

Periodontal Diseases

Prevention and patient management

Patient risk assessment

The following **patient risk assessment** can help categorize the patient's risk profile as either **LOW**, **MEDIUM** or **HIGH**. The periodontal risk assessment system should be used together with **Table 1**.

Based on an observation of the patient, score each item and calculate the patient's overall risk score.

Q	Item	Score = 0	Score = 1	Score = 2	Score = 3
1	Tooth loss due to periodontal diseases	No tooth loss <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tooth loss due to periodontitis <input type="checkbox"/>
2	Bleeding on probing	< 20% of teeth <input type="checkbox"/>	20–50% of teeth <input type="checkbox"/>	> 50% of teeth <input type="checkbox"/>	<input type="checkbox"/>
3	Probing depth	≤ 3mm <input type="checkbox"/>	> 3–5mm <input type="checkbox"/>	Localized tooth sites > 5mm <input type="checkbox"/>	Generalized tooth sites > 5mm <input type="checkbox"/>
4	Diabetes	No <input type="checkbox"/>	Well controlled (HbA1c < 7%) <input type="checkbox"/>	<input type="checkbox"/>	Poorly controlled/uncontrolled (≥ 7%) <input type="checkbox"/>
5	Smoking	No <input type="checkbox"/>	< 10 cigarettes per day <input type="checkbox"/>	10–15 cigarettes per day <input type="checkbox"/>	> 15 cigarettes per day <input type="checkbox"/>
6	Bone loss	No <input type="checkbox"/>	Initial bone loss <input type="checkbox"/>	< 1/3 of the root length <input type="checkbox"/>	≥ 1/3 of the root length <input type="checkbox"/>
7	Heavy plaque deposits covering	< 10% of teeth <input type="checkbox"/>	10–50% of teeth <input type="checkbox"/>	> 50% of teeth <input type="checkbox"/>	<input type="checkbox"/>
		CATEGORY TOTAL <input type="checkbox"/>	CATEGORY TOTAL <input type="checkbox"/>	CATEGORY TOTAL <input type="checkbox"/>	CATEGORY TOTAL <input type="checkbox"/>
		TOTAL SCORE <input type="checkbox"/>			

ASSESSMENT OF PATIENT'S RISK PROFILE

LOW FINAL SCORE = 0–5

MEDIUM FINAL SCORE = 6–10

HIGH FINAL SCORE = 11–19

ABBREVIATED ASSESSMENT

An abbreviated assessment can be completed if it is not feasible to complete the full questionnaire. If the patient has any of the listed items, he/she should be considered at risk, and necessary professional advice should be given.

NOTE This scorecard uses the main risk factors, but other risk factors could influence periodontal health, such as excessive alcohol and sugar consumption.

EXAMPLE Patient risk profiles using the patient risk assessment on reverse side

LOW TOTAL SCORE = 3	MEDIUM TOTAL SCORE = 6	HIGH TOTAL SCORE = 15
Q1 No tooth loss due to periodontitis <input type="checkbox"/> 0	Q1 No tooth loss due to periodontitis <input type="checkbox"/> 0	Q1 Tooth loss due to periodontitis <input type="checkbox"/> 3
Q2 Bleeding on probing: 20–50% of teeth <input type="checkbox"/> 1	Q2 Bleeding on probing: 20–50% of teeth <input type="checkbox"/> 1	Q2 Bleeding on probing: > 50% of teeth <input type="checkbox"/> 2
Q3 Probing depth: 3–5 mm <input type="checkbox"/> 1	Q3 Probing depth: 3–5 mm <input type="checkbox"/> 1	Q3 Probing depth: localized tooth sites > 5 mm <input type="checkbox"/> 2
Q4 No diabetes <input type="checkbox"/> 0	Q4 No diabetes <input type="checkbox"/> 0	Q4 Diabetes: well controlled (HbA1c < 7%) <input type="checkbox"/> 1
Q5 Non-smoker <input type="checkbox"/> 0	Q5 Smoker: < 10 cigarettes per day <input type="checkbox"/> 1	Q5 Smoker: 10–15 cigarettes per day <input type="checkbox"/> 2
Q6 No bone loss <input type="checkbox"/> 0	Q6 Bone loss: < 1/3 of the root length <input type="checkbox"/> 2	Q6 Bone loss ≥ 1/3 of the root length <input type="checkbox"/> 3
Q7 Inadequate oral hygiene with visible/detectable plaque covering 10–50% of teeth <input type="checkbox"/> 1	Q7 Inadequate oral hygiene with visible/detectable plaque covering 10–50% of teeth <input type="checkbox"/> 1	Q7 Poor oral hygiene with visible/detectable plaque covering > 50% of teeth <input type="checkbox"/> 2
TOTAL SCORE <input type="checkbox"/> 3	TOTAL SCORE <input type="checkbox"/> 6	TOTAL SCORE <input type="checkbox"/> 15

PATIENT WITH

Typical biofilm-induced gingivitis	Initial to moderate periodontitis	Severe periodontitis
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Periodontal diseases are chronic inflammatory diseases of bacterial aetiology that affect the tooth-supporting soft and hard tissues:

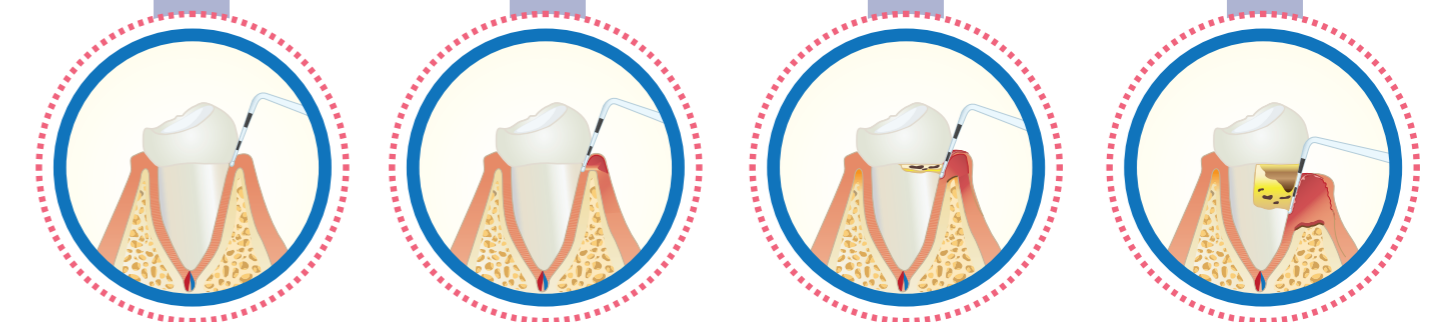
- **Plaque-induced gingivitis** is a gingival inflammation without bone loss.
- **Periodontitis** is an inflammation of the gingival tissues resulting in loss of alveolar bone.

TABLE 1 PERIODONTAL DISEASE PROGRESSION

Table 1 is an assessment tool used to determine the patient's periodontal status as **gingival/periodontal health**, **gingivitis** or **periodontitis**, using common signs/symptoms that can be easily identified using only a **periodontal probe** and an **x-ray**. Early detection of the disease enables general practitioners and/or dental hygienists to prevent disease progression and help patients improve and maintain their oral/periodontal health.

GINGIVAL/ PERIODONTAL HEALTH	GINGIVITIS	Initial to Moderate PERIODONTITIS STAGES 1–2	Severe PERIODONTITIS STAGES 3–4
Healthy gums	Red and swollen gums	Red and swollen gums	Red and swollen gums
Good oral hygiene	Plaque and/or calculus	Plaque and/or calculus	Plaque and/or calculus
Minimal bleeding on probing (<10% of sites)	Bleeding on probing (≥20% of sites)	Generalized bleeding on probing	Generalized bleeding on probing
No periodontal pockets (≤3 mm)	Shallow periodontal pockets (≤4 mm)	Periodontal pockets (4–5 mm)	Deep periodontal pockets (>5 mm)
No bone loss on radiograph	No bone loss on radiograph	Bone loss < 1/3 of root length on radiograph	Bone loss > 1/3 of root length on radiograph

MEASURING POCKET DEPTH USING A PROBE



*Please consult national guidelines and recommendations on periodontal disease management and prevention

TABLE 2 PERIODONTAL DISEASES: PREVENTION AND MANAGEMENT OF PATIENTS

Table 2 below provides a patient risk profile and practical guidance to effectively manage patients. It should be used together with Table 1, which aids in the assessment of periodontal disease progression. To determine the patient's risk profile, please refer to the patient risk assessment on the reverse side of this page.

PATIENT'S RISK PROFILE		LOW TOTAL SCORE = 0-5	MEDIUM TOTAL SCORE = 6-10	HIGH TOTAL SCORE = 11-19
TREAT YOUR PATIENTS	TREATMENT GOALS	<ul style="list-style-type: none"> Enhance plaque control for good oral hygiene Eliminate clinical signs of inflammation 	<ul style="list-style-type: none"> Avoid progression to periodontitis 	<ul style="list-style-type: none"> Arrest disease progression Regeneration of lost structures as appropriate Surgical intervention as appropriate Further interventions to restore oral function and aesthetics
	ANTI-INFECTIVE THERAPY	<ul style="list-style-type: none"> Professional Mechanical Plaque Removal (PMPR): <ul style="list-style-type: none"> Effective control of plaque and removal of the calculus through supra- and sub-gingival scaling and root debridement Perform scaling using sonic/ultrasonic scalers and hand instruments (scalers and curettes) with effective management of pain/discomfort Removal of stains/colorations on tooth surfaces and newly formed calculus through prophylaxis and air polishing if appropriate 	<ul style="list-style-type: none"> Subgingival debridement using hand and/or ultrasonic instruments Evaluate the need for adjunctive antimicrobial therapies 	
	CORRECTIVE THERAPY	<ul style="list-style-type: none"> Provide Oral Hygiene Instructions (OHI) to patient: <ul style="list-style-type: none"> 2 minutes twice-daily brushing with up to 1500ppm fluoride toothpaste Use manual or powered toothbrush for an effective reduction of plaque and gingival inflammation Use soft, small-headed brushes with end-rounded bristles Daily interproximal cleaning with interdental brushes and/or dental floss in sites with narrow interdental spaces Additional approach to be adapted to patient as appropriate, with adjunctive use of dentifrices and/or mouth rinses with scientifically proven antiplaque/antigingivitis effects 	<ul style="list-style-type: none"> Re-evaluate initial treatment response Consider surgical interventions or referral to a periodontist if inflammation persists despite good oral hygiene 	<ul style="list-style-type: none"> Advise behavioural change and engagement in practical actions Consider surgical interventions or referral to a periodontist if inflammation persists and residual pockets are above 5mm despite good oral hygiene
PREVENTION AND LONG-TERM MAINTENANCE/ FOLLOW-UPS		<ul style="list-style-type: none"> Recall for supportive periodontal therapy (SPT) once or twice per year Polish tooth surfaces (bristle brush, rubber cup and air polisher to be adapted to the patient) to prevent plaque re-accumulation Oral Hygiene Instructions (OHI) and professional homecare recommendation 	<ul style="list-style-type: none"> Recall for supportive periodontal therapy (SPT) twice per year upon professional recommendation Continuous risk assessment and risk factor control 	<ul style="list-style-type: none"> Recall for supportive periodontal therapy (SPT) more than twice per year upon professional recommendation
		PRIMARY CARE AND PREVENTION, DELIVERED MAINLY BY A DENTAL HYGIENIST	PRIMARY CARE AND PREVENTION, DELIVERED MAINLY BY A DENTAL HYGIENIST AND/OR DENTIST	CONSULTATION AND CONSIDERATION FOR REFERRAL TO A PERIODONTIST