

Manual or Automatic cleaning?

As a key part of dental infection control policy, the cleaning and sterilisation of dental instruments remains the cornerstone of practice compliance. In the UK, local regulations provide guidance as to which cleaning methods are “Essential” or “Best Practice” and different guidelines apply various criteria about which cleaning is most suitable.

In England and Wales, Section 3.33 of (W)HTM 01-05 accepts that manual cleaning, in principle, is an “acceptable method” of cleaning, although this is accompanied by certain caveats, not least being the inability to adequately validate this method. The use of a washer disinfector is currently considered “Best Practice”, but as yet there is no specific timetable for implementation of this standard. Scotland and Northern Ireland, on the other hand, have made it Essential for practices to use WD’s as part of the decontamination process.

The main considerations in selecting the most effective cleaning method include effectiveness, compatibility with the items to be cleaned and the occupational health and exposure risks posed to staff with each method.

HTM 01-05 (2013) states that manual cleaning is “acceptable within the essential-quality-requirements framework”. However, as part of the move towards “best-practice” it further states that manual cleaning should be considered only where the manufacturer specifies that the device is either incompatible with automated processes, or when the washer-disinfector is temporarily unavailable, for example, when being repaired or validated.

When using a manual cleaning method, staff involved must have a written procedure to follow and be fully trained, and the critical parameters should be controlled as far as possible to reduce the variability in cleaning performance. A low-foaming neutral detergent specifically designed for cleaning instruments should be used in accordance with manufacturer’s instructions. Water temperature should not be above 45 degrees and items should be fully immersed to minimise splashing.

The reason that manual cleaning is not considered “best practice” is that the process is difficult to validate due to variables and inconsistencies in individual’s cleaning styles. Furthermore, this process can carry a greater risk of injury to decontamination staff compared with other methods. It is, however, important that there are sufficient facilities and staff training in manual cleaning, as this may be necessary when other cleaning methods are not appropriate, or where other automated methods are temporarily unavailable. If manual cleaning methods are used it is recommended that there should be systems in place to avoid recontamination of clean instruments, an agreed written procedure and a visual inspection should be carried out for cleanliness, wear and damage following cleaning.

In comparison, the use of a washer disinfector removes all variables from the cleaning process, enabling it to be fully audited and validated for regulatory compliance.

Choosing a washer disinfectant that has the capability to meet all your needs regarding space and capacity is important from the outset. For example, one with customisable storage trays that can accommodate a reasonable number of instruments and one that can achieve a fast turnaround is essential in a busy practice, so choosing a machine with multiple programmes including a 'fast wash' is important in terms of maintaining practice efficiency. An integrated data logger should also be used as it automatically records all the necessary data required for compliance documentation, removing the need to keep manual records.

Automated processes have certain advantages over manual cleaning, just as a domestic dishwasher is often preferred over the manual task. Instruments cleaned with automated equipment do not normally need to be presoaked (unless there is a considerable time lapse between used instruments entering the reprocessing cycle – in which case a pre-soak solution is useful), cleaning is generally considered more effective using an automated method and staff exposure to blood and body fluids is greatly reduced. Not least, the use of automated equipment can increase productivity and is therefore the most efficient method available, freeing up staff to deal with other surgery tasks.

The case for using an automated rather than a manual process for cleaning instruments is strong, and the question of whether the use of washer disinfectants in dental practices will become mandatory is, in my view, 'yes' – the only debate is around the timing. Our increasing knowledge about disease transmission and the need to safeguard patients in every area of healthcare, including dentistry, makes this scenario inevitable. 30 years ago, a dental professional would not have routinely worn gloves when performing a procedure, now the wearing of gloves is an expected and accepted part of all treatment and patients would react negatively were it not the case.

Decontamination remains an important aspect of dental care and is a top priority for regulators and inspectors. As with other sections of the various infection control guidelines, it is compliance that will first create the need for practices to change. But if a practice looks at the bigger picture now, they will find many advantages, not just in terms of compliance, but also with regard to enhanced efficiency and health and safety from which every practice is likely to benefit.