

In 1940 Dr. Clayton Gracey, a dentist and educator, transformed standard “scalers” into a series of area-specific instruments that could be used to access periodontal pockets with minimal trauma. Collaborating with Hugo Friedman, the founder of Hu-Friedy Manufacturing, Dr. Gracey’s designs enabled clinicians to detect, assess and treat previously inaccessible areas of disease. The revolution continues with an ever-expanding array of smaller working ends, improved angulation and more ergonomic designs benefiting both clinicians and patients. This PowerPage reviews numerous popular periodontal instruments and describes their main design features.

Gracey Curettes – Subgingival Scaling and Root Planing

Unique design features differentiate Gracey from universal curettes

- Blades (2) are “offset” from shank
 - Universal shank is 90 degrees to shank
- Only lower cutting edge on each blade can be used
 - Offset blade protects tissue from upper cutting edge
- Blade is curved in two planes
- Area specific design
 - Gracey 1-2 and 3-4 Anterior teeth
 - Gracey 5-6 Anterior and premolar teeth
 - Gracey 7-8 and 9-10 Posterior teeth – buccal and lingual surfaces
 - Gracey 11-12 Posterior teeth – mesial surfaces
 - Gracey 13-14 Posterior teeth – distal surfaces

Modifications to Gracey Designs

- Gracey 15/16 and 17/18 are modifications of 11/12 and 13/14 respectively
 - Both provide improved access to convex crown and root surfaces
 - Ergonomic design decreases operator wrist flexion
 - Easier insertion and intraoral fulcrum placement
 - Available in After-Five and Mini-Five designs in standard or rigid shank
 - Disadvantage – increases number of instruments needed to treat arch

Gracey 15/16 – Designed to access mesial surfaces of posterior teeth

- Same offset blade as 11/12
- Shank accentuated similar to 13/14 for improved “reach” (access)

Modifications to Gracey Designs - Continued

Gracey 17/18 – Accentuated shank improves distal access to posterior teeth

- Terminal shank is 3 mm longer than standard Gracey
- Blade is 1 mm shorter than standard Gracey
- Handle modification reduces interference with opposing arch

Langer Curettes – Modified Set of 3 Curettes

Gracey 5/6, 11/12 and 13/14

- Gracey shank design enables improved access to difficult areas
- Universal blade angulation (90 degrees to shank) enables use of both cutting edges
- Allows adaptation to both mesial and distal without changing end/instrument

After Five Curettes – Modified Version of Standard Gracey

- Terminal shank is 3 mm longer, larger in diameter and more tapered
- Thinner blade enables more smooth subgingival insertion and less tissue distention

Mini Five Curettes – Modification of After Five Curettes

- Improved insertion and adaptation in deep narrow pockets, furcations, grooves, line angles
- Shorter blade – half the length of After Fives
- Available in both finishing and rigid design
 - Finishing design recommended only for very light instrumentation

Gracey Curvettes – Increased Upward Curvature

Enables closer blade adaptation

- Caution – increased potential for root gouging
- Shorter blade than traditional Gracey (as with Mini Fives)

Morse Curette – Modification of Morse Scaler (sickle)

- Miniature working end of scaler modified with protective features of curette
- Straight shank design ideal for anterior teeth

Kramer-Nevins Curettes

- Modified Gracey designed for root planing and curettage
- Slightly modified blade length, thinner profile and extra length

Schwartz Periotriervers

- Set of two, double-ended, magnetized instruments
 - One for furcations; one for deep pockets
- Designed for retrieval of broken instrument tips

ODU 11-12 Explorer

Shank design and tip curvature of Gracey 11-12 curette

- Long shank provides ideal access to deep pockets
- Available in even longer After Five length
- Highly sensitive design useful for calculus detection in deep pockets

Kunselman, Barbara, Scaramucci, Mary Kaye; Make the Most of Your Modified Gracey Curets; Dimensions of Dental Hygiene; November 2010; 8(11); 42-44; www.dimensionsofdentalhygiene.com/ddhright.aspx?id=9909#.UQmBISdEGSo

Pattison, Anna M and Gordon L; Periodontal Instrumentation; Second Edition; Pg 179-80, 408-26