## NEW CLASSIFICATION OF PERIODONTAL<sup>1</sup> AND PERI-IMPLANT DISEASES



Periodontitis is a **chronic multifactorial inflammatory disease** associated with dysbiotic plaque biofilm and characterized by the progressive destruction of the tooth's supporting apparatus.

## Its main features include:

- Loss of periodontal tissue support, manifested through clinical attachment loss (CAL)
- Alveolar bone loss assessed radiographically
- Presence of periodontal pockets
- Gingival bleeding

Diagnosis must be performed by all dentists on all patients and represents an essential step during the first visit for ethical, professional, and medico-legal reasons. In 2017, a consensus between the American Association of Periodontology (AAP) and the European Federation of Periodontology (EFP) provided professionals with a new classification of periodontal diseases. The main advantage of this new classification is its ability to predict the progression of the disease, especially in patients with systemic conditions.

TABLE 1: PERIODONTAL DISEASE STAGES. This is the Classification of periodontitis based on stages defined by severity.

	STAGE I	STAGE II	STAGE III	STAGE IV
Interdental Clinical attachment loss (CAL)* at site of greatest loss	1-2 mm	3-4 mm	≥5 mm	≥5 mm
Radiographic bone loss	Coronal third (<15%)	Coronal third (15-30%)	Extending to middle or apical third of the root	Extending to middle or apical third of the root
Tooth loss	No tooth loss due to periodontitis	No tooth loss due to periodontitis	Tooth loss due to periodontitis of ≤4 teeth	Tooth loss due to periodontitis of ≥5 teeth

<sup>\*</sup> In the most damaged site.

**TABLE 2: PERIODONTAL DISEASE GRADES.** They express the biological characteristics of the disease and the likelihood of its progression.

			<b>GRADE A</b> Slow rate of progression	<b>GRADE B</b> Moderate rate of progression	<b>GRADE C</b> Rapid rate of progression
	Direct evidence	Longitudinal data (radiographic bone loss or clinical attachment loss)	Evidence of No loss over 5 years	<2 mm over 5 years	≥2 mm over 5 years
	Indirect evidence	% bone loss/age	<0,25	0,25 - 1,0	>1,0
Primary criteria		Phenotype	Heavy biofilm deposits with low levels of destruction	Destruction level commensurate with biofilm deposits	Destruction exceeds expectations given biofilm deposits; specific clinical patterns suggestive of periods of rapid progression and/ or early onset disease
Grade modifiers	Risk factors	Smoking	Non-smoker	Smoker <10 cigarettes/day	Smoker ≥10 cigarettes/day
		Diabetes	Normoglycemic / no diabetes diagnosis	HbA1c* <7,0% in diabetic patients	HbA1c* ≥7,0% in diabetic patients

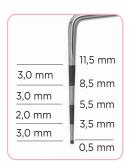
<sup>\*</sup>HbA1c: glycated hemoglobin

## PERIODONTAL DIAGNOSIS<sup>2</sup>

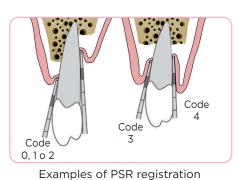
The PSR (PERIODONTAL SCREENING AND RECORDING) represents a quick, simple, and effective procedure for identifying patients who may require further evaluation for periodontal disease. The PSR is performed using a simplified periodontal probe, the O.M.S. probe. The probe has a rounded tip of 0.5 mm diameter and a colored area extending from 3.5 mm to 5.5 mm. The examination is conducted by sextants: in each sextant, only one value (code) representing the highest severity for that sextant is recorded.

**TABLE 3: PSR CODES** 

CODE	BLEEDING	CALCULUS/DEFECTIVE PROSTHETIC MARGINS	PROBING DEPTH	
4	May be present	May be present	Black band not visible > 5,5 mm	
3	May be present	May be present	Black band partially visible 3,5 mm < PD <5,5 mm	
2	May be present	Present	Below Black band entirely visible < 3,5 mm	
1	Present	Not present	Below Black band entirely visible < 3,5 mm	
0	Not present Below Black band entirely visible		Below Black band entirely visible < 3,5 mm	
X	Edentulous sextant or less than 2 teeth			
*	It can be added to any code to indicate an additional issue that may require evaluation: furcation involvement, mobility, mucogingival defects, recession greater than 3,5 mm.			



O.M.S. probe



2. **S&** La diagnosi in parodontologia. 2020

## STEPS IN PERIODONTAL TREATMENT

PHASE	PURPOSE	METHODS	CHEMICAL AND MECHANICAL ADJUVANTS
STEP 1 Patient Motivation	Control risk factors and remove biofilm.  IDEAL FOR: All periodontitis patients, irrespective of the stage of their disease.	Home oral hygiene, professional oral hygiene. <b>RECOMMENDED</b> : Smoking control and interventions for diabetes control.	<ul> <li>Curasept ADS DNA 0.20</li> <li>Curasept ASTRINGENT PRO</li> <li>Curasept SOFTLINE 0.10 or 0.12</li> <li>Curasept PROXI</li> <li>Curasept FLOSSLINE</li> </ul>
STEP 2 Periodontal Instrumentation (cause-related therapy)	Remove subgingival biofilm and tartar.  IDEAL FOR: All periodontitis patients, irrespective of their disease stage, only in teeth with loss of periodontal support and/or periodontal pocket formation.	Subgingival periodontal manual or ultrasonic instrumentation. <b>RECOMMENDED</b> : Association with antiseptic mouthwashes (only chlorhexidine) or local release systems of antiseptics or antibiotics. <b>NOT RECOMMENDED:</b> Laser and photodynamic therapy.	<ul> <li>Curasept ASTRINGENT PRO</li> <li>Curasept PERIO PRO</li> <li>Curasept SOFTLINE 0.10 or 0.12</li> <li>Curasept PROXI</li> </ul>
STEP 3 Surgical Periodontology	Treat, eliminate or possibly regenerate the sites not responding to the therapy of Phase 2.  IDEAL FOR: Pockets >4 mm with bleeding or pockets >6 mm.	Surgical intervention. <b>RECOMMENDED:</b> Regenerative therapy when possible. <b>NOT RECOMMENDED:</b> Surgical therapy in patients with poor plaque control.	<ul> <li>Curasept IMPLANT PRO</li> <li>Curasept SURGICAL</li> <li>Curasept SOFTLINE 0.10</li> <li>Curasept PROXI</li> </ul>
STEP 4 Periodontal Maintenance	Prevent recurrence of periodontitis after successful periodontal therapy.  IDEAL FOR: Patients already treated without pockets >4 mm with bleeding or pockets >6 mm. It is aimed at maintaining periodontal stability in all treated periodontitis patients.	Personalized instructions and periodic recall program.  RECOMMENDED: Use of toothbrush and interdental brushes, potentially electric/sonic toothbrush or floss.  NOT RECOMMENDED:  Laser, photodynamic therapy, subgingival drugs.	<ul> <li>Curasept PREVENT</li> <li>Curasept SOFTLINE 0.15 and 0.17</li> <li>Curasept PROXI</li> <li>Curasept FLOSSLINE</li> </ul>