Endodontics made more efficient with the ScanX Swift™

Dr. Howard Golan discusses a different type of imaging technology

Technology has made endodontic treatment faster and more efficient. However, there are still parts of the endodontic protocol that cannot be avoided that add time to the procedure.

Taking radiographs is a fundamental part of endodontics. When traditional film radiographs are exposed and processed, there is a unit of time that goes by that the practitioner has to get up from the chair, leave the room, and wait for the X-rays to be exposed and processed.

Digital sensor technology has significantly decreased this unit of time. The instantaneous processing of the digital image allows the practitioner to step out of the room and within minutes return to the procedure. No longer does the auxiliary have to process the film in another room, sometimes at the other end of the office, wait for the processing time, either dip or automatic, then return to the practitioner for evaluation.

However, digital sensor technology does have its negatives. First, the sensor girth makes it sometimes very difficult for placement in the patient's mouth. Now compound that by trying to fit this sensor around a rubber dam and clamp. As a practitioner who has done his fair share of endodontics, placement of the film is of utmost importance in order to see the apex of the tooth being worked on. When a rubber dam clamp is placed, a rigid sensor can be difficult to place in the right position. If it moves or the patient moves it because he/she is uncomfortable, then repeat exposures may be needed.

A second disadvantage of sensor technology is cost. These sensors are expensive, and when they break down, which is inevitable, or they are out of warranty, their replacement cost is high.

An endodontic clinician has another option that takes advantage of digital technology, reduces the cost in the future, and will not have any placement or exposure issues like one can have with sensors. Phosphor storage plates (PSPs) are thin, flexible digital sensors that are exposed similarly to traditional dental film. With similar dimensions to film, PSPs allow for ease of placement, due to comparative dimensions with traditional film, and can be used with rubber dams and ring systems. Like other digital radiological technology, the dosage required to expose PSPs is less than traditional film. Furthermore, the plates are disposable. The replacement cost of the plates per the number or exposures per plate end up being similar to traditional film costs. The processor for these plates, although an initial investment similar to sensors, has no moving parts and has a lifespan years and years longer than sensors.

As with sensors, PSP technology can have disadvantages. One is the separate processing and exposure mediums. Once a PSP is exposed in the patient's mouth, the PSP is delivered to the processor that is usually in a non-treatment room or hallway with a computer attached. Thus, the auxiliary or clinician exposes the PSP, removes his/her gloves, and walks the plate to the digital processor. This prevents the instantaneous advantage that sensors have over PSPs.

However, a new PSP processor has been developed to close the gap between the exposure and the processing. The ScanX Swift (Air Techniques) is a one-slot PSP processor that is small enough to fit on a countertop in a dental treatment room. Thus, the auxiliary does not need to leave the treatment room after exposing the film. Once the plate is exposed, the auxiliary places the plate into the ScanX Swift, and in seconds, the image is in front of the operator ready for evaluation. In addition, there is a protective barrier that is placed

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over the ScanX Swift's slot so that the auxiliary exposing the film does not have to deglove in order to process the image.

The ScanX Swift provides the endodontic practice with almost instantaneous digital X-ray processing by moving the digital processor into the treatment room. This saves time. The one-slot processor provides a more economical option for those practices like endodontics that do not take a large amount of X-ray series.

The ScanX Swift enhances infection control and lowers the cost of gloves and disposables by allowing the exposer of the X-ray to remain in the treatment room and contain possible cross-contamination.

Finally, the PSPs are disposable, reducing high replacement costs in the future. Endodontic practices should seriously consider incorporating the ScanX Swift into their X-ray protocols. They will enjoy its convenience, long-term cost savings, and quality of image processing.

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