

Clinical and Technical Considerations in the Analysis of Gingival Crevicular Fluid

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PhD KCE IIII

PERIOTRON Course

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Analytical Parameters that Require Consideration

- Timing of GCF collection in relation to other clinical parameters
- GCF volume is recorded or not
- GCF samples are stored and analyzed individually or pooled
- GCF samples stored dry or placed in buffer and then stored
- Temperature of storage at -80°C
- Shaking, vortexing, centrifuging, duration and temperature

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Collection of gingival crevicular fluid

- Periopapers strip (Oraflow Inc.)
 - Presterilized
 - Standard 1.2 ul



Dias et al., 2022

- Larger Periocol paper strips collecting up to 2.0 ul

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Collection of gingival crevicular fluid



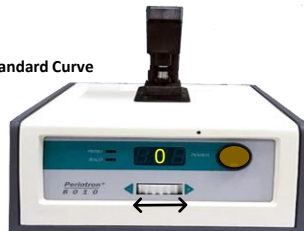
de Aguiar et al., 2017

- 1-2 mm
- 30 sec
- Samples visibly contaminated with blood are rejected
- Visible supragingival plaque should be removed

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Quantification of Gingival Crevicular Fluid Volume

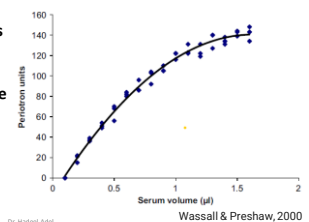
- Turn on
- Zero the Periotron
- Calibrate _____ Standard Curve



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Quantification of Gingival Crevicular Fluid Volume

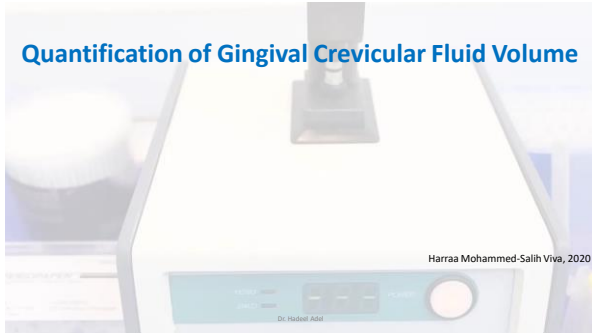
- 0.1–1.6 ul, at 0.1-ul increments
- Periotron Professional software (Oraflow Inc.) _____ 0.50, 0.75, 1.00 and 1.25 ul in triplicate



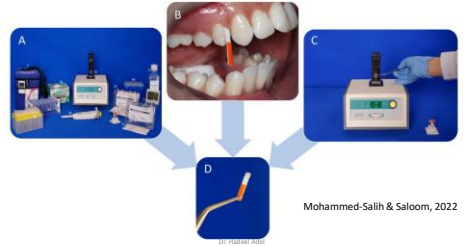
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Wassall & Preshaw, 2000

Quantification of Gingival Crevicular Fluid Volume



Instruments and Materials



THANK YOU

