osteocom

ADVANCED COURSE IN PERIODONTAL INSTRUMENTATION



Anna M. Pattison

HuFriedyGroup
The Best In Practice

Advanced Course in Periodontal Instrumentation

By Anna M. Pattison, RDH, MS



LEVELS

Difficulty Advanced

Theory ●●●●●

Practice ●●●●

KEY INFO

English

On Demand

Periodontology

10h

9 video lectures

Clinical Yes

NO

SUMMARY

Topic:

The latest advancements in high-tech devices, hand instruments, and ultrasonic tips that have revolutionized clinical practice

Objectives:

Achieve precision in advanced periodontal instrumentation for deep pockets and furcations
Master cutting-edge tools, including Gracey Lite Curets, ultrasonic tips, and diamond-coated files, to elevate your clinical outcomes
Develop innovative fulcrum techniques, such as extraoral and opposite arch approaches, for superior control and efficiency
Gain a deeper understanding of root morphology and perfect your sharpening skills for optimal instrument performance
Perform precise, overlapping instrumentation strokes on extracted teeth using advanced curets
Confidently use Universal curets, Rigid Gracey curets, After-Fives, Mini-Fives, Micro-Minis, Gracey Lite Curets, Files, Sickles, Diamond curets, and Furcation curets

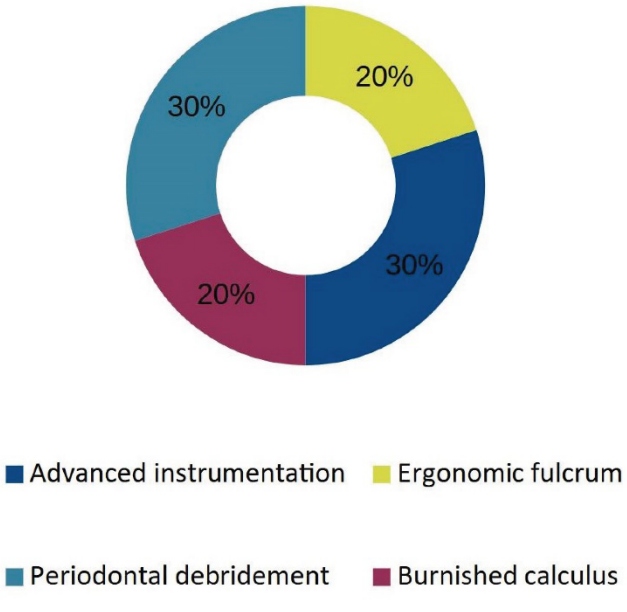
WHY TO ENROL:

1- Master advanced techniques to manage complex periodontal cases, including the detection and effective removal of burnished calculus using both hand and ultrasonic instruments.

2- Improve clinical precision, ergonomics, and efficiency through practical demonstrations on fulcrum positioning, stroke direction, body posture, and instrument control.

3- Enhance patient outcomes in daily practice by integrating updated protocols, evidence-based instrumentation strategies, and supportive tools like Sterify Gel for regeneration and maintenance.

SKILLS YOU WILL LEARN



Channel Description:

This complete video course, led by internationally renowned dental hygienist and educator **Anna M. Pattison**, delivers a comprehensive and advanced update on **periodontal instrumentation**.

Designed for **dentists and dental hygienists**, the course addresses the clinical challenges of treating patients with moderate to advanced **periodontitis** and those with **dental implants**.

By participating in this learning experience, you will gain both practical guidance and **evidence-based strategies** to elevate your daily practice.

Through a combination of theoretical lectures, **clinical videos** and **hands-on demonstrations**, you will explore the latest innovations in hand instrumentation and ultrasonic technology; in fact, the course showcases a wide range of advanced tools including **Universal** and **Rigid Gracey curets, Mini-Fives™, Micro-Minis, Pattison Gracey Lite curets, Nevi sickles, diamond-coated files, furcation curets** and **titanium instruments** for implants.

Hands-on demonstrations on periodontal typodonts highlight key instrumentation techniques, with a special focus on **difficult areas such as deep narrow pockets and furcations**. Ergonomic and effective fulcrum strategies, such as extraoral, cross-arch, reinforced, and opposite-arch position, are also presented to enhance clinical precision and operator comfort. Additional modules cover sharpening techniques using visual guides and a review of root morphology with extracted teeth.

Comparison of **hand scaling, ultrasonic instrumentation, and subgingival air polishing techniques** is included to guide optimal instrument selection and ensure thorough maintenance of both natural teeth and implants.

By the end of the course, you will be able to apply refined techniques, master a range of advanced instruments, and optimize outcomes for **complex periodontal and implant cases**.

In particular, this course will focus on:

- Identify the objectives of **periodontal debridement**
- Recognize the design, **indications and sequence for use** of new curets, sickles, diamond-coated
- Describe **ultrasonic devices** and tips for periodontal and implant scaling
- Recognize the indications for extraoral, opposite arch, **alternative fulcrums** and positions
- Objectives and principles of **periodontal debridement**
- Selection and sequencing of advanced curets, sickles, diamond-coated instruments, furcation curets, and implant-specific tools
- Use of **piezoelectric ultrasonic units** and tips for periodontal and implant instrumentation
- **Ergonomic fulcrum strategies**: extraoral, reinforced, opposite arch, and cross-arch positions
- Comparative effectiveness of subgingival **air polishing vs. hand** and **ultrasonic scaling**
- **Instrument innovations**, including Gracey 15/16, 17/18, Mini Fives™, Micro Mini Fives, and Gracey Lite
- **Clinical videos** demonstrating techniques for scaling complex anatomical sites

At the end of the course, you'll be able to:

- Achieve precision in **advanced periodontal instrumentation** for deep pockets and furcations
- **Master cutting-edge tools**, including Gracey Lite Curets, ultrasonic tips, and diamond-coated files, to elevate your clinical outcomes
- Develop **innovative fulcrum techniques**, such as extraoral and opposite arch approaches, for superior control and efficiency
- Gain a deeper understanding of **root morphology** and perfect your sharpening skills for optimal instrument performance
- Perform precise**, overlapping instrumentation** strokes on extracted teeth using advanced curets
- **Confidently use** Universal curets, Rigid Gracey curets, After-Fives, Mini-Fives, Micro-Minis, Gracey Lite Curets, Files, Sickles, Diamond curets, and Furcation curets
- Scale maxillary and mandibular furcations with accuracy and control

- **Apply innovative fulcrum techniques**—including extraoral, opposite arch, and reinforced positions—for improved access and ergonomics
- Master sharpening techniques and understand root morphology to enhance clinical efficiency
- **Deliver high-quality periodontal and implant maintenance** using subgingival air polishing
- **Improve patient care** and clinical outcomes through advanced, evidence-based instrumentation strategies

Who is the course for?
This comprehensive course is designed for dental hygienists and dentists seeking to master advanced instrumentation techniques for patients with moderate to advanced periodontitis, including implant maintenance.

Ok, but how does it work?
This **10 hour** course is divided into **9 video lectures** that you can find by accessing your personal osteocom area from any device and downloading from the osteocom mobile app, available on iOS and Android.



Video Lecture 1 - Keys to avoid and remove burnished calculus (1h 36min)
Description:

This video lecture explores the complex challenge of burnished calculus; what it is, why it occurs, and how to prevent and effectively remove it.

Burnished deposits are often difficult to detect and even harder to eliminate, especially in areas with limited access such as furcations or deep pockets. Through detailed explanations and clinical demonstrations, Dr. Pattison guides practitioners in recognizing high-risk zones and selecting the most appropriate instruments and techniques.

A focus on **power scaling** is presented, offering comparisons between different ultrasonic technologies and their effectiveness against burnished deposits. Dr. Pattison then explores **hand instrumentation**,

highlighting optimal tool designs and precise techniques—including the use of Hirschfeld files, sharp curets, and overlapping strokes in multiple directions.

A key portion of the lecture is devoted to understanding the **causes of burnishing**, such as the use of dull instruments, insufficient angulation, and inadequate fulcrum pressure.

In particular, this lecture focuses on:

- Defining and detecting burnished calculus
- How to avoid and remove burnished deposits using power scaling
- Comparing ultrasonic technologies and tip designs for improved removal
- Identifying and managing residual subgingival calculus
- Instrumentation strategies based on shape, location, and access

Video Lecture 2 - 2025 Update on advanced periodontal instrumentation (1h 32min)
Description:

Periodontal disease affects over 50% of adults worldwide and residual or burnished calculus is still commonly found after scaling procedures.

This lecture addresses the crucial question: Why does residual calculus persist despite treatment? Through clinical scenarios, Dr. Pattison explores common causes such as inadequate exploration, poor instrumentation technique, improper body positioning, and the use of dull or inappropriate tools.

Dr. Pattison emphasizes the importance of thorough debridement and the role of instrumentation in detoxifying root surfaces, and outlines clinical strategies to reduce subgingival calculus and biofilm to levels compatible with periodontal health, while aiming to minimize inflammation and bleeding.

In particular, this lecture focuses on:

- Common reasons for residual or burnished calculus after treatment
- Instrumentation errors and clinical challenges in deep pockets

- The importance of correct body positioning and sharp instruments
- The role of root debridement in reducing inflammation and maintaining periodontal health

Video Lecture 3 - Sterify Gel (27min)
Description:

This lecture presents the clinical rationale and practical applications of Sterify Gel as an adjunct to non-surgical periodontal therapy. Once mechanical and chemical detoxification of the periodontal defect has been completed, Sterify Gel can play a critical role in supporting tissue regeneration and stabilizing treated sites.

Dr. Pattison highlights how Sterify Gel maintains space for healing, supports soft tissue architecture, and acts as a temporary barrier against bacterial recolonization for up to 30 days, and also shows how the gel can be used to extend maintenance intervals, preserve compromised implants, and reinforce outcomes when full-mouth treatment is not feasible.

In particular, this lecture focuses on:

- Why and when to apply Sterify Gel after non-surgical periodontal therapy
- How Sterify Gel promotes healing, supports tissues, and prevents early reinfection
- Using Sterify Gel in compromised implants and partial-mouth treatment plans
- Case-based applications with different non-surgical approaches

Video Lecture 4 - Comparison of hand and ultrasonic strokes (2h 23min)
Description:

This lecture provides a detailed comparison between **hand instrumentation** and **ultrasonic scaling**, challenging the common misconception that ultrasonics remove more calculus or biofilm per stroke than hand instruments. Instead, emphasis is placed on technique,

stroke sequence, and clinical strategy—particularly in managing deep pockets and heavy or tenacious deposits.

Dr. Pattison outlines best practices for initial therapy using scaling and root planing kits, universal curets, and Gracey curets, with guidance on how to tailor your approach during both active and maintenance phases. Limitations of current ultrasonic devices are discussed alongside the specific advantages of manual instruments, especially in terms of control, adaptability, and access to complex anatomy.

Dr. Pattison also introduces **Guided Biofilm Therapy (GBT)** and devices such as **EMS PerioFlow**, offering insight into their role in non-surgical periodontal treatment and supportive care.

In particular, this lecture focuses on:

- Differences in stroke effectiveness between hand and ultrasonic instruments
- Sequencing instrumentation in deep pockets with heavy calculus
- Selecting the right tools for scaling, root planing, and maintenance
- Benefits and limitations of ultrasonic scalers
- Introduction to Guided Biofilm Therapy and EMS PerioFlow systems

Video Lecture 5 - Proper instrument grasp: technique and clinical control (34min)
Description:

This lecture explores one of the most fundamental yet often overlooked aspects of periodontal instrumentation: the instrument grasp. Through a detailed analysis of grasping techniques and clinical ergonomics, Dr. Pattison explains how proper hand positioning directly impacts control, access, blade angulation, and ultimately, treatment success.

The lecturer contrasts traditional vs. analytical approaches and demonstrates how to adjust your grasp for different clinical tasks, from delicate exploration to heavy root debridement. Dr. Pattison also covers grasp techniques specific to ultrasonic instrumentation, the role of effective fulcrums, and the critical importance of correct body and sitting positions during treatment.

By clearly illustrating both effective and ineffective techniques, this lecture helps clinicians refine their motor control and increase the precision of every stroke.

In particular, this lecture focuses on:

- Differences between relaxed and firm modified pen grasp techniques
- Grasp adaptations for curets and ultrasonic scalers
- The relationship between grasp, fulcrum, and blade angulation
- Correct body posture and intraoral fulcrum positioning
- Traditional vs. analytical approaches to instrumentation

Video Lecture 6 - Hu-Friedy main cassette overview (32min)
Description:

This practical video lesson offers a comprehensive walkthrough of the **Hu-Friedy main cassette**, an essential organizational tool for periodontal and diagnostic procedures. Designed to promote clinical efficiency, safety, and instrument traceability, the cassette system is presented in a step-by-step format that clearly explains its setup and function.

Each diagnostic and periodontal instrument is introduced with a detailed overview of its purpose, correct use, and proper placement within the cassette. This structured approach enhances daily workflow while supporting infection control and instrument longevity through consistent layout and maintenance practices.

In particular, this lecture focuses on:

- Overview of the Hu-Friedy main cassette and its clinical advantages
- Identification and function of periodontal and diagnostic probes
- Correct clinical application of each instrument
- Best practices for organizing, maintaining, and optimizing the cassette system

Video Lecture 7 - Correct body and sitting posture (15min)
Description:

This concise yet essential lecture focuses on the ergonomics of periodontal instrumentation, emphasizing how proper body and sitting

posture directly enhance power, precision, and endurance during clinical procedures.

Through a clinical video demonstration using a typodont model, the lecture shows how small adjustments in posture and angulation can significantly improve access, control, and effectiveness—especially during probing and scaling. Whether you're performing diagnostic assessments or advanced debridement, mastering your positioning is key to reducing fatigue and improving long-term clinical outcomes.

In particular, this lecture focuses on:

- How posture influences strength, stability, and control during probing
- Correct sitting position for optimal ergonomics
- Proper body alignment for maximum instrument effectiveness
- Clinical demonstration of posture and angulation on a typodont model

Video Lecture 8 - (48min)
Description:

In this hands-on clinical demonstration, Dr. Pattison shows how to effectively remove burnished calculus using a typodont model, focusing on technique, precision, and instrument selection. Viewers will observe the practical application of Gracey curets, Hirschfeld files, diamond-coated instruments, and ultrasonic tips in deep periodontal pockets and furcation areas.

This video highlights different fulcrum strategies, such as extraoral, opposite-arch, and reinforced intraoral fulcrums, while demonstrating the advantages of combining vertical, oblique, and horizontal overlapping strokes to break up tenacious deposits.

Video Lecture 9 - (2h 35min)

Description:

This detailed clinical demonstration presents a full instrumentation workflow on a typodont model, simulating a typical non-surgical periodontal treatment session. Dr. Pattison guides viewers through each

step, from initial exploration to calculus removal, using both hand and ultrasonic instruments.

The video illustrates correct body posture, seating position, and fulcrum placement, while showcasing the use of various instruments, including Universal curets, Mini-Fives, Micro-Minis, and ultrasonic tips. Techniques for scaling posterior teeth, interproximal areas, and furcations are demonstrated in real-time, with practical commentary on ergonomics, access, and control.

This video is ideal for clinicians seeking to refine their full-mouth debridement protocols and improve efficiency without compromising thoroughness or comfort.

Scan the code and enter the course



Author Bio:

Anna Matsuishi Pattison RDH, MS, is a former Associate Professor and Chair of Dental Hygiene at the Ostrow School of Dentistry at the University of Southern California. As an internationally recognized expert on instrumentation, she is coauthor of the textbook, Periodontal Instrumentation, has contributed to Newman and Carranza's Clinical Periodontology and Implantology, was Editor-in-Chief of Dimensions of Dental Hygiene and is currently the Co-Director of the Pattison Institute offering online videos and workshops


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