












Ultrasonic Instrumentation Assessment/Evaluation

CRITERIA			
PREPARATION:			
1.	All necessary equipment at treatment area.		
2.	Connected ultrasonic unit to water source on dental unit and an electrical power source.		
3.	Turned ultrasonic unit on, flushed handpiece for a minimum of 2 minutes.		
4.	Provided client/patient with preprocedural rinse.		
5.	Selected appropriate initial insert/tip and proceeded with placement into upright, handpiece filled with water (magnetostrictive) or wrenched in place (piezoelectric).		
6.	Adjusted water and power (active tip stroke size/amplitude) to appropriate initial setting. Water pattern was aligned with deposit type and power setting (mist and/or rapid drip).		
POSITIONING:			
7.	Placed client/patient in a supine position with appropriate head position for each area. Provided protective eyewear.		
8.	Positioned self ergonomically and could see clearly for debridement each area.		
9.	Light-illuminated treatment site appropriately		
GRASP & FINGER REST/FULCRUM:			
10.	Used a light, balanced grasp.		
11.	Used appropriate intra or extra oral finger rest/fulcrum (ie: conventional, opposite arch, cross arch).		
ADAPTATION:			
12.	Explored with explorer or inactive insert/tip as needed to locate hard deposit and assess tooth anatomy. Positioned active tip surface at edge of hard deposit (if/when applicable)		
13.	Applied active tip at no more than a 15-degree angle to tooth surface; modified angle to maintain contact of active tip with tooth/root surface based on tooth/root anatomy (~2-3mm of working active tip)		
14.	Adapted back, face or lateral surface of active tip as most appropriate		
15.	Vertical and transverse orientation of insert/tip implemented as most appropriate. Adapted active tip beyond midline of proximal surfaces.		
ACTIVATION:			
16.	Always kept active tip in motion.		
17.	Used quick, controlled, sweeping, or tapping strokes based on location and type of deposit (horizontal, vertical, oblique, multidirectional).		
18.	Used overlapping strokes working in CHANNELS (~2-3mm width). Moved coronal-apical when in vertical orientation.		
19.	Did not apply excessive lateral pressure.		
20.	Maintained appropriate power level (active tip stroke size/amplitude) throughout procedure; adjusted when necessary.		
21.	Positioned large bore, single opening HVE 1-2 teeth away from insert/tip; stopped periodically to allow complete evacuation of water and saliva		
22.	Evaluated progress with visual examination and explorer or inactive insert/tip.		
DOCUMENTATION:			
23.	Appropriate documentation in client/patient's record.		

Ultrasonic Instrument Worksheet

Insert / Tip <i>Brand Name</i>	Insert / Tip Image	Tip Diameter <i>Standard Slim Ultra Thin</i>	Tip Shape <i>Straight Curved</i>	Tip Profile # of bends (1-3)	Tip Cross Section  <i>Cylindrical / Round Rectangular / Square</i>	Power Level <i>Low Medium High</i> <i>(Lowest Effective Power Setting)</i>	Deposit Type <i>Biofilm Calculus Stain</i> <i>(light mod heavy; tenacity)</i>	Area of Use	Other
		Standard	Straight	One	Rectangular	Low - High	Moderate to Heavy Calculus Stain	Supragingival	Specifically designed for efficiently removing moderate to heavy calculus and stain
		Standard	Straight	 One	Round	Low - High	Moderate to Heavy Calculus Stain	Supragingival and Subgingival when tissue allows	
		Standard	Straight	 Three	Diamond / Square	Low - High	Moderate to Heavy Calculus Stain	Supragingival and Subgingival when tissue allows	
		Slim	Straight	Three	Diamond / Square	Low - High	Moderate Calculus	Supragingival and Subgingival when standard diameters are too thick	The thin design provides improved subgingival access.
		Slim	Straight	One	Round	Low - Medium	Biofilm and Light Calculus <i>*localized moderate calculus if no better option</i>	Supragingival and Subgingival Flat Anatomy	
		Slim	Curved	One	Round	Low - Medium	Biofilm and Light Calculus <i>*localized moderate calculus if no better option</i>	Supragingival and Subgingival Contoured or Flat Anatomy	Curved inserts allow adaptation to root anatomy and are designed for use in furcation's and concavities
									
		Ultra Thin	Straight	One	Round	Low - High	Biofilm and Light Calculus <i>*localized moderate calculus if no better option</i>	Supragingival and Subgingival Flat Anatomy	Calculus detection comparable to that of an ODU 11/12 Explorer when insert is inactive Access to difficult areas: misalignments, interproximal surfaces, and areas of tight tissues

Case Study Notes: