

Periodontal propedeutics

Diagnosis

The aim of diagnosis

- Recognize illness, distinguish from healthy
- Causative and risk factors

!! The precise diagnosis is essential for the correct treatment planning!!

Diagnosztikai módszerek

- ❖ Anamnesis
- ❖ Clinical examination – registration of PD and CAL
- ❖ Radiological examination
- ❖ (Laboratorial examination)

-anamnesis-

❖ Systematic disease:

- cardiovascular
- endocrin-
- hematology
- immunology
- etc.

❖ Gyógyszer:

- anticogulant
- antihypertensive
- immunosuppressive
- antiepileptic,
- antibiotics
- etc.

❖ Pregnancy

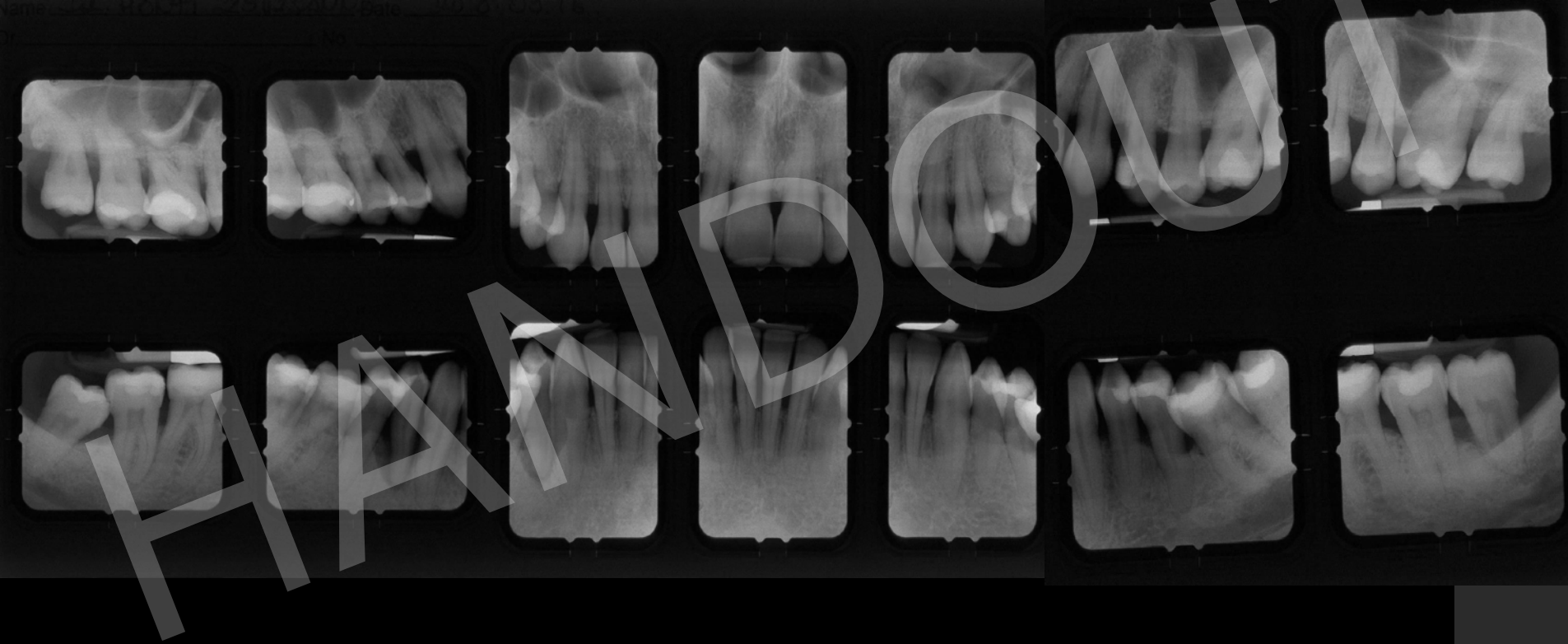
/menopause

❖ allergy

❖ smoking

❖ oral hygiene habits

-periodontal status xrays-



- klinikai vizsgálat-

- inspection
- periodontal probing

INSPECTION

◆ GINGIVITIS:

◆ SURFACE: NO ORANGE PEEL FEATURE, FLAT, SHINY

◆ COLOUR: LIVID

◆ TISSUE CONSISTANCY: OEDEMA, FIBROTIC

◆ CONTOUR: IRREGULAR

◆ LOCALIZATION: APICAL/CORONAL FROM CEJ



◆ HEALTHY: LIGHT PINK, ORANGE PEEL FEATURE, ETC.

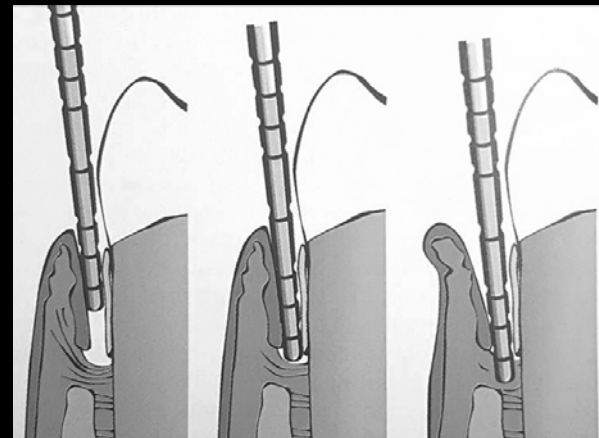


- PERIODONTAL PROBING-



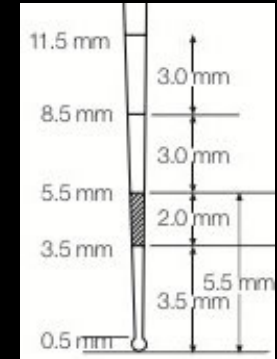
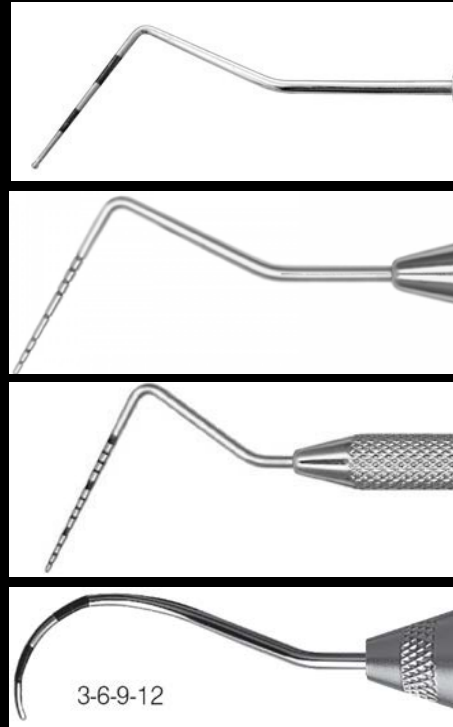
Technique of periodontal probing

- ❖ Probing on 6 surface of the tooth
 - ❖ O: M – Mid – D
 - ❖ V: M - Mid – D
- ❖ Power of probing 0,25 N
- ❖ Factors influencing the result of the measurement made with a periodontal probe
 - ❖ Thickness of the probe
 - ❖ Malposition of the probe due to anatomic features (contour)
 - ❖ Pressure applied
 - ❖ Degree of inflammation



Probes

- WHO probes
 - 0,5 mm ball
 - 3,5-5,5 mm black strip
- Williams probe
 - 1-2-3—5—7-8-9-10
- UNC-15 probe
 - notation in mm-s
 - Black stripes between 4-5, 9-10, 14-15 mm
- Nabers probe
 - Furcation lesions
- Pressure sensitive probes

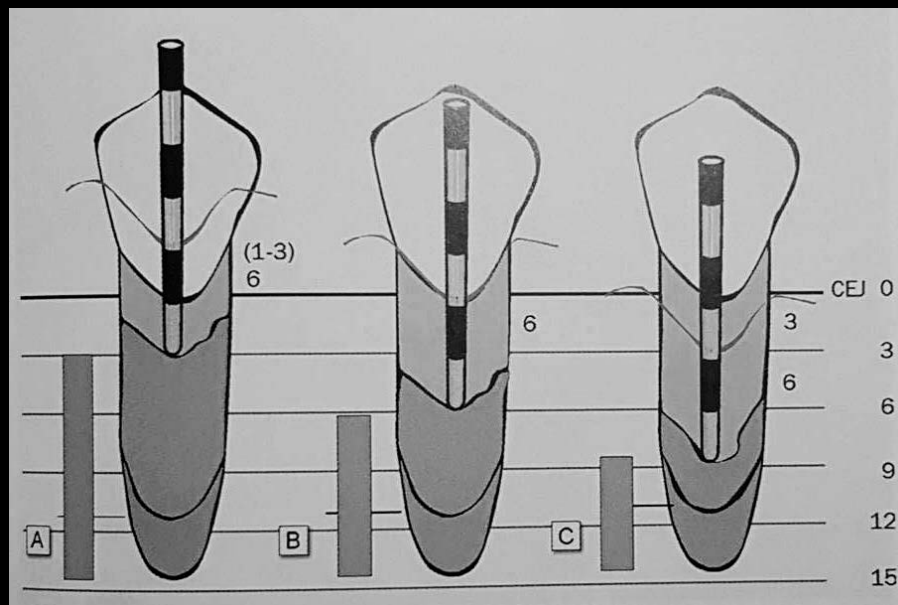
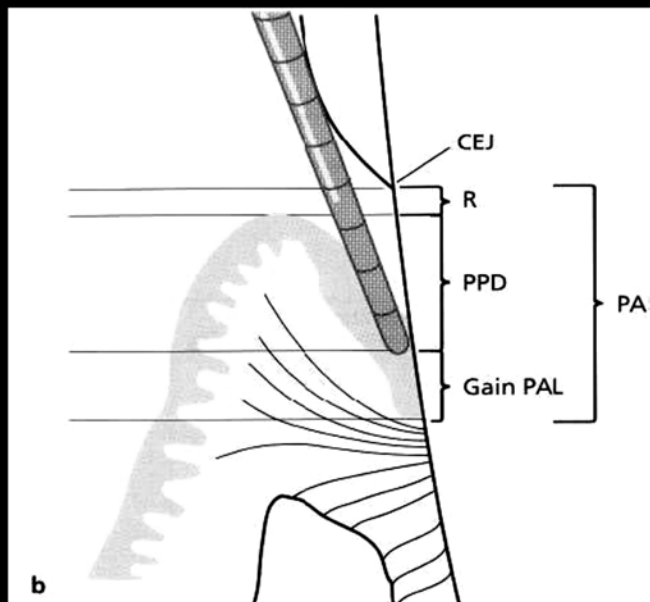


Clinical parameters

- parodontitis -

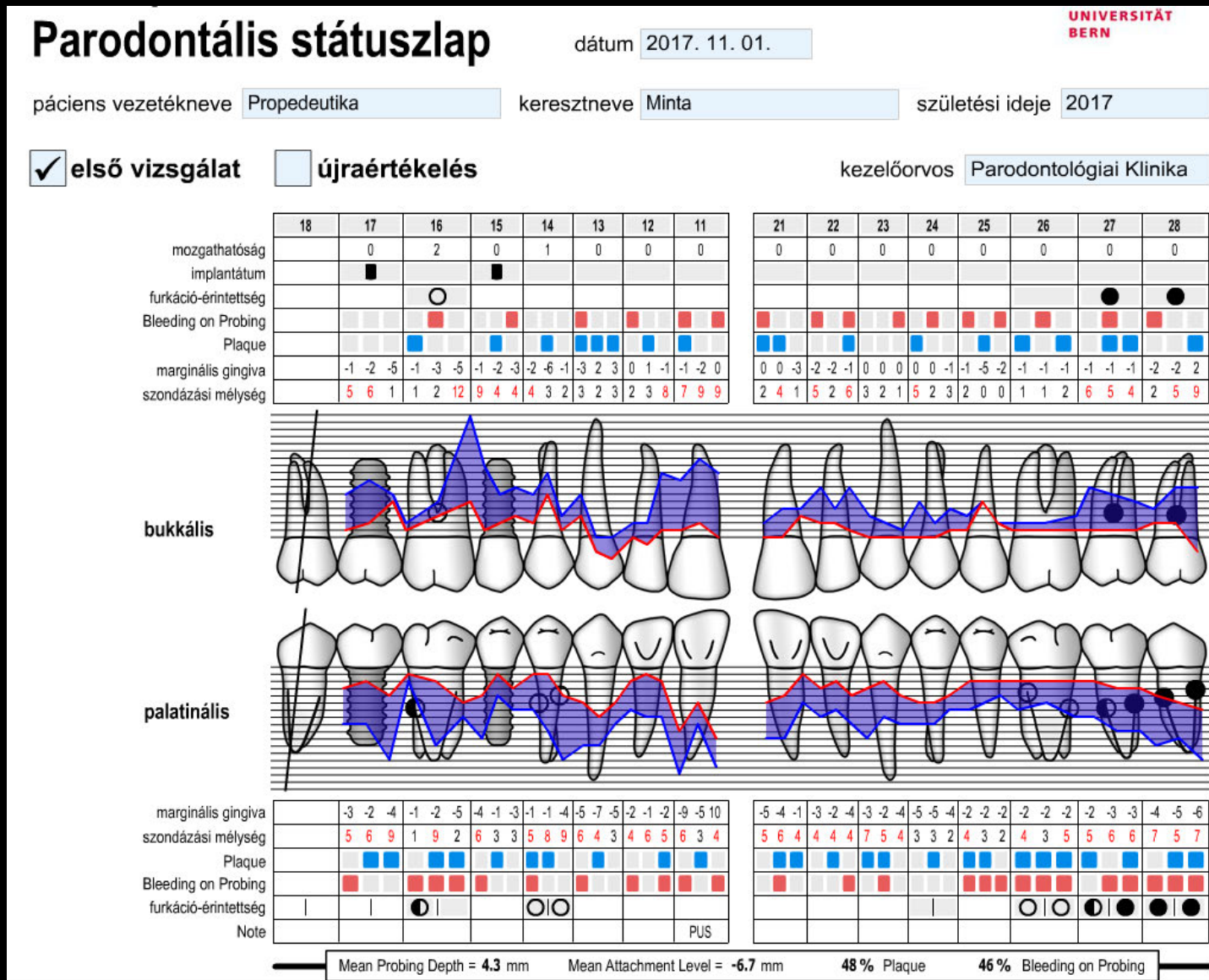
- ❖ Probing Pocket Depth – PPD
- ❖ Gingival recession – GR
- ❖ Clinical attachment loss – $CAL = PPD + GR$
- ❖ Furcation lesion
- ❖ Tooth mobility
- ❖ Bleeding – BOP
- ❖ Plaque, calculus
- ❖ Plaque retentive factors

Probing Pocket Depth– PPD



Periodontal status

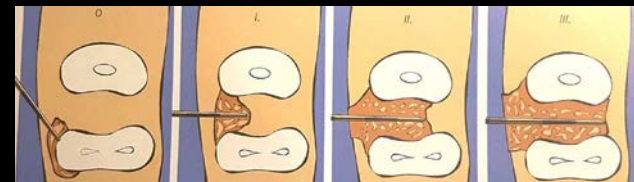
- <http://www.periodontalchart-online.com/hu/>



Classification of furcation defects



- **Degree I:**
 - horizontal loss of periodontal support not exceeding one third of the width of the tooth
- **Degree II:**
 - horizontal loss of periodontal support exceeding one third of the width of the tooth, but not encompassing the total width of the furcation area
- **Degree III:**
 - horizontal “through-and-through” destruction of the periodontal tissues in the furca- tion area



Tooth Mobility

- **1:**
 - Between 0,2-1 mm horizontally
- **2:**
 - ≥ 1 mm horizontally
- **3:**
 - Also vertical mobility



Gingival Index (Löe '67)

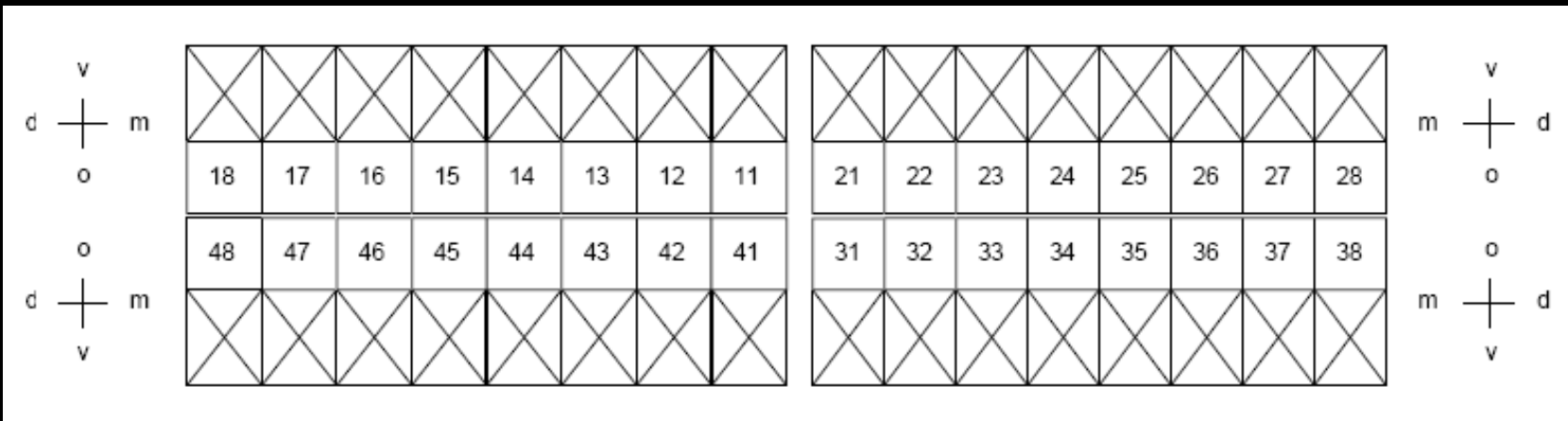
-BOP-

- **0:** Absence of visual signs of inflammation
- **1:** Slight change in color and texture
- **2:** Visual inflammation and bleeding tendency
- **3:** Inflammation with tendency for spontaneous bleeding

FMBS

- Full Mouth Bleeding Score-

- 1/+: bleeding
- 0/-: no bleeding
- $(\text{all surfaces} \times 100) / (\text{number of tooth} \times 6) = \text{FMBS}$



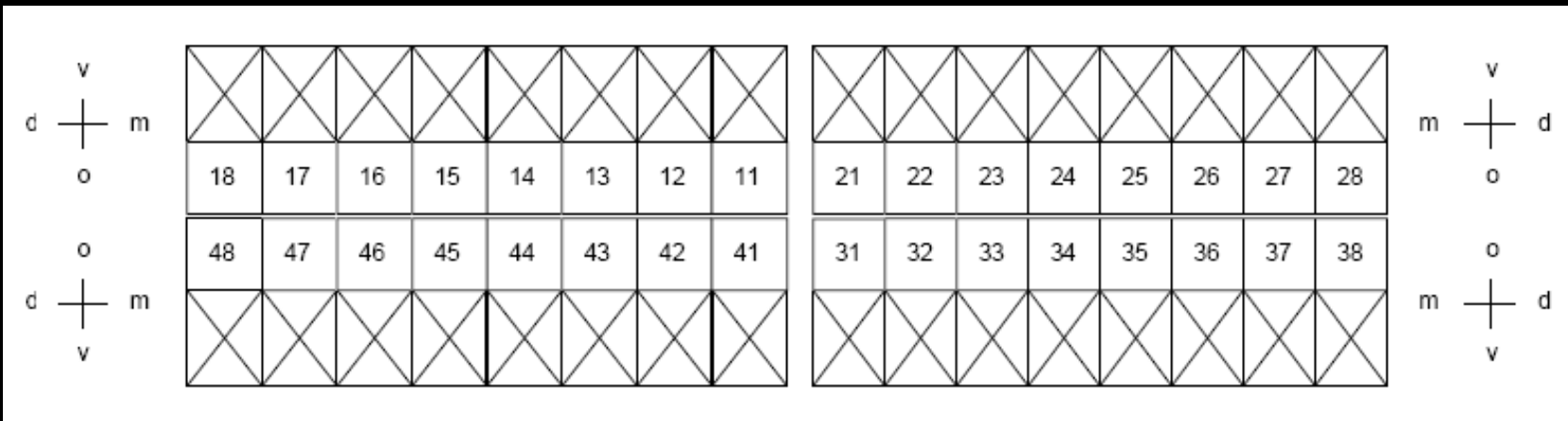
Plaque index (Silness – Löe '64)

- **0:** Absence of plaque
- **1:** Plaque disclosed after running a probe
- **2:** Visible plaque
- **3:** Abundant plaque

FMPS

-Full Mouth Plaque Score-

- 1/+: plaque
- 0/-: no plaque
- $(\text{all surfaces} \times 100) / (\text{number of tooth} \times 6) = \text{FMPS}$



Plakk index (FMPS) / Ínyvérzés index (FMBS)

R

Páciens neve:

L

Dátum

Felnevő neve

1

B																	
P	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8
L																	
B																	

FMPS: $\frac{\text{Összfelszín} \times 100}{\text{Fogak száma} \times 6} = \text{---} = \text{---} \%$

FMBS: $\frac{\text{Összfelszín} \times 100}{\text{Fogak száma} \times 6} = \text{---} = \text{---} \%$

Dátum

Felnevő neve

B																	
P	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8
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Dátum:

Felnevő neve

4

B																	
P	8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8
L																	
B																	

FMPS: $\frac{\text{Összfelszín} \times 100}{\text{Fogak száma} \times 6} = \text{---} = \text{---} \%$

FMBS: $\text{---} = \text{---} \%$

Semmelweis Egyetem
Parodontológiai Klinika
Plakk, Ínyvérzés v1.3

Assessment of periodontal treatment needs

- CPITN index
 - PSR index
- BPE – Basic Periodontal examination

PSR index

– Periodontal Screening and Recording –

- **Code 0:** Colored area completely visible. No calculus or defective margins. Gingival tissues are healthy with no bleeding after gentle probing
- **Code 1:** Colored area completely visible. No calculus or margins are detected. Bleeding after probing.
- **Code 2:** Colored area of probe completely visible. Supra- or subgingival calculus and/or defective margins are detected.
- **Code 3:** Colored area of probe partly visible.
- **Code 4:** Colored area of probe completely disappears, indicating probing depth of greater than 5.5 mm.
- **Code *:** Clinical abnormalities (furcation invasion, mobility, mucogingival problems, or recession) extending to the colored area of the probe (3.5 mm or greater)
- **Code X:** Edentulous sextant (less than 2 teeth not intended for extraction).

CPITN index

- Community Periodontal Index of Treatment Needs -

- Treatment needs:
 - **TN 0:** in case of gingival health (Code 0)
 - **TN 1:** need for improved oral hygiene (Code 1)
 - **TN 2:** need for scaling, removal of overhangs and improved oral hygiene (Codes 2+3)
 - **TN 3:** complex periodontal treatment (Code 4)

BPE

– Basic Periodontal Examination

Kód	Leírás	Kezelés
0	<p><u>No:</u> Deeper pockets than 3,5mm, calculus, plaque retentive factors, bleeding on probing The coloured band (3.5-5.5 mm) is completely visible</p>	No treatment required
1	<p><u>No:</u> Deeper pockets than 3,5mm, calculus, plaque retentive factors, <u>Yes:</u> Bleeding on probing The coloured band (3.5-5.5 mm) is completely visible</p>	Oral hygiene instructions (OHI)
2	<p><u>No:</u> Deeper pockets than 3,5mm <u>Yes:</u> Calculus, plaque retentive factors, bleeding on probing The black band is completely visible</p>	Oral hygiene instructions (OHI) Removal of calculus Correction of plaque retentive margins of restoration

3	The coloured band partially visible (pocket of 4-5 mm)	<p>Full charts required at start and finish of treatment</p> <p>OHI</p> <p>Calculus removal</p> <p>Correction of defective margins of restoration and root surface instrumentation (RSI) as required</p>
4	The coloured band is completely hidden (pocket of 6 mm or more)	<p>Full charts required at start and finish of treatment, including note of furcation involvements and any other relevant clinical findings</p> <p>OHI</p> <p>Calculus removal</p> <p>Correction of defective margins of restoration and root surface instrumentation (RSI) as required</p> <p>Surgery may be needed</p>
*	Furcation involvement, mobility, mucogingival problems, or recession extending to the coloured area of the probe (indicating 3,5 mm or greater)	

Gingival recession



Abrasion



Abfraction



Erosion

Miller-classification

- **Miller I:** marginal tissue recession not extending to the mucogingival junction. No loss of interdental bone or soft tissue.
- **Miller II:** marginal tissue recession extends to or beyond the mucogingival junction. No loss of interdental bone or soft tissue.
- **Miller III:** marginal tissue recession extends to or beyond the mucogingival junction. Loss of interdental bone or soft tissue is apical to the CEJ, but coronal to the apical extent of the marginal tissue recession.
- **Miller IV:** marginal tissue recession extends beyond the mucogingival junction. Loss of interdental bone extends to a level apical to the extent of the marginal tissue recession

Parameters

- ❖ Depth of gingival recession
- ❖ Width of gingival recession
- ❖ Width of keratinized gingiva
- ❖ Thickness of keratinized gingiva
- ❖ Distance of papilla-contact point
- ❖ PPD
- ❖ Gingival index (Löe)
- ❖ Plaque index (Silness-Löe)

