

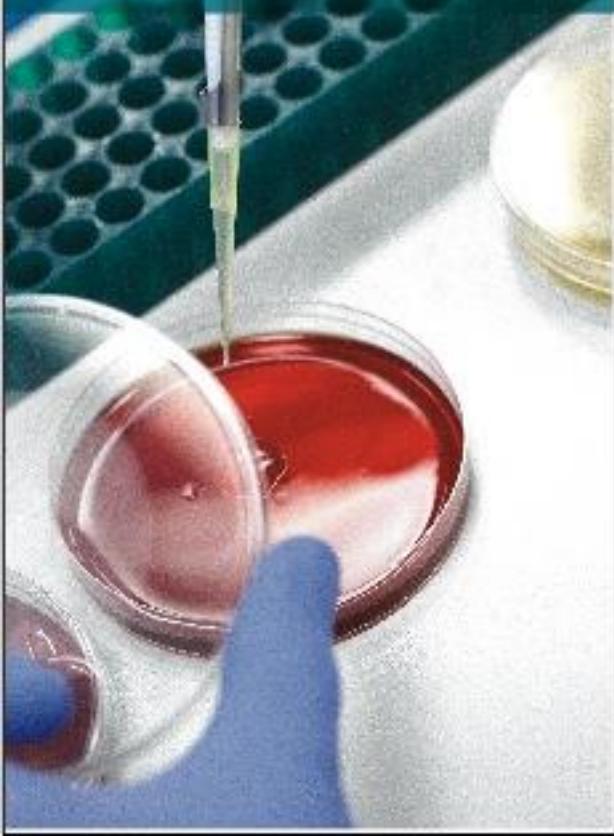


CÁTEDRA EXTRAORDINARIA

DENTAID

EN INVESTIGACIÓN  
PERIODONTAL

formación continua



# CASOS CLÍNICOS E.T.E.P.

## La nueva clasificación de las enfermedades periodontales y periimplantarias



*Periodontitis Como Manifestación de  
Enfermedades Sistémicas*



Universidad Complutense de Madrid

Grupo de Investigación ETEP (Etiología y Terapéutica de las Enfermedades Periodontales)  
ETEP Research Group (Etiology and Therapy of Periodontal Diseases)

- ✓ Hombre
- ✓ 32 años
- ✓ Ingeniero industrial

### Motivo de consulta

“Tengo neutropenia cíclica severa y me afecta mucho a la boca y las encías”

### Refiere

Mucha inflamación gingival, necrosis papilar y aftas mayores coincidentes con el momento del descenso de neutrófilos

## Historia médica

- Neutropenia cíclica, con ingresos hospitalarios frecuentes por infecciones y procesos febris
- Medicación: G-CSF (factor estimulante de colonias de granulocitos) en caso de infecciones severas
- Sin antecedentes familiares de neutropenia
- Con antecedentes familiares de periodontitis (madre)
- No fumador

# NEUTROPENIA = recuento total neutrófilos < 1500 cél/microlitro

(= principales células involucradas en la inmunidad)

alteraciones en  
cantidad/calidad/funcióñ

infecciones

Grados { Leve = 1000 – 1500 cél/microlitro  
Moderada = 500 – 1000 cél/microlitro  
Severa < 500 cél/microlitro

## Tipos

TIPO	GRADO	INICIO
<b>Crónica</b> (si dura > 3 meses)	Leve/Moderado/Severo	Nacimiento/posterior
<b>Cíclica</b> (cada 21-28 días)	Moderado-severo	Nacimiento
<b>Asociada a síndromes</b> (Kostmann)	Muy severa	Nacimiento

Congénita  
hereditaria  
  
(alteración ELA2  
neutrófilos, en  
cromosoma 19)

↓  
Error  
hematopoyesis

## HISTORIA DENTAL

- **2004:** Primera fase básica I. Posteriormente, interrumpió el tratamiento
- **2011:** Reanuda el tratamiento. **Segunda fase básica**, e inclusión, hasta la actualidad, en un **programa de mantenimiento cada 3 meses**, coincidiendo con los días previos a la fase de neutropenia.

## TÉCNICAS DE HIGIENE BUCODENTAL

- Higiene bucal mejorable:
  - No utiliza de manera habitual dispositivos de higiene interdental
  - En los periodos de neutropenia, sustituye el cepillado, que es doloroso, por colutorio con clorhexidina 0,12% cada 12 horas

*Durante la fase de neutropenia cíclica  
(cada 21 días)*

- **Cabeza y cuello**

Proceso infeccioso en párpado izquierdo  
Gangliopatías a nivel submandibular



- **ATM**

Inspección de ATM normal

- **Piel**

Proceso infeccioso en pierna derecha



## Exploración intrabucal

*Durante la fase de neutropenia cíclica  
(cada 21 días)*

- **Labios/ Mucosa**

Afta mayor en mucosa labial izquierda



- **Lengua**

La exploración de la lengua es normal

*Durante la fase de neutropenia cíclica  
(cada 21 días)*



# Exploración intrabucal

*Durante la fase de neutropenia cíclica  
(cada 21 días)*



# Exploración intrabucal

*Durante la fase de neutropenia cíclica  
(cada 21 días)*

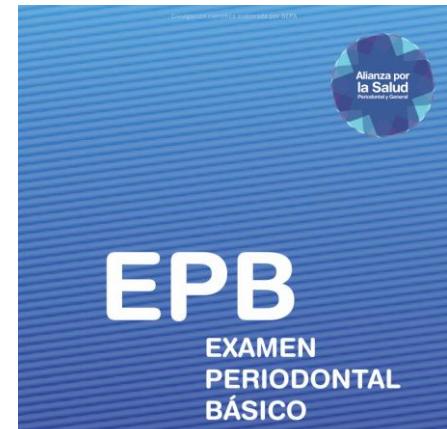


*Durante la fase de neutropenia cíclica  
(cada 21 días)*



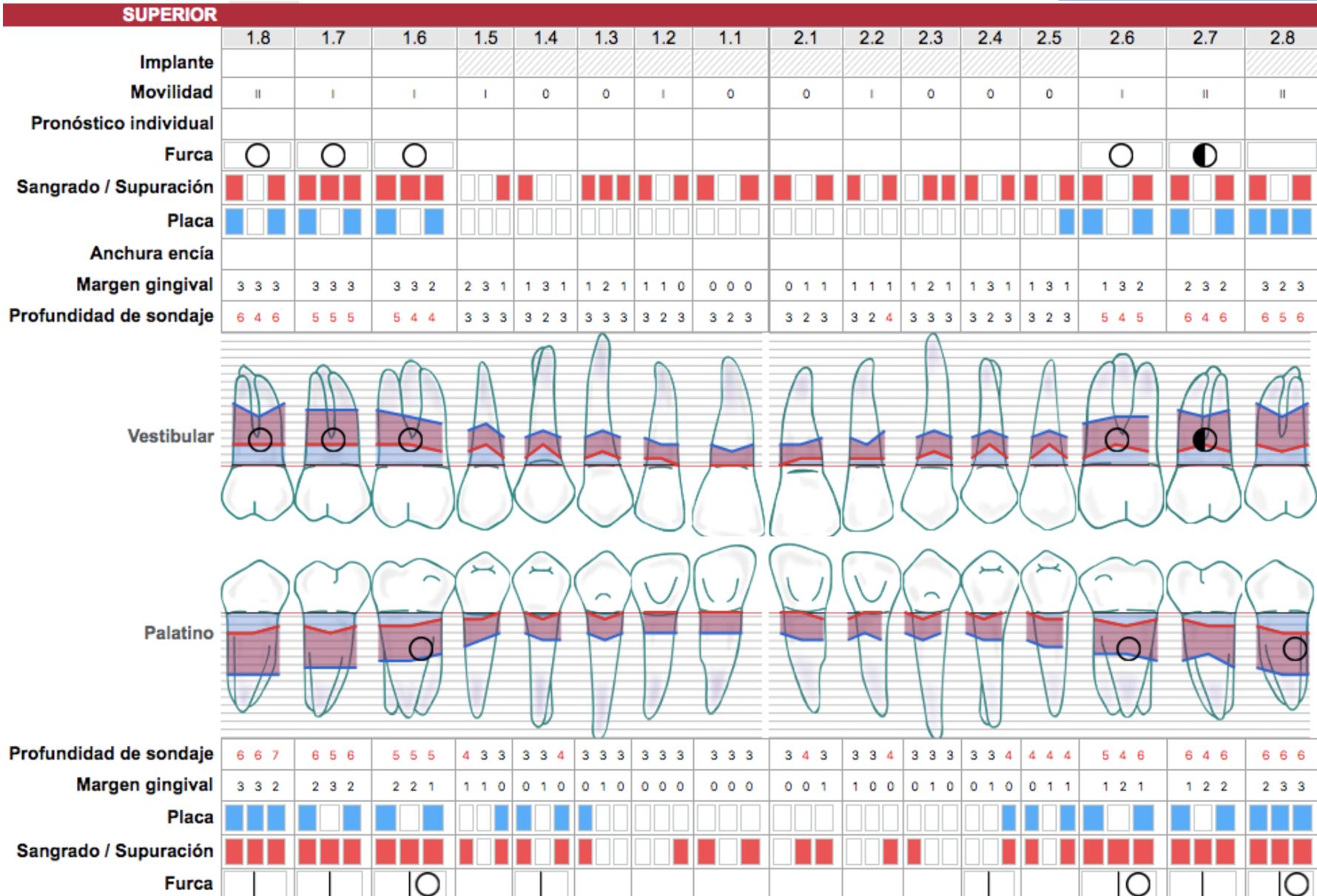
- ✓ El paciente presenta **integridad de arcadas**
- ✓ No presenta acumulación importante de placa dental y cálculo, pero sí **recesiones generalizadas, inflamación y ulceración del margen gingival**
- ✓ Mordida cruzada posterior izquierda, apiñamiento anteroinferior, clase III molar y canina derecha, clase I canina izquierda
- ✓ **Vitalidad positiva** en todos sus dientes

4*	3	4*
4*	3	4*
EXAMEN PERIODONTAL BÁSICO		

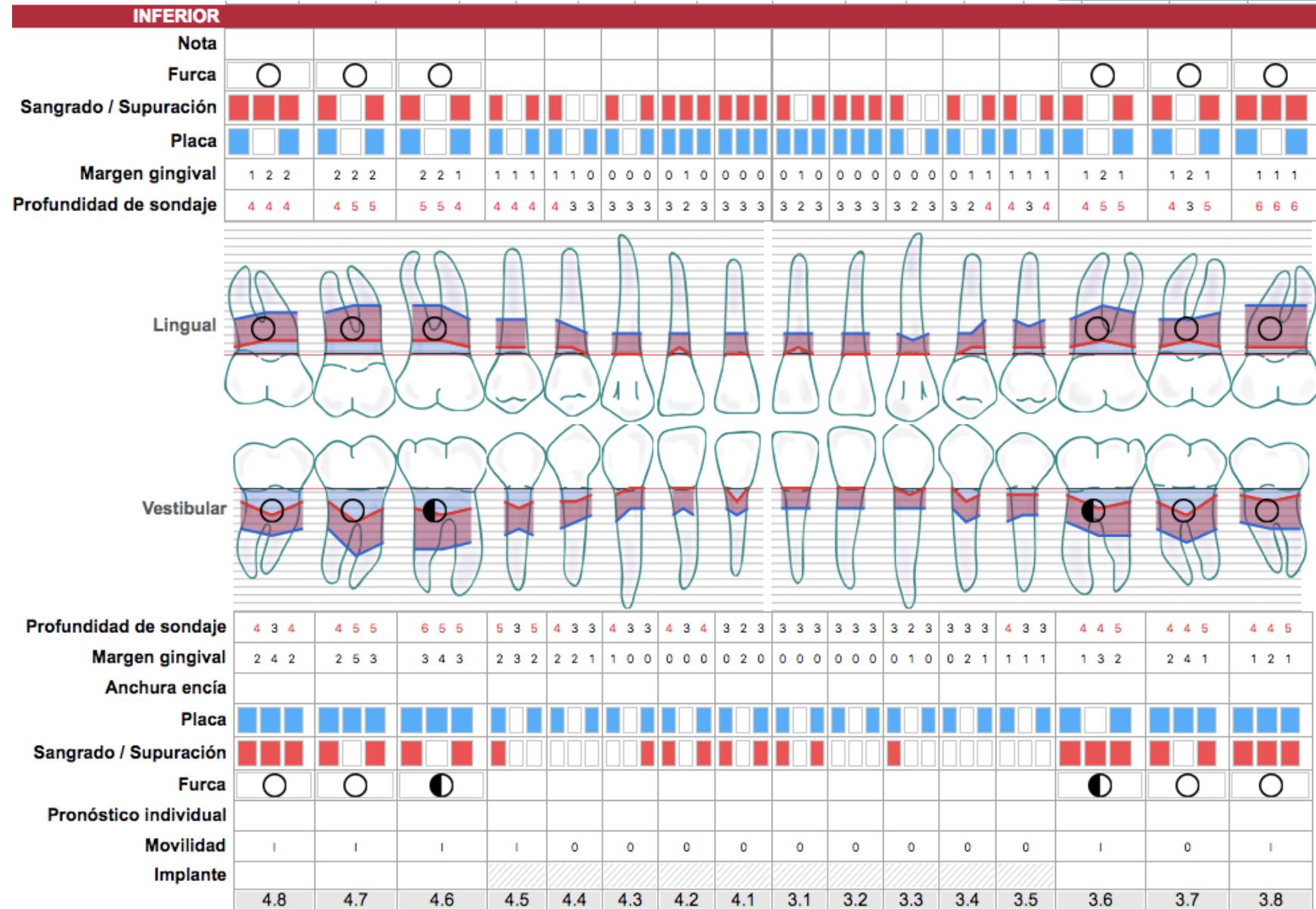


## Exploración periodontal

Actualidad



IP= 56%    IG= 65%

**Actualidad**

**Actualidad**



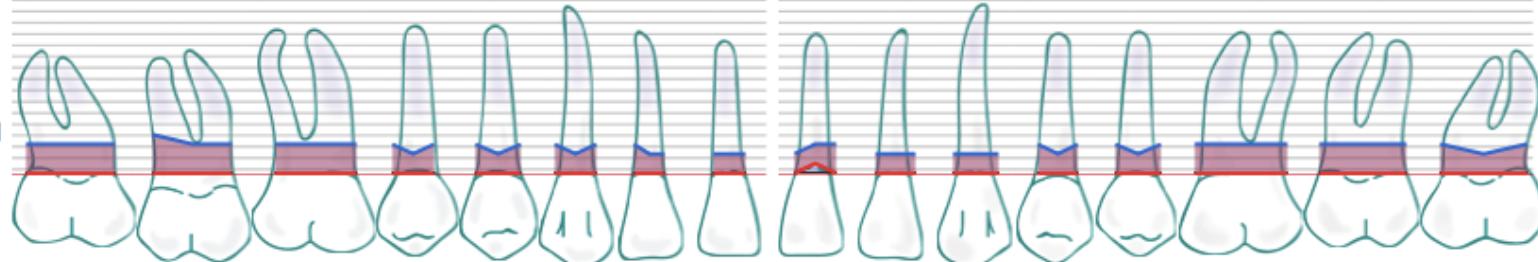
2004

2004

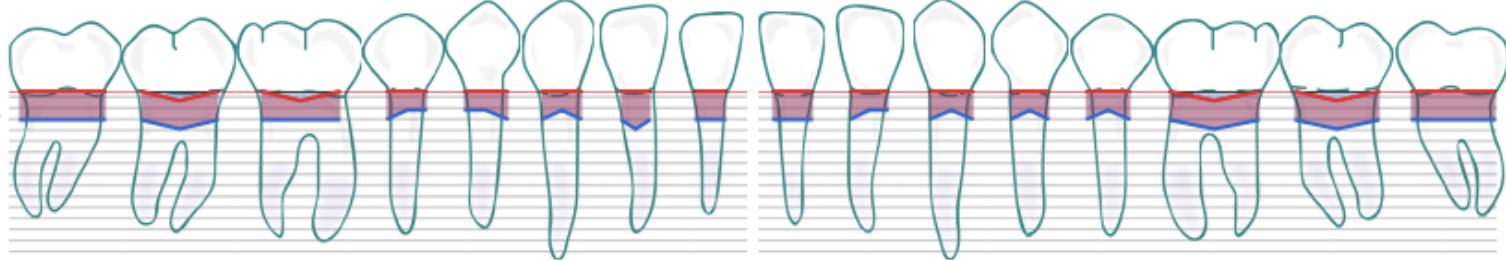
**INFERIOR**

	Nota																
<b>Furca</b>																	
<b>Sangrado / Supuración</b>	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	
<b>Placa</b>	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	
<b>Margen gingival</b>	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
<b>Profundidad de sondaje</b>	3 3 3	4 3 3	3 3 3	3 2 3	3 2 3	3 2 3	3 2 2	2 2 2	2 2 3	2 2 2	2 2 2	3 2 3	3 2 3	3 3 3	3 3 3	3 2 3	3 2 3

Lingual



Vestibular

**Profundidad de sondaje**

3 3 3	3 3 3	3 2 3	3 2 2	2 2 3	3 2 3	3 4 3	3 3 3	3 3 3	3 2 2	3 2 3	3 2 3	3 3 3	3 3 3	3 3 3	3 3 3
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**Margen gingival**

0 0 0	0 1 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 1 0	0 0 0
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**Anchura encía**

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**Placa**

■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■
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**Sangrado / Supuración**

■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■	■■■
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**Furca**

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**Pronóstico individual**

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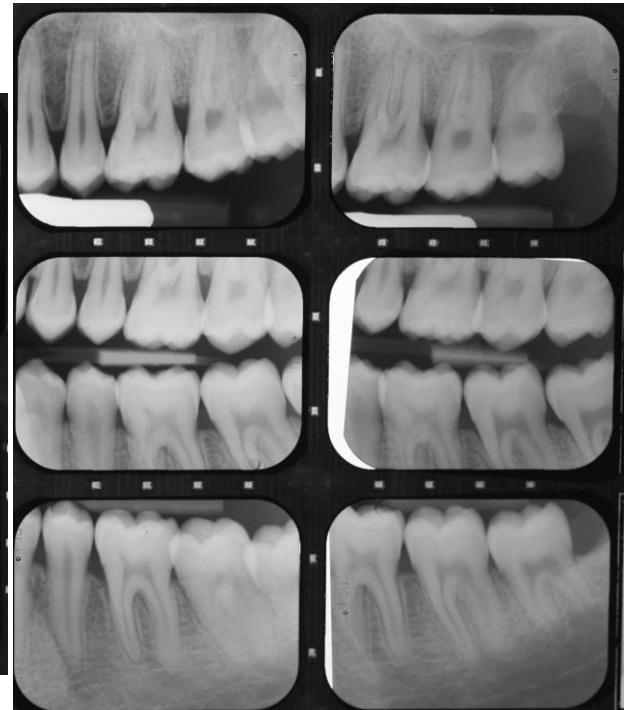
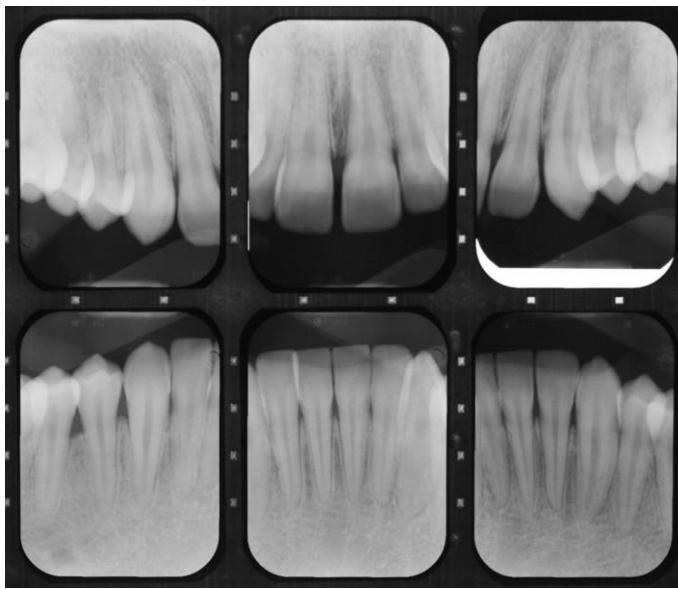
**Movilidad**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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**Implante**

4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8
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2004



- I. Gingival Diseases
  - A. Dental plaque-induced gingival diseases\*
    - 1. Gingivitis associated with dental plaque only
      - a. without other local contributing factors
      - b. with local contributing factors (See VIII A)
    - 2. Gingival diseases modified by systemic factors
      - a. associated with the endocrine system
        - 1) puberty-associated gingivitis
        - 2) menstrual cycle-associated gingivitis
        - 3) pregnancy-associated
          - a) gingivitis
          - b) pyogenic granuloma
        - 4) diabetes mellitus-associated gingivitis
      - b. associated with blood dyscrasias
        - 1) leukemia-associated gingivitis
        - 2) other
    - 3. Gingival diseases modified by medications
      - a. drug-influenced gingival diseases
        - 1) drug-influenced gingival enlargements
        - 2) drug-influenced gingivitis
          - a) oral contraceptive-associated gingivitis
          - b) other
    - 4. Gingival diseases modified by malnutrition
      - a. ascorbic acid-deficiency gingivitis
      - b. other
  - B. Non-plaque-induced gingival lesions
    - 1. Gingival diseases of specific bacterial origin
      - a. *Neisseria gonorrhoea*-associated lesions
      - b. *Treponema pallidum*-associated lesions
      - c. streptococcal species-associated lesions
      - d. other
    - 2. Gingival diseases of viral origin
      - a. herpesvirus infections
        - 1) primary herpetic gingivostomatitis
        - 2) recurrent oral herpes
        - 3) varicella-zoster infections
      - b. other
- 3. Gingival diseases of fungal origin
  - a. *Candida*-species infections
    - 1) generalized gingival candidosis
    - b. linear gingival erythema
    - c. histoplasmosis
    - d. other
- 4. Gingival lesions of genetic origin
  - a. hereditary gingival fibromatosis
  - b. other
- 5. Gingival manifestations of systemic conditions
  - a. mucocutaneous disorders
    - 1) lichen planus
    - 2) pemphigoid
    - 3) pemphigus vulgaris
    - 4) erythema multiforme
    - 5) lupus erythematosus
    - 6) drug-induced
    - 7) other
  - b. allergic reactions
    - 1) dental restorative materials
      - a) mercury
      - b) nickel
      - c) acrylic
      - d) other
    - 2) reactions attributable to
      - a) toothpastes/dentifrices
      - b) mouthrinses/mouthwashes
      - c) chewing gum additives
      - d) foods and additives
    - 3) other
  - 6. Traumatic lesions (factitious, iatrogenic, accidental)
    - a. chemical injury
    - b. physical injury
    - c. thermal injury
  - 7. Foreign body reactions
  - 8. Not otherwise specified (NOS)

**Figure I.**

Classification of periodontal diseases and conditions.

\* Can occur on a periodontium with no attachment loss or on a periodontium with attachment loss that is not progressing.

- |  |  |
|--|--|
| II. Chronic Periodontitis†<br>A. Localized<br>B. Generalized<br><br>III. Aggressive Periodontitis†<br>A. Localized<br>B. Generalized<br><br>IV. Periodontitis as a Manifestation of Systemic Diseases<br>A. Associated with hematological disorders<br>1. Acquired neutropenia<br>2. Leukemias<br>3. Other<br>B. Associated with genetic disorders<br>1. Familial and cyclic neutropenia<br>2. Down syndrome<br>3. Leukocyte adhesion deficiency syndromes<br>4. Papillon-Lefèvre syndrome<br>5. Chediak-Higashi syndrome<br>6. Histiocytosis syndromes<br>7. Glycogen storage disease<br>8. Infantile genetic agranulocytosis<br>9. Cohen syndrome<br>10. Ehlers-Danlos syndrome (Types IV and VIII)<br>11. Hypophosphatasia<br>12. Other<br>C. Not otherwise specified (NOS)<br><br>V. Necrotizing Periodontal Diseases<br>A. Necrotizing ulcerative gingivitis (NUG)<br>B. Necrotizing ulcerative periodontitis (NUP)<br><br>VI. Abscesses of the Periodontium<br>A. Gingival abscess<br>B. Periodontal abscess<br>C. Pericoronal abscess | <br><br>VII. Periodontitis Associated With Endodontic Lesions<br>A. Combined periodontic-endodontic lesions<br><br>VIII. Developmental or Acquired Deformities and Conditions<br>A. Localized tooth-related factors that modify or predispose to plaque-induced gingival diseases/periodontitis<br>1. Tooth anatomic factors<br>2. Dental restorations/appliances<br>3. Root fractures<br>4. Cervical root resorption and cemental tears<br>B. Mucogingival deformities and conditions around teeth<br>1. Gingival/soft tissue recession<br>a. facial or lingual surfaces<br>b. interproximal (papillary)<br>2. Lack of keratinized gingiva<br>3. Decreased vestibular depth<br>4. Aberrant frenum/muscle position<br>5. Gingival excess<br>a. pseudopocket<br>b. inconsistent gingival margin<br>c. excessive gingival display<br>d. gingival enlargement (See I.A.3. and I.B.4.)<br>6. Abnormal color<br>C. Mucogingival deformities and conditions on edentulous ridges<br>1. Vertical and/or horizontal ridge deficiency<br>2. Lack of gingiva/keratinized tissue<br>3. Gingival/soft tissue enlargement<br>4. Aberrant frenum/muscle position<br>5. Decreased vestibular depth<br>6. Abnormal color<br>D. Occlusal trauma<br>1. Primary occlusal trauma<br>2. Secondary occlusal trauma |
|--|--|

**Figure 1. (Continued)**

† Can be further classified on the basis of extent and severity. As a general guide, extent can be characterized as Localized = ≤30% of sites involved and Generalized = >30% of sites involved. Severity can be characterized on the basis of the amount of clinical attachment loss (CAL) as follows: Slight = 1 or 2 mm CAL, Moderate = 3 or 4 mm CAL, and Severe = ≥5 mm CAL.

✓ La lesión corresponde al apartado IV, Periodontitis  
Como Manifestación de Enfermedades Sistémicas,  
subapartado B (Asociado a Alteraciones Genéticas)

## CLASSIFICATION OF PERIODONTAL AND PERI-IMPLANT DISEASES AND CONDITIONS 2017

## Periodontal Diseases and Conditions

Periodontal Health, Gingival Diseases and Conditions			Periodontitis			Other Conditions Affecting the Periodontium					
Periodontal Health and Gingival Health	Gingivitis: Dental Biofilm-Induced	Gingival Diseases: Non-Dental Biofilm-Induced	Necrotizing Periodontal Diseases	Periodontitis	Periodontitis as a Manifestation of Systemic Disease	Systemic diseases or conditions affecting the periodontal supporting tissues	Periodontal Abscesses and Endodontic-Periodontal Lesions	Mucogingival Deformities and Conditions	Traumatic Occlusal Forces	Tooth and Prosthesis Related Factors	
Chapple, Mealey, et al. 2018 Consensus Rept <a href="#">link</a>	Papapanou, Sanz et al. 2018 Consensus Rept <a href="#">link</a>	Trombelli et al. 2018 Case Definitions <a href="#">link</a>	Jepsen, Caton et al. 2018 Consensus Rept <a href="#">link</a>	Tonetti, Greenwell, Kornman. 2018 Case Definitions <a href="#">link</a>		Jepsen, Caton et al. 2018 Consensus Rept <a href="#">link</a>	Papapanou, Sanz et al. 2018 Consensus Rept <a href="#">link</a>				

## Peri-Implant Diseases and Conditions

Berglundh, Armitage et al. 2018 Consensus Rept [link](#)

Peri-Implant Health	Peri-Implant Mucositis	Peri-Implantitis	Peri-Implant Soft and Hard Tissue Deficiencies
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✓ La situación clínica del paciente puede incluirse dentro del apartado de Periodontitis como manifestación de enfermedad sistémica

Caton J, Armitage G, Berglundh T, Chapple ILC, Jepsen S, S Kornman K, L Mealey B, Papapanou PN, Sanz M, S Tonetti M. (2018) A new classification scheme for periodontal and peri-implant diseases and conditions - Introduction and key changes from the 1999 classification. J Clin Periodontol, 45 Suppl. 20, S1-S8.

- ✓ La neutropenia cíclica se incluye en las alteraciones sistémicas que tienen un impacto importante en la pérdida de inserción periodontal por un mecanismo inflamatorio, en el subapartado de desórdenes genéticos, de tipo inmunológico
- ✓ Se define como un recuento de neutrófilos < 500 céls/microlitro cada 21 días, que dura de 3 a 6 días cada vez. Aumenta el riesgo de infecciones recurrentes, úlceras orales y pérdida de inserción periodontal
- ✓ Fuerza de la asociación: débil

Albandar JM, Susin C, Hughes FJ. Manifestations of systemic diseases and conditions that affect the periodontal attachment apparatus: Case definitions and diagnostic considerations. J Clin Periodontol. 2018 Jun;45 Suppl 20:S171-S189

Jepsen S, Caton JG, Albandar JM, Bissada NF, Bouchard P, Cortellini P, Demirel K, de Sanctis M, Ercoli C, Fan J, Geurs NC, Hughes FJ, Jin L, Kantarci A, Lalla E, Medianos PN, Matthews D, McGuire MK, Mills MP, Preshaw PM, Reynolds MA, Sculean A, Susin C, West NX, Yamazaki K. Periodontal manifestations of systemic diseases and developmental and acquired conditions: Consensus report of workgroup 3 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Clin Periodontol. 2018 Jun;45 Suppl 20:S219-S229

Classification	Disorders
1.	Systemic disorders that have a major impact on the loss of periodontal tissue by influencing periodontal inflammation
1.1.	Genetic disorders
1.1.1.	Diseases associated with immunologic disorders
	Down syndrome
	Leukocyte adhesion deficiency syndromes
	Papillon-Lefèvre syndrome
	Haim-Munk syndrome
	Chediak-Higashi syndrome
	Severe neutropenia
	- Congenital neutropenia (Kostmann syndrome)
	- Cyclic neutropenia
	Primary immunodeficiency diseases
	- Chronic granulomatous disease
	- Hyperimmunoglobulin E syndromes
	Cohen syndrome
1.1.2.	Diseases affecting the oral mucosa and gingival tissue
	Epidermolysis bullosa
	- Dystrophic epidermolysis bullosa
	- Kindler syndrome
	Plasminogen deficiency

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Classification	Disorders
1.	Systemic disorders that have a major impact on the loss of periodontal tissue by influencing periodontal inflammation
1.1.3.	Diseases affecting connective tissues Ehlers-Danlos syndrome (types IV, VIII) Angioedema (C1-inhibitor deficiency)
	Systemic lupus erythematosus
1.1.4.	Metabolic and endocrine disorders Glycogen storage disease Gaucher disease Hypophosphatasia Hypophosphatemic rickets Hajdu-Cheney syndrome Diabetes mellitus
	Obesity Osteoporosis
1.2.	Acquired immunodeficiency diseases Acquired neutropenia HIV infection
1.3.	Inflammatory diseases Epidermolysis bullosa acquisita Inflammatory bowel disease Arthritis (rheumatoid arthritis, osteoarthritis)

Albandar JM, Susin C, Hughes FJ. Manifestations of systemic diseases and conditions that affect the periodontal attachment apparatus: Case definitions and diagnostic considerations. J Clin Periodontol. 2018 Jun;45 Suppl 20:S171-S189

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Classification	Disorders
2.	Other systemic disorders that influence the pathogenesis of periodontal diseases Emotional stress and depression Smoking (nicotine dependence)
3.	Systemic disorders that can result in loss of periodontal tissue independent of periodontitis
3.1.	Neoplasms Primary neoplastic diseases of periodontal tissue -Oral squamous cell carcinoma -Odontogenic tumors -Other primary neoplasms of periodontal tissue Secondary metastatic neoplasms of periodontal tissue
3.2.	Other disorders that may affect periodontal tissue Granulomatosis with polyangiitis Langerhans cell histiocytosis Giant cell granulomas Hyperparathyroidism Systemic sclerosis (scleroderma) Vanishing bone disease (Gorham - Stout syndrome)

Albandar JM, Susin C, Hughes FJ. Manifestations of systemic diseases and conditions that affect the periodontal attachment apparatus: Case definitions and diagnostic considerations. J Clin Periodontol. 2018 Jun;45 Suppl 20:S171-S189

Jepsen S, Caton JG, Albandar JM, Bissada NF, Bouchard P, Cortellini P, Demirel K, de Sanctis M, Ercoli C, Fan J, Geurs NC, Hughes FJ, Jin L, Kantarci A, Lalla E, Medianos PN, Matthews D, McGuire MK, Mills MP, Preshaw PM, Reynolds MA, Sculean A, Susin C, West NX, Yamazaki K. Periodontal manifestations of systemic diseases and developmental and acquired conditions: Consensus report of workgroup 3 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Clin Periodontol. 2018 Jun;45 Suppl 20:S219-S229

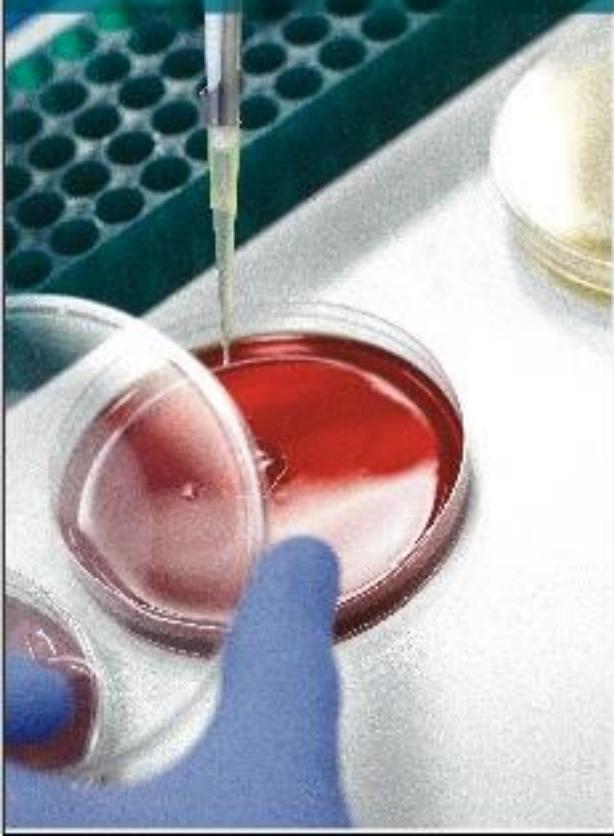


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Mercedes López Durán y el Grupo de Investigación ETEP



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ETEP Research Group (Etiology and Therapy of Periodontal Diseases)