: a systematic review of observational studies. *J Clin Periodontol* 2010; 37: 675–684. doi: 10.1111/j.1600-051X.2010.01587.x

- Tsami et al. (2009) Hellas, privatpraksis, n=280, 16-8år**
- Eickholz et al./Pretzl et al. (2008) Tyskland, universitetsklinikk, n=100, gj.10år**
- Jansson & Lagervall (2008) Sverige, universitetsklinikk, n=60, 24-10år**
- Chambrone & Chambrone (2006) Brazil, privatpraksis, n=120, 36-10år**
- Fardal et al. (2004) Norge, privatpraksis, n=100, 11-9år**
- König et al. (2002) Tyskland, universitetsklinikk, n=146, 13-8år**
- Matthews et al. (2001) Canada, universitetsklinikk, n=335, 38-10år**
- McLeod et al. (1998) USA, universitetsklinikk, n=100, 29-5år**
- McGuire & Nunn (1996 / 1991) USA, privatpraksis, n=100, 16-5år**
- Wood et al. (1989) USA, universitetsklinikk, n=63, 34-10år**
- McFall (1982) USA, universitetsklinikk, n=100, 29-15år**
- Hirschfeld & Wasserman (1978) USA, privatpraksis, n=600, 53-15år**

Det er store forskjeller mellom studiene, noe som begrenser konklusjoner. Alder, røyking og opprinnelig tannprognose før perio-behandling er assosiert med tanntap

Hvis henvist fra en tannlege før protetik-behandling, hva ønsker man seg tilbake fra periodontisten?

1. At pasienten kommer tilbake uten en aktiv periodontal sykdom, og uten uønskede tilstander av periodontale vev
2. Forslag om hvilke tenner som kan bevares, hvilke som må følges nøye og hvilke som bør ekstraheres?
3. Hvor mye beinfeste trenger en tann for å bære en krone eller fungere som bro Pilar?



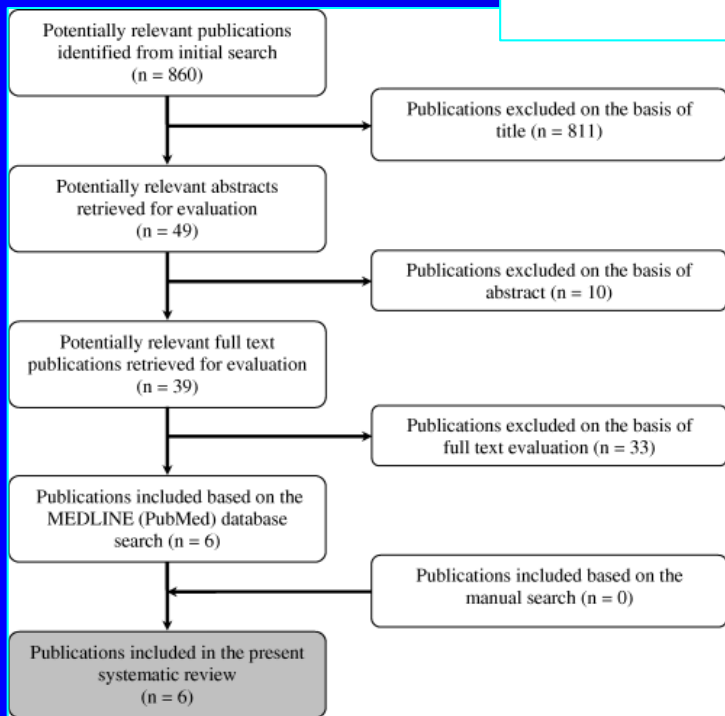
Ante IH. The fundamental principles av abutments. *Michigan State Dent Soc Bull* 1926; 8: 14:
The total periodontal membrane area of the abutment teeth must equal or exceed that of the teeth to be replaced. The length of the periodontal membrane attachment of an abutment tooth should be at least $\frac{1}{2}$ or $\frac{2}{3}$ of that of its normal root attachment.

Martina Lulic
 Urs Brägger
 Niklaus P. Lang
 Marcel Zwahlen
 Giovanni E. Salvi

Ante's (1926) law revisited:
 a systematic review on survival rates
 and complications of fixed dental
 prostheses (FDPs) on severely reduced
 periodontal tissue support



View issue TOC
 Volume 18, Issue s3
 June 2007
 Pages 63-72



Ingen økt risiko funnet for:

Biological complications:

- change in pocket probing depth (PPD),
- change in clinical attachment level (CAL),
- change in Plaque Index (PII) score,
- change in Gingival Index (GI) score,
- change in bleeding on probing (BOP) score,
- change in radiographic alveolar bone height,
- change in FDP mobility,
- change in pulpal conditions,
- incidence of caries,
- change in periodontal ligament area (PLA) (% or mm²).

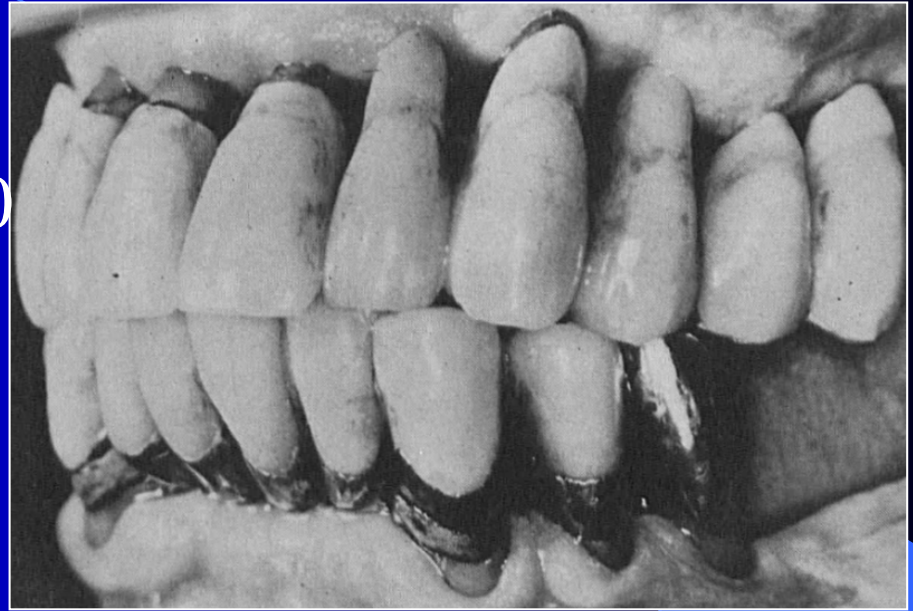
Technical complications:

- loss of retention,
- fracture of abutment tooth,
- fracture of metal framework.

Perio-protetikk-broer

Under forutsetning av nitid renhold og oppfølging:

- Høy success med mer enn 20 års klinisk oppfølging
- Type 3 Gull-legering+ Akrylat
- Biologisk rasjonale for å splinte ustabile tenner



Fremstilt i 1969-1973, Göteborg Universitet
Oppfølging-studier av: Nyman & Lindhe & Lundgren
1975a,b 1976a,b,k 1977...1984

Innledende
behandling av
periodontitt



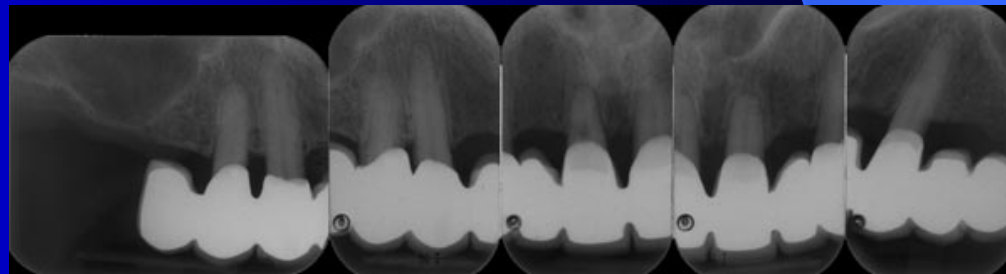
Semi-
permanent
bro under
hygiene-fase
– vurdering
av prognose



Preparering
permanent
bro



Permanent
bro
oppfølging





CASE #1

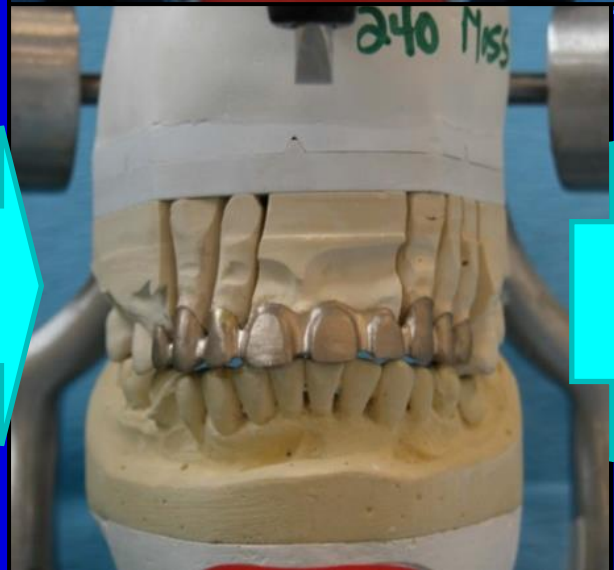
FØR

Med partiell protese

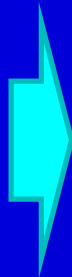
Uten partiell protese



UNDER



ETTER



Hvis henvist fra en tannlege før protetik-behandling, hva ønsker man seg tilbake fra periodontisten?

1. At pasienten kommer tilbake uten en aktiv periodontal sykdom, og uten uønskede tilstander av periodontale vev
2. Forslag om hvilke tenner som kan bevares, hvilke som må følges nøye og hvilke som bør ekstraheres?
3. Hvor mye beinfeste trenger en tann for å bære en krone eller fungere som bropilar?
4. Korreksjonskirurgi i samband med protetik

Korreksjonskirurgi i samband med protetikk

Pre-protetisk

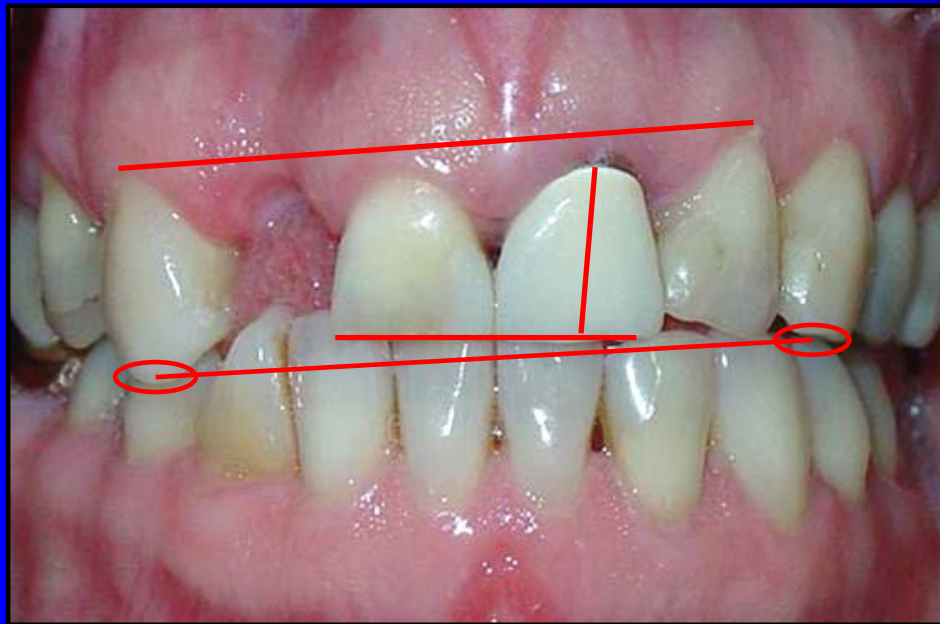
- Kroneforlenging
 - Symmetri
 - Økt retensjon
- Vevs-skulpturering, -forbedring, f.eks ved mellomledd
- Rot-hemiseksjon

Post-protetisk

- Kronekant -eksponering
- Vevs-skulpturering, -forbedring
- Gingival hyperplasi

CASE #2

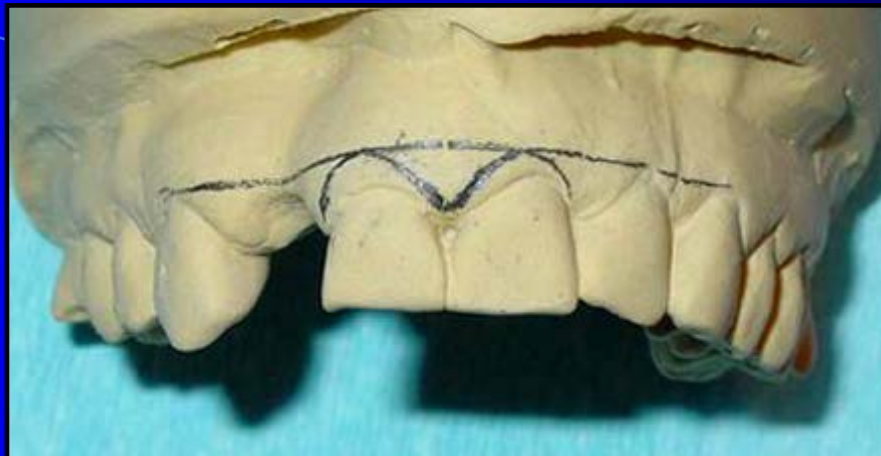
The background is a solid blue color. A thin, light blue curved line starts from the top left and arcs towards the right. On the right side, there is a blue wedge-shaped area that tapers towards the top right corner, creating a gradient effect from dark blue to a lighter blue.



Plan

1. Endo 11 og 21 vurdering
2. Prelim. Kroneprep. 11 & 21 + temp
3. Kroneforlenging 11-21 & bløtvevsplastikk 12
4. Temporær
5. 3-leddsbro x-11-21







3 uker post-op





Finprep





Grovbrent

Karakterisering og
glansing

