Periodontal Treatment Protocol

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1. Periodontal Assessment

Signs of perio disease:
- Gingivae become red/purple
- Gingivae loses stippled texture
- Oedematous, swollen, spongy, friable gingivae
- Gingival margins can become thick, blunted, rolled
- Suppuration
- Perio disease may be present in the absence of these signs

BPE should be carried out at every examination visit.

BPE Scoring codes:

0 No pockets >3.5 mm, no calculus/overhangs, no bleeding after probing (black band completely visible)

1 No pockets >3.5 mm, no calculus/overhangs, but bleeding after probing (black band completely visible)

2 No pockets >3.5 mm, but supra- or subgingival calculus/overhangs (black band completely visible)

3 Probing depth 3.5-5.5 mm (black band partially visible, indicating pocket of 4-5 mm)

4 Probing depth >5.5 mm (black band entirely within the pocket, indicating pocket of 6 mm or more)

***** Furcation involvement

Use WHO probe (diameter of 0.5mm and coloured band from 3.5-5.5mm) and probing force of 20-25g recommended

Protocol: Pre-treatment full periodontal indices (see attached)

This should include:
- 6PPC
- Recession
- Bleeding
- Mobility
- Furcation involvements
- Suppuration
- Plaque score

Plaque scores can be good motivation for patients, however please note the appearance of the gingival tissues as this is a better indication of inflammation than the patients plaque score on the day.

2. Diagnosis

Armitage GC. Development of a classification system for periodontal diseases and conditions. Ann Periodontol. 1999;4:1-6

Gingivitis
Periodontitis **Localised Aggressive**
Generalised Aggressive
Chronic (generalised / localised)
Periodontal disease associated with systemic illness
Necrotising periodontal diseases – NUG / NUP
Abscesses of the periodontium
Perio-Endo lesions
Developmental disorders

Risk Factors

Genetic predisposition (only approx. 10% are resistant)
Local factors: plaque and plaque retentive factors, tooth anatomy, position, restorations, root shape, length, pulpal involvement, thin alveolar bone, occlusion
Systemic factors: Smoking Obesity Diabetes
Nutrition Stress

Aggressive Periodontitis

Primary: Non-contributory medical history
Familial aggregation of cases
Rapid attachment loss and bone destruction – progression difficult to measure
Usually non-smokers with good oral hygiene

Secondary: Amount of microbial deposits inconsistent with amount of tissue destruction
Elevated levels *Aa* and *Pg*
Phagocyte abnormalities
Hyper-responsive macrophage phenotype (increased levels PEG2 & IL-1β)
Progression of attachment loss and bone loss may be self-arresting

Localised AP	**Generalised AP**
Incisors/ 1st molars +2 other teeth	Incisors/1st molars +>3 other teeth
Little inflammation	Some inflammation
Simple, Thin, non calcified biofilm	Biofilm can be as thick as in chronic perio

Chronic Periodontitis

- The amount of destruction commensurate with oral hygiene and plaque levels, local predisposing factors, smoking, stress and subgingival calculus is invariably present at diseased sites
- The rate of progression of chronic periodontitis is in most cases slow to moderate; periods of rapid tissue destruction may occur

Localised:	**Generalised:**
When <30% of sites are affected	more than 30% of sites affected

3. Non Surgical Treatment

Expected outcomes from non surgical treatment (Cobb CM. J of C Periodontol. 2002;29(Suppl 2):6-16):

Pocket depth (Cobb 1996)	Reduction in pocket depth	Attachment change
1-3mm pockets	0.03mm	- 0.34mm (loss)
4-6mm pockets	1.29mm	+ 0.55mm (gain)
7mm + pockets	2.16mm	+ 1.19mm (gain)

Chronic Periodontal Disease

a. OHI – the use of snug fitting Tepe brushes, floss and single tufted brushes (+ smoking cessation, advice on diabetes control as appropriate)
b. Full Periodontal indices
c. RSD pockets 4mm of deeper under LA (2mins per site using ultrasonic) + OHI
d. Oral hygiene review at one month post RSD (assess inflamed soft tissues, remove calculus, reassess Tepe brushes and demonstrate snug fitting Tepe brushes)

Tepe Brushes: Snug fit, change in size as inflammation subsides, use them in furcations, use them vertically in deep pockets

Aggressive Periodontal Disease

a. OHI – the use of snug fitting Tepe brushes, floss and single tufted brushes
b. Full Periodontal indices
c. RSD pockets 4mm of deeper under LA (2mins per site using ultrasonic) with adjunctive antibiotics usually for first cycle of treatment only* + OHI
d. Oral hygiene review at one month post RSD (assess gingival inflammation, remove calculus, reassess Tepe brushes and demonstrate snug fitting Tepe brushes)

* Adjunctive antibiotics to start on the day of treatment and completed during the time period when the patient is taking the antibiotics:

- 500mg Azythromycin OD 3/7
- 500mg Amoxycillin and 400mg Metronidizole TDS 7/7

Drug Induced Gingival Overgrowth

a. Assess medical history
   - antiepileptics (e.g. phenytoin and occurs in about 50% of patients taking drug),
   - immunosupressants (e.g. cyclospirin and occurs in about 30% of patients taking drug)
   - calcium channel blockers (e.g. amlodipine, nifedipine and occurs in about 10% of patients taking drug).
b. Write to GMP and ask if drug can be changed to another generic drug
c. OHI – the use of snug fitting Tepe brushes, floss and single tufted brushes
d. Review at 3/12 after changing medication
e. Full Periodontal indices
f. RSD pockets 4mm of deeper under LA (2mins per site using ultrasonic) + OHI
g. OH review at one month post RSD (assess inflamed soft tissues, remove calculus, reassess Tepe brushes and demonstrate snug fitting Tepe brushes)

4. Reassessment & Further Treatment

- Minimum of 3 months post RSD before reassessment to allow gingival healing
- Full periodontal indices
- Assess reasons for the presence of residual pockets
- Plan either a further cycle of non-surgical RSD or surgical treatment

5. Supportive Periodontal Treatment / Periodontal Maintenance

Frequency depends on the compliance of the patient, may vary between 2 – 4 months and should include the following:

a. Review and reinforce OH – i.e. show the patient which areas are being missed and show them in how to clean these areas in the patients own mouth
b. Full periodontal indices
c. Scaling where necessary, may need LA and RSD (may even need to consider other treatment like surgery, root amputation, hemisection – this can be provided in secondary care)

Periodontal Indices Chart

Date:

Patient Sticker:

Plaque																
Furcation																
Mobility																
Suppuration																
Bleeding																
Recession																
6PPC																
	18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
	48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
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