Maintenance

Instructions for cleaning & sterilization of dental instruments

MA Dental has prepared an instruction guide of how to clean & sterilize dental instruments step by step. The process is divided in different steps and the details of each one are described below:

Inspection

While the instrument blades and handles are still soft, make sure to remove any residue. Avoid using a metal brush. A metal brush will leave scratches or scrapes on the instrument surface, allowing residue to attach to other areas of your instruments. Because this is normally difficult to avoid, be mindful that if it is not removed during sterilization, it may bake onto the handle, producing discoloration if not removed.

NOTE: To avoid damaging the coating and thereby shortening the product's lifetime, do not use any abrasive equipment to remove residue from IDX Sharp or non-stick instruments.

DISINFECTION

Do not leave used instruments to sit in water or air. Immediately proceed to wash with your disinfectant of choice for dental hand instruments. Do NOT use liquids that contain chlorine, phenol or amines.Change the disinfectant regularly according to the instructions.

RINSING

The instruments must be washed thoroughly under running, lukewarm water immediately after disinfection.

CLEANING

The cleaning of dental instruments and materials is nothing more than the removal of the dirt, reducing the microbial charge, the organic matter and other contaminants; assuring the maintenance of the instrument's lifespan.
The cleaning can happen through two kinds of procedures:

I – Manual Cleaning
Manual procedure by means of physical action applied to the instrument's surface. You can use: soft-bristled brush and long cable, wire brush for drills, brush for cleaning lumen, sink with deep tub faucet with steerable jet, detergent and running water.

II – Mechanical Cleaning
Automated procedure by means of water jet washers or low frequency ultrasound, that operates under di erent conditions of time and temperature.

DRYING

The instruments must be opened and dried with compressed air pistols with no oil or humidity, or they can be dried with paper towels and clean lint-free cloth.

VISUAL INSPECTION

This step verifies the efficiency of the cleaning process and the integrity conditions of the article. If necessary, proceed again to cleaning or replace the article. The deteriorated instruments or the ones that show corrosion indications must be separated and sent to re-wash.

STERILIZATION PACKAGE

For autoclave's sterilization, the strictly cleaned and dried material must be packed in packages made with material that allow the passage of steam. The most recommended is the surgical paper. During this step it's important to use chemical indicators to evaluate the presence of critical parameters of the steam sterilization: time, temperature and presence of steam. These tapes react chemically altering its color and should be placed inside each package before sterilization.

STERILIZATION

Sterilization is the process that aims to destroy or eliminate all microbial life forms through physical or chemical procedures. To ensure sterilization, it is essential that the steps already mentioned here are correctly followed. In an autoclave, the maximum temperature is 134-137°C, while in dry heat or hot air devices, the maximum temperature is 180°C.

STORAGE

Dry instruments thoroughly before storing them.