

Create it 



Minimally Invasive Therapy

The oral hygiene journey



NSK



Create M.I.T.

Create a healthier future – with you, and M.I.T.

At NSK, we have long worked alongside dental professionals and partners across the globe, developing solutions that address real clinical needs. This unwavering commitment has been at the heart of our mission since our founding in 1930.

With pride in our “MADE in KANUMA” heritage, we’ve delivered high-quality dental instruments to professionals in more than 135 countries. But our role extends beyond manufacturing – we aim to be a true partner, growing together with those who care for patients every day.

In recent years, the need for periodontal care has become increasingly evident, and the industry has adopted the clinical framework set out by the European Federation of Periodontology (EFP) as a global standard. In response, NSK is proud to introduce M.I.T. (Minimally Invasive Therapy) – our new framework aligned with these global standards.

Create it – to protect the beauty and irreplaceable value of smiles around the world.

WHAT IS M.I.T.?

Minimally Invasive Therapy: Pursuing Excellence in Periodontal Care

M.I.T. aligns with the benchmark in periodontal treatment – being anchored in the EFP S3 Level Clinical Guidelines and built around a patient-first philosophy. This modern approach empowers clinicians to deliver precise, predictable, and evidence-based care for Stage I-III periodontitis.

By embracing this structured, research-driven framework, clinicians can elevate their practice, enhance patient outcomes, and align with global standards in periodontal care. This framework empowers clinicians to deliver effective, evidence-based care through three key pillars:

What M.I.T. recommends



Thorough Patient Assessment

Accurate diagnosis is the foundation of successful treatment. Clinicians begin by checking their patient's risk factors (systemic, local and lifestyle factors). Conduct a full intraoral and extraoral exam/analysis. Initiate patient engagement.



Evidence-Based Treatment

Clinicians establish a diagnosis and conclude with a personalised treatment plan, based on the patient's unique case. Personalised care can be provided using NSK's extensive portfolio of precision instruments and technologies – designed to support clinicians and patients in every stage of periodontal therapy.



Patient Empowerment

Patients are equipped with the knowledge and education to maintain their oral health independently. Through patient engagement, with the support of clinicians and NSK solutions, long-term outcomes become a shared achievement.

WHY M.I.T.?

Empowering Clinical Decision-Making with M.I.T.

M.I.T. is more than a treatment concept – it is a clinical framework designed to support confident, patient-specific decision-making. It also fosters a shared understanding across your practice, ensuring consistency and clarity in periodontal care.

Its minimally invasive philosophy extends beyond technique to encompass the entire approach to patient care. Through meaningful and productive consultations, clinicians can identify the most effective, least invasive interventions to improve patient outcomes. At the same time, patient education becomes a powerful tool, enabling individuals to take ownership of their oral health and reducing the need for frequent clinical visits. Most importantly, M.I.T. encourages a proactive mindset: by assessing each patient's unique needs and focusing on treating the underlying condition rather than merely maintaining it, stabilisation is achieved more efficiently and sustainably. This results in a streamlined, patient-friendly care pathway that reflects the very essence of minimally invasive dentistry.

Why M.I.T. makes a difference



Personalised Over Protocolised

The importance is placed on understanding each patient's unique situation and tailoring the appropriate approach accordingly, rather than applying the same treatment to all patients.



Comprehensive Coverage Across All Stages

It accommodates patients across the full spectrum of periodontal conditions and stages of treatment.



Patient Focused

With the patient's unique diagnosis being considered, M.I.T. offers clinical choice and supports evidence based periodontal care.

The M.I.T. journey

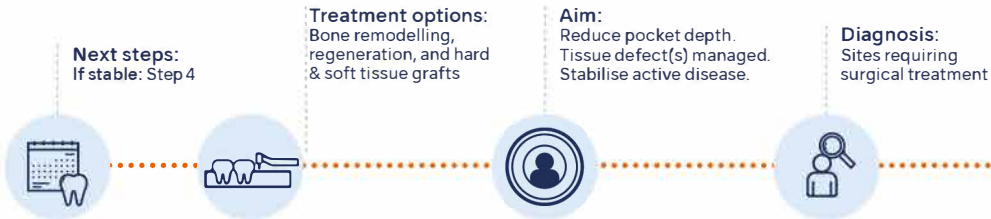
SCREEN / ASSESS



PRODUCTS AVAILABLE TO STEP 1



SURGICAL TREATMENT



PRODUCTS AVAILABLE TO STEP 3



SUPPORTIVE CARE



SUPRAGINGIVAL TREATMENT



Diagnosis:
Gingival health
Gingivitis
Periodontitis
Peri-implant health
Peri-mucositis
Peri-implantitis

Aim:
Disrupt biofilm
Remove stains
Reduce inflammation
Engage patient

Treatment options:
Supragingival / mucosal biofilm disruption, PMPR* & plaque retentive factor management:
Powder therapy, Piezo ultrasonic scaling / Air scaling, Hand-instrumentation, Polishing & Rotary instruments

Decide way forward:
If healthy: Repeat Step 0/1
If stable: Step 4
If unstable & engaged: Step 2
If unstable & non-engaged: Repeat Step 1



VA2-LUX-HP Ti Piezo Scaler Handpiece

Piezo Scaler Tips G4, G8, G16 & P20

Ti-Max S970L Air Scaler

Air Scaler Tips S3 & S1

iProphy

Rotary instruments Z25L & Zmicro

SUBGINGIVAL TREATMENT



Next steps:
If stable: Step 4
If unstable: Repeat Step 2, or move to Step 3

Treatment options:
Subgingival / Submucosal PMPR:
Powder therapy, Piezo ultrasonic scaling / Air scaling & Hand-instrumentation

Aim:
Disrupt biofilm.
Removal of plaque retentive factors.
Inflammation and pocket depth reduction.
Continued patient engagement.

Diagnosis:
Periodontitis / Peri-mucositis / Peri-implantitis



PRODUCTS AVAILABLE TO STEP 4

PRODUCTS AVAILABLE TO STEP 2

Education

In the management of periodontal disease, the quality of a patient's self-care is not a secondary concern – it is a decisive factor in both treatment outcomes and long-term prognosis. During the Maintenance Phase, it is no longer sufficient for dental professionals to only provide treatment. Instead, we must adopt the mindset of collaborative partners, working alongside our patients to preserve their oral health.

Clinical care is not the end of the journey – it is the beginning of lifelong health maintenance. Our role extends beyond technical procedures; it includes nurturing and supporting each patient's ability to care for their own oral health.

To fulfill this role effectively, a multifaceted approach is essential:

- Clearly communicating the importance of self-care in a way that resonates with each patient's personal context.
- Providing ongoing training in proper brushing techniques and the use of interdental cleaning tools.
- Sustaining motivation through regular feedback, encouragement, and positive reinforcement.

These efforts are not optional or merely supplementary – they are central to our professional mission. Supporting self-care is a clinical skill in its own right, and one that directly contributes to the long-term success of periodontal therapy.

From 'treating' to 'empowering':

With the M.I.T. framework, our role is to guide, support, and walk alongside our patients as they take ownership of their oral health. By embracing this philosophy as a team and integrating it into daily practice, we strengthen patient trust and build a foundation for sustainable, lifelong health.



Step 0 - Screen / Assess

All patients should first undergo a comprehensive consultation and clinical examination, so that dental professionals can establish an accurate diagnosis, determine the appropriate evidence-based treatment plan, and provide patient-centred education according to the individual's unique condition.



Diagnosis

Periodontal care is a cornerstone of oral health – essential for every patient, regardless of symptoms. *Step 0: Screen / Assess* applies universally, from first-time visitors to patients in long-term maintenance, ensuring that every individual receives a personalised and evidence-based treatment approach, according to their condition at the time of each treatment.



Aim

Before any treatment begins, a comprehensive evaluation is essential. This includes a multidimensional assessment of the patient's oral health, systemic conditions, lifestyle habits, and risk factors. Based on this thorough analysis, we establish a diagnosis grounded in scientific evidence and clinical best practices. The goal is clear: to formulate a treatment plan that is precisely tailored to the individual needs of each patient. Step 0 is more than a starting point – it is the core of clinical excellence. By embracing this approach as a unified team and integrating it into daily practice, we elevate the quality of care, enhance patient satisfaction, and achieve long-term treatment success.



Treatment options

Assess the patient's current condition, using periodontal charts (pocket/probing depths, bleeding on probing (BoP), clinical attachment level (CAL) measurements, and biofilm scores), as well as appropriate radiographs.



Next steps

Explain the intention of a minimally invasive approach (and possibly introduce the M.I.T. framework). Identify what treatment pathway the patient is currently on and discuss it with them to ensure understanding and engagement.





Step 1 - Supragingival Treatment

Step 1 focuses on behaviour change and supragingival biofilm control, personalised oral-hygiene education (e.g. toothbrushing and interdental cleaning), PMPR (Professional Mechanical Plaque Removal), correction of plaque-retentive factors, and targeted risk-factor control (e.g. smoking cessation and glycaemic control). The aim is to engage and motivate the patient, ultimately creating a patient-maintainable environment before any subgingival therapy.



Diagnosis

Step 1 covers most types of patients, specifically patients with gingival health, gingivitis, periodontitis, peri-implant health, peri-mucositis, and/or peri-implantitis. Patients might for example present gingival inflammation, characterised by erythema, edema, and bleeding on probing. Plaque control might be inadequate, and the patient might yet need to establish consistent oral hygiene habits. Supragingival plaque and calculus could be heavily accumulated, and systemic risk factors such as smoking or diabetes may be contributing to the periodontal condition.



Aim

The key goal is to disrupt biofilm, remove plaque retentive factors such as staining, reduce inflammation and achieve patient engagement – as deemed relevant. Supragingival plaque and calculus can be effectively eliminated to prevent an early inflammatory response and establish a healthy periodontal environment.



Treatment options

Supragingival /mucosal biofilm disruption, PMPR & plaque retentive factor management: Powder therapy, Piezo ultrasonic scaling / Air scaling, Hand-instrumentation, Polishing & Rotary instruments

Before



After



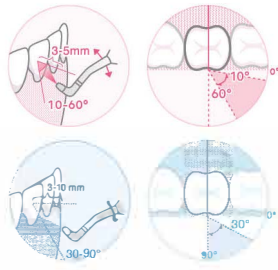


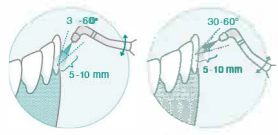


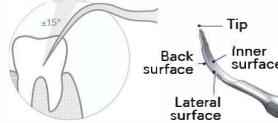







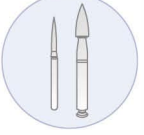



Next steps

- If healthy: Repeat Step 0/1
- If stable: Step 4
- If unstable & engaged: Step 2
- If unstable & non-engaged: Repeat Step 1



Products available to STEP 1

				WITH	BY
POWDER THERAPY	Supragingival	 <p>Varios Combi Pro2 Prophy-Mate neo</p>		 <p>FLASH pearl & SOFT pearl</p>	 <p>For use on sound enamel, with moderate to heavy staining. Direct the nozzle away from the gingival margin and exercise caution near inflamed tissue.</p>
	Gingival margin	 <p>Varios Combi Pro2 Perio-Mate</p>		 <p>Perio Mate Powder</p>	 <p>For biofilm management and light staining. The Perio-Mate nozzle with Perio Mate Powder, can be used on all oral areas. Not to be used in areas of high inflammation.</p>
SCALING	Piezo	 <p>Varios Combi Pro2 Varios 970</p>		 <p>Piezo Scaler Tips</p>	 <p>Working area For optimal efficiency, focus on using $\pm 2-3$ mm from the tip, at a $\pm 15^\circ$ angle, using the lateral surface primarily. * The inner and back surfaces may also be used depending on the situation. The correct tip should be chosen, based on tip shape and cross section – to fit the tooth morphology and presenting condition.</p>
	Air	 <p>Ti-Max S970</p>		 <p>Air Scaler Tips</p>	 <p>Air scalers' orbital stroke pattern ensures all surfaces are active in use. Care should be taken to avoid tip end to tooth contact. The correct tip should be chosen, based on tip shape and cross section – to fit the tooth morphology and presenting condition.</p>
POLISHING	Tooth surface	 <p>iProphy X55L & Z57L</p>		 <p>Prophy Cups & Brushes</p>	 <p>Low abrasivity polishing pastes are advised for staining and biofilm management.</p>
SMOOTHENING	Restorations	 <p>Z25L & Zmicro</p>		 <p>Diamond Burs & Polishing Disc</p>	 <p>Remove overhanging restorations that are plaque retentive, by smoothing and polishing.</p>



STEP 2 - Subgingival Treatment

Step 2 focuses on subgingival instrumentation, removing subgingival biofilm and calculus and aiming to reduce bleeding and pocket depth(s) without surgery. High-quality instrumentation and reassessment is key during this phase.



Diagnosis

The patient might present with:

Periodontitis: Periodontal inflammation with progressive loss of periodontal ligament and alveolar bone, resulting in clinical attachment loss (CAL) and periodontal pocketing (often with bleeding on probing and/or suppuration). Left untreated, it could lead to tooth mobility and potential tooth loss.

Peri-mucositis: A reversible, plaque-associated inflammatory lesion confined to the peri-implant soft tissues, presenting with bleeding on probing (suppuration), erythema and oedema, without radiographic bone loss beyond initial post-placement remodelling.

Peri-implantitis: Inflammation of the mucosa together with progressive loss of supporting crestal bone compared with a baseline, typically accompanied by increased probing depths and bleeding on probing and/or suppuration. Without intervention, implant failure is likely.



Aim

Effective removal of subgingival biofilm and calculus to reduce periodontal pocket inflammation, promote soft tissue healing, and achieve pocket depth reduction – establishing a foundation that lowers the likelihood of future surgical intervention. The removal of plaque retentive factors such as overhangs might be necessary and continued patient engagement remains essential.



Treatment options

Subgingival / Submucosal PMPR:

Powder therapy, Piezo ultrasonic scaling / Air scaling & Hand-instrumentation

Before



After



Treatment











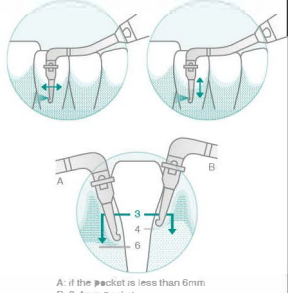
Next steps

If stable: Step 4

If unstable: Repeat Step 2, or move to Step 3



Products available to STEP 2

		WITH	BY
SCALING	Piezo	 <p>Varios Combi Pro2</p> <p>Varios 970</p>	 <p>Piezo Scaler Tips</p>  <p>Working area For optimal efficiency, focus on using $\pm 2-3$ mm from the tip, at a $\pm 15^\circ$ angle, using the lateral surface primarily. * The inner and back surfaces may also be used depending on the situation.</p>
	Air	 <p>Ti-Max S970</p>	 <p>Air Scaler Tips</p>  <p>Heavy gross deposit removal, using curette-shaped tips that allow access to interproximal calculus spurs</p> <p>Air scalers' orbital stroke pattern ensures all surfaces are active in use. Care should be taken to avoid tip end to tooth contact. The correct tip should be chosen, based on tip shape and cross section - to fit the tooth morphology and presenting condition.</p>
POWDER THERAPY	Subgingival	 <p>Varios Combi Pro2</p> <p>Perio-Mate</p>	 <p>Perio Mate Powder</p>  <p>The Perio-Mate nozzle tip is used around implant prostheses to gain access. It may also be used following initial non-surgical subgingival PMPR to disrupt residual biofilm in non-bleeding pockets that remain non-responsive at review</p> <p>A: if the pocket is less than 6mm B: 3-4mm pockets</p>



STEP 3 - Surgical Treatment

Step 3 targets residual deep sites and hard-to-clean defects, using site-specific corrective therapy to gain access for thorough decontamination and to reshape or regenerate tissues where indicated. This may include resective or regenerative periodontal surgery and periodontal plastic procedures, selected to stabilise the periodontium and improve long-term maintainability.



Diagnosis

The patient continues to present sites that do not sufficiently improve with continued treatment from non-surgical therapy (Steps 1 & 2). These areas of incomplete healing indicate a need for surgical intervention / targeted procedures after Step 2, to correct persistent pocketing and restore proper periodontal architecture.



Aim

The goal is to eliminate or reduce periodontal pockets and restore osseous defects – ultimately stabilising active disease, supporting long-term tooth preservation and functional rehabilitation.



Treatment options

Treatment may include: Bone remodelling, bone regeneration, and/or hard and soft tissue grafts.







Next steps

If stable: Step 4



Products available to STEP 3

		PRODUCT	
		 <p>VarioSurg 4</p>	 <p>Surgic Pro2</p>
		WITH	
		 <p>Ultrasonic Surgery Tips</p>	 <p>Surgical Handpieces</p>
SURGICAL INTERVENTION	MAIN CLINICAL GOAL		
Access flap surgery (open flap debridement)	Reflect flap to access deep pockets and remove granulation tissue; limited bone reshaping if needed.	<ul style="list-style-type: none"> Bone Surgery tips SG1 / SG1A / SG8 / SG8A for very conservative adjustment of bony ledges. Curved tips SG2R / SG2L where interproximal access is limited. Scraper tips SG3 / SG4 / SG5 for controlled removal of fibrous tissue from defect walls. 	<ul style="list-style-type: none"> X-SG65L for light osteoplasty and smoothing of sharp bony edges where you have straight access. Z-SG45L if you need to adjust bone in more posterior or lingual areas with restricted access.
Regenerative surgery for intrabony defects (GTR/EMD ± graft)	Prepare the defect and bony walls for grafting and regeneration in vertical defects.	<ul style="list-style-type: none"> Bone Surgery tips SG1 / SG1A / SG8 / SG8A / SG30 for shaping defect walls and creating micro-osteotomies/decortication points. Curved tips SG2R / SG2L for mesial/distal components. Scraper tips SG3 / SG4 / SG5 to clean and refine defect walls with minimal bone sacrifice. 	<ul style="list-style-type: none"> X-SG65L for rotary decortication with small round burs and gentle rounding/opening of bony walls where access is straightforward. Z-SG45L when posterior positioning or a distal approach requires a 45° head for better line of sight.
Regenerative surgery in Class II furcations	Regain support within accessible furcation defects while retaining the tooth.	<ul style="list-style-type: none"> Curved tips SG2R / SG2L / SG14R / SG14L for precise osteoplasty within the furcation entrance & along interradicular bone. Bone Surgery tips SG1 / SG8 for refining adjacent crater walls. Scraper tips SG3 / SG4 for controlled removal of granulation tissue from the furcation dome. 	<ul style="list-style-type: none"> Z-SG45L as the main contra-angle when slightly widening furcation entrances or smoothing interradicular bone in posterior molars. X-SG65L on buccal/lingual cortical bone where straight access allows simple contour correction.
Resective periodontal surgery (apically positioned flap, osseous resection)	Reduce pocket depth by recontouring bone and repositioning the flap apically.	<ul style="list-style-type: none"> Bone Surgery tips SG1 / SG1A / SG8 / SG30 for precise shaping and thinning of bony walls and crater correction. Curved tips SG2R / SG2L / SG14R / SG14L for interproximal and furcation-adjacent contouring. Scraper tips SG3 / SG4 / SG5 to refine and smooth resected surfaces after bulk removal. 	<ul style="list-style-type: none"> X-SG65L as the main workhorse for bulk cortical bone removal and levelling in accessible areas with carbide/diamond burs. Z-SG45L for distal molars, palatal/lingual aspects and distal wedge areas where the 45° head improves access and visibility.



STEP 4 - Supportive Care

Step 4 focuses on supportive periodontal care (maintenance)—a lifelong, risk-based programme of periodic review, monitoring (e.g., bleeding on probing, pocket depths, stability), and tailored prevention to sustain health and prevent recurrence. It reinforces home care and risk-factor control (e.g., smoking, glycaemic management) and provides professional prophylaxis and targeted retreatment of sites as indicated to maintain stability over time.

Diagnosis

The patient's periodontal tissues are clinically stable, showing little to no inflammation. Pocket depths are shallow, with no bleeding on probing or signs of infection. The patient follows excellent oral hygiene routines and remains highly motivated. Ongoing supportive periodontal therapy helps effectively prevent disease from returning.

Aim

Maintain periodontal stability post-treatment and prevent disease recurrence through ongoing supportive care. Patients are empowered to sustain effective oral hygiene and lasting motivation, while facilitating early detection and timely intervention – all key to ensuring long-term tooth retention.

Treatment options

Supragingival / mucosal biofilm disruption, PMPR* & plaque retentive factor management: Powder therapy, Piezo ultrasonic scaling / Air scaling, Hand-instrumentation & Polishing

Before



After



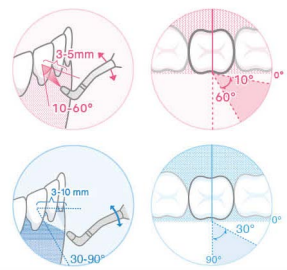


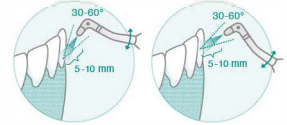

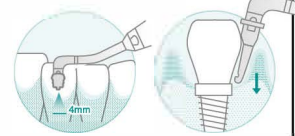


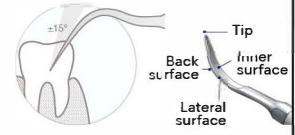


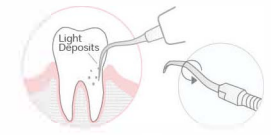





Next steps







Schedule call-back every 3-12 months (according to the patient's needs).
A perio patient never ceases to be a perio patient.



Products available to STEP 4

			WITH	BY
POWDER THERAPY	Supragingival	 <p>Varios Combi Pro2 Propy-Mate neo</p>	 <p>FLASH pearl & SOFT pearl</p>	 <p>For use on sound enamel, with moderate to heavy staining. Direct the nozzle away from the gingival margin and exercise caution near inflamed tissue.</p>
	Gingival margin	 <p>Varios Combi Pro2</p>	 <p>Perio Mate Powder</p>	 <p>Jet Nozzle gently removes stain and biofilm from root surfaces, restorations and prostheses. For use on healthy tissues and reduced periodontium.</p>
	Subgingival	 <p>Perio-Mate</p>	<p>Perio Mate Powder</p>	 <p>The Perio-Mate nozzle can be used without a tip to remove biofilm in up to 4mm pockets with no bleeding. The Perio-Mate nozzle can be used with a tip to access prostheses, around hard to access implants and abutments.</p>
SCALING	Piezo	 <p>Varios Combi Pro2 Varios 970</p>	 <p>Piezo Scaler Tips</p>	 <p>Working area For optimal efficiency, focus on using $\pm 2-3$ mm from the tip, at a $\pm 15^\circ$ angle, using the lateral surface primarily. * The inner and back surfaces may also be used depending on the situation. The correct tip should be chosen, based on tip shape and cross section – to fit tooth morphology and presenting condition.</p>
	Air	 <p>Ti-Max S970</p>	 <p>Air Scaler Tips</p>	 <p>The correct tip should be chosen, based on tip shape and cross section – to fit tooth morphology and presenting condition.</p>
POLISHING	Tooth surface	 <p>iProphy X55L & Z57L</p>	 <p>Prophy Cups & Brushes</p>	 <p>Low abrasivity polishing pastes are advised for staining and biofilm management.</p>

Case study - by Cat Edney

	 <p>STEP 0: SCREEN / ASSESS</p>	 <p>STEP 1: SUPRAGINGIVAL TREATMENT</p>
<p>PATIENT CONDITION</p> 	<p>28 Year-old female patient presented with a concern about the aesthetics of her teeth and bleeding gums.</p> <p>She smokes 2 cigarettes a day.</p> <p>She has not engaged in dental care for over five years and admits poor home care, irregular tooth brushing and no interdental cleaning.</p>	<ul style="list-style-type: none"> • Heavy supragingival deposits <ul style="list-style-type: none"> • Heavy plaque biofilm <ul style="list-style-type: none"> • Inflammation • Staining on upper incisors and lingual molars. <ul style="list-style-type: none"> • Bleeding: 100% • Plaque: 95%
<p>TREATMENT AIM</p> 	<p>Initial consultation to assess the patient condition shows inflammation with screening scores of: 4-3-4</p>	<p>Removal of supragingival deposits. Engaging and enabling patient in order to do better home care.</p>
<p>TREATMENT</p> 	<ul style="list-style-type: none"> • Screening with BPE • Bitewing Radiographs • Discussion on the progression of periodontitis and its links to diabetes and smoking. • Demonstration of M.I.T. framework and potential treatments that may be required. 	<ul style="list-style-type: none"> • Piezo Ultrasonic Scaling • Electric toothbrush demonstration <ul style="list-style-type: none"> • Interdental brush • Removal of heavy calculus deposits lingually on the lower teeth, and buccally on the upper teeth • G16 refines interdental calculus removal and removes staining.
<p>WHICH NSK PRODUCTS WERE USED</p> 	<p>No products.</p> <p><i>This is a good opportunity to show the patient the M.I.T. framework and discuss the pathway the patient may be on.</i></p>	<ul style="list-style-type: none"> • Varios Combi Pro2 • Piezo Ultrasonic Scaling Tips: G Tips (G1-16) • Powders (full range): SOFT pearl FLASH pearl Perio Mate Powder • 1:1 Contra angle



**STEP 2:
SUBGINGIVAL
TREATMENT**



**STEP 3:
SURGICAL
TREATMENT**



**STEP 4:
SUPPORTIVE
CARE**

- Generalised pocketing: 4-8mm down to
- Localised residual pocketing: 5mm UL3 LL8 &
- Pocketing on molars: 4mm
 - Bleeding: 42% down to 6%
 - Plaque: 39% down to 10%
- Subgingival deposits

The patient condition was stabilised and she was showing good motivation and evidence of good oral home-care.
No Step 3 intervention was therefore needed.

- Generalised pocketing: <4mm
 - Bleeding: 2% UL3
 - Plaque: 10%
- Patient has reduced cigarette smoking by half

Removal of subgingival deposits.
Re-instrumentation of non-responding sites.

n/a

Maintaining and monitoring the stability of the periodontitis condition.

- Piezo Ultrasonic Scaling
- Hand instrumentation
- Biofilm management with powder therapy

n/a

- Full mouth biofilm management with powder therapy
 - Soft deposit removal, with P20 tip
 - Lavage of gingival margins, with P20 tip

- Varios Combi Pro2
- Perio Mate Powder
- Piezo Ultrasonic Scaling Tips:
 - Fine and long G Tips: G16 & G9
 - P tips: P1-P26R+L

n/a

- Varios Combi Pro2
- Perio Mate Powder
- Piezo Ultrasonic Scaling Tip: P20

Case study - by Cat Edney cont...

Initial Presentation



A 28-year-old female patient presented with concerns about the appearance of her teeth and bleeding gums.

She reports smoking two cigarettes per day and has not engaged in professional dental care for over five years.

The patient admits to poor oral home care, including irregular toothbrushing and no interdental cleaning.

Step 0

Bleeding: 100%

Plaque: 95%

BPE:

4	3	4
4	3	4

Findings:

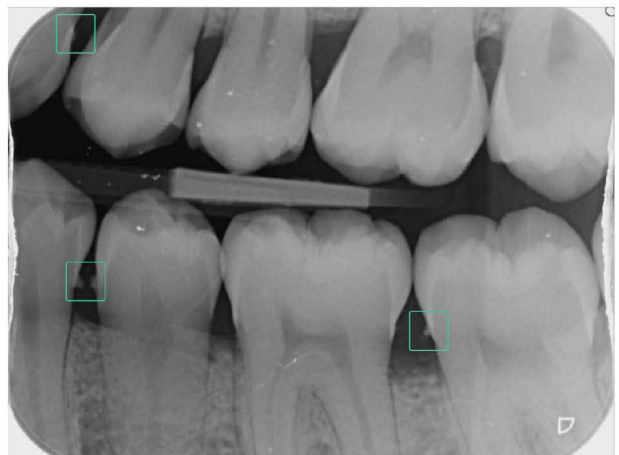
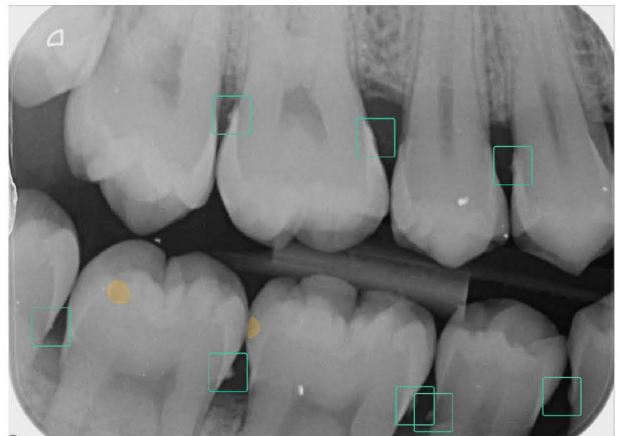
- Generalised inflammation and biofilm.
- Radiographs show generalised horizontal bone loss involving the coronal third of the roots, indicating Generalised Periodontitis, Stage II, Grade B. The case is unstable, with smoking identified as a modifying risk factor.

Treatment pathway:

Professional Mechanical Plaque Removal (PMPR)

Education:

- Patient engagement in home care (patient mechanical plaque removal)
- Smoking cessation
- Diet modification
- Explaining periodontal disease and associated risk factors



Following Step 1



Treatment pathway:
Supragingival PMPR (Professional Mechanical Plaque Removal) and Oral hygiene instruction

Equipment used:
Varios Combi Pro2, with G8 & G16 tips

- Education:
- Demonstration of Electric Toothbrush, interdental brushes and floss.
 - Discussion on smoking cessation.

Step 2

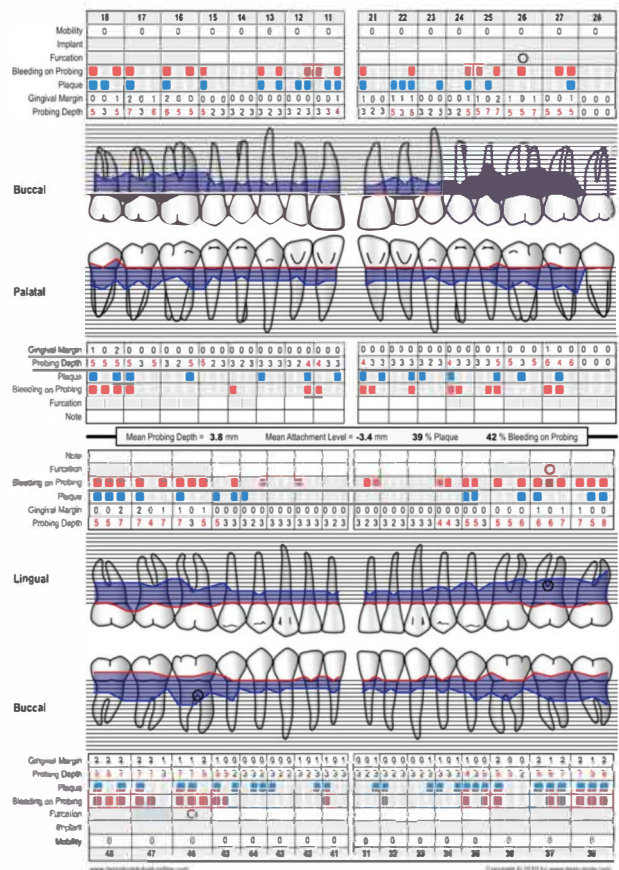
Bleeding: 42%
Plaque: 39%

Findings:
Generalised pocketing of 4-8mm

Patient engagement:
More than 50% improvement in plaque and bleeding scores.

Treatment pathway:
Subgingival PMPR (Professional Mechanical Plaque Removal)

Equipment used:
Varios Combi Pro2, with P11, P26R+L & G16 Piezo Ultrasonic Scaling tips



Case study - by Cat Edney cont...

Step 2 (continued sessions)

Bleeding: 6%

Plaque: 10%

Residual pocketing findings:

- 5 mm at mesio-buccal aspect of UL3
- 5 mm at disto-buccal aspect of LL8
- 4 mm at molars:
 - UR8, UR7
 - UL7
 - LR7

Treatment pathway:

Repeat Subgingival PMPR (Professional Mechanical Plaque Removal) and Oral hygiene instruction.

Equipment used:

Varios Combi Pro2, with:

- Perio Mate Powder for supragingival biofilm management.
- Piezo Ultrasonic Scaling tips: P11, P2D & P3D

Education:

- Demonstration of interdental brushes
- Discussion on smoking cessation

Step 4

Bleeding: 2%

Plaque: 10%

Findings:

Pocketing <4mm

Diagnosis:

Generalised Periodontitis, Stage II, Grade B, Stable

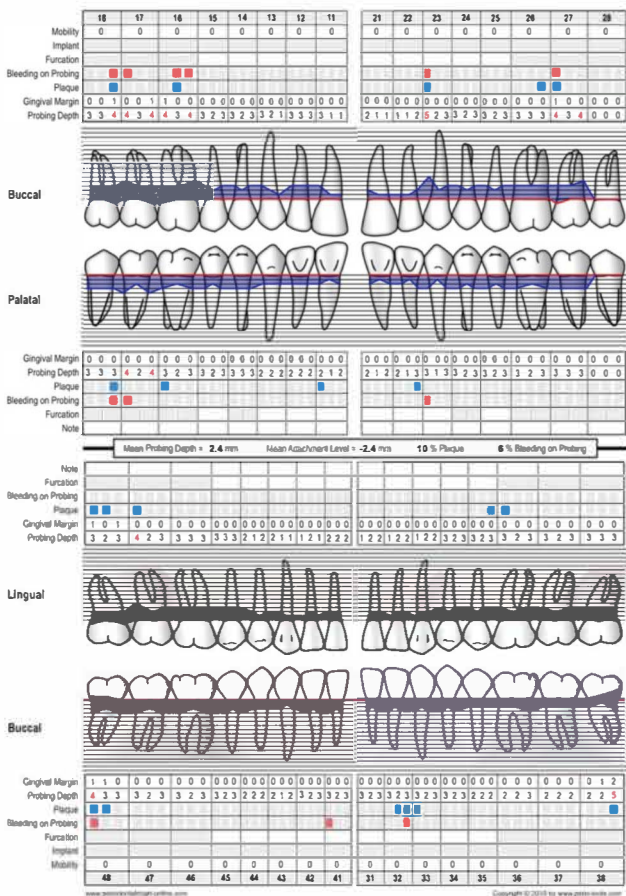
Treatment pathway:

Supportive Periodontal Care

Equipment used:

Varios Combi Pro2, with:

- Perio Mate Powder
- P20 tip



M.I.T. Results

Before



After





DURA
GRIP

NSK Varios2 Lux

NSK supports you in being your best version.