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DENTAL INSTRUMENT CARE & STERILIZATION INSTRUCTIONS

STAINLESS STEEL & TITANIUM INSTRUMENTS:

Dental stainless steel has excellent corrosion resistance but can discolor or corrode when exposed to unusual or improper chemical or chemical concentrations.

Contact with the following chemicals must be avoided: Aluminum chloride, aqua regia, barium chloride, bichloride of mercury, calcium chloride, carbolic acid, chlorinated lime, citric acid, Dakin's Solution, ferric chloride, ferrous chloride, hydrochloric acid, iodine, Lysol, mercuric chloride, mercury salts, phenol, potassium permanganate, potassium thiocyanate, stannous chloride, sodium hypochlorite (household bleach), sulfuric acid, and tartaric acid (stain and tartar remover).

Hinged instruments (forceps, hemostats, needle holders, orthodontic pliers, rongeurs, scissors, etc.) should have a proper lubricant applied regularly to prevent rust, corrosion, and "stiff" joints. All hinged instruments must also be sterilized in the OPEN POSITION (instrument breakage may occur if sterilized in the closed position).

Before sterilization, instruments should be cleaned and DRIED. Washing in a low sudsing neutral (pH 7) detergent (non-corrosive) is recommended. Cleaning may be done by hand scrubbing (use caution to prevent injury), ultrasonic cleaning (please carefully monitor the solution dilution and the length of time the instruments are left in the solution), or automated washer. If hand-scrubbing is utilized, please use only stiff nylon cleaning brushes (not steel wool or wire brushes). If an ultrasonic cleaner is used, please be sure to change the solution frequently (please see manufacturers' instructions).

Sterilization by steam autoclave, unsaturated chemical vapor, dry heat oven, or rapid dry heat transfer oven is acceptable. Only distilled water should be used in autoclaves or hard-water spotting may occur. Please follow the follow directions:

Steam autoclave:

Gravity Displacement: 30 minutes at 250 degreesF / 121 degreesC (15 psi)

Prevacuum: Minimum 5 minutes at 273 degreesF / 134 degreesC

Unsaturated chemical vapor: 20 minutes at 270 degreesF / 132 degreesC (20 – 40 psi)

Dry heat: 60 – 120 minutes at 320 degreesF / 160 degreesC

Rapid dry heat transfer: 12 minutes at 350 degreesF / 177 degreesC for wrapped items or 6 minutes at 350 degreesF / 177 degreesC for unwrapped items.

CARBON STEEL INSTRUMENTS: The above instructions must be followed but, additionally, a corrosion inhibitor (such as our “Corrosion Inhibitor” or “Surgical Milk”) must be utilized if a steam autoclave is used. Also, please be sure that the instruments are dry at the end of the autoclave vent/dry cycle. Do not leave instruments in a wet condition for prolonged periods of time.

OSSEOUS COAGULUM TRAP: The filter basket should be kept moist to prevent material from drying and adhering to the mesh. Rinse the basket thoroughly and place in ultrasonic cleaner. Visually inspect the filter mesh for defects or wear. The OCT may be Chemiclaved or autoclaved. Please sterilize the filter and OCT prior to use. DO NOT PLACE OCT cap or body in an ultrasonic cleaner or discoloration may occur.

MTA BLOCK: Cleaning of the MTA Block may be done as with any other normal dental instrument. The MTA Block may be steam autoclaved using temperatures normal for dental instrument sterilization.

TROUBLE-SHOOTING:

Pitting: This is caused by a chemical reaction on the instruments. Be sure to use only approved cleaning/ultrasonic solutions. Never use household bleach or stain and tartar remover. Please be sure, also, to rinse and dry instruments thoroughly. Please carefully monitor the length of time the instruments are left in the ultrasonic cleaner.

Rust: This is probably caused by a transfer of corrosion from “rusting” instruments. Please avoid contact of “rusting” instruments with other instruments. Brown stains are not rust and can be caused by using high pH detergents (by deposits of phosphate). Black stains are often caused by use of low pH detergents (pitting may also result).

Spotting: This may result from the residue of minerals in water – distilled water should be used if possible. Insufficient rinsing and/or drying after ultrasonic cleaning may also cause spotting. Additionally, failure to change the ultrasonic solution on a regular basis, or failure to clean an autoclave may result in spotting.

DAMAGED INSTRUMENTS: All instruments should be examined for damage and wear. Any worn or damaged instruments should be removed from use.

STORAGE: Instruments should be stored in a clean, dry environment distant from moisture or any corrosive chemicals.