

Tools of the trade

Discovering interference in the bite; reducing radiation; eliminating false positives and more are under review this month ...

Leaf Gauge

by Dr Yo-Han Choi, Canada Bay Dental, Breakfast Point, NSW

The Leaf Gauge is something I've been using for the past few months. It consists of about 50 thin strips of plastic held in a spiral binder at one end. It helps reveal if there's an interference in the bite.

What's good about it

There are a number of different ways to use a Leaf Gauge. It can be used to screen for the first contact of a bite. It can also be used to check that a bite is even when making specific appliances for a patient. It gives the dentist a good idea of the muscular tension involved.

As each leaf corresponds to a certain measurement, it allows us to assess the bite very accurately. When I'm doing a crown on a back tooth, it shows how much needs to be cut from the crown so the bite is perfectly aligned. It can also be used to predict any future complications with treatment.

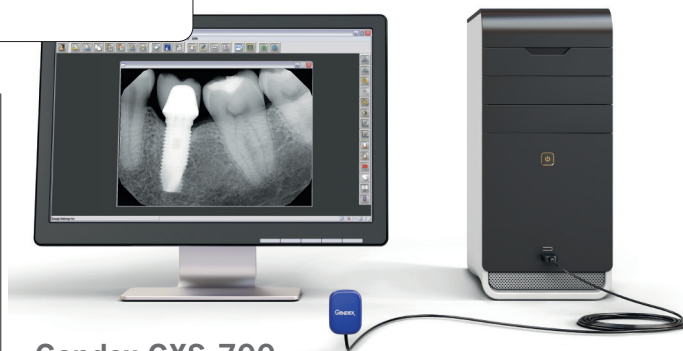
It's not going to make a drastic change to your practice but when you need it, it certainly makes a difference and saves a lot of time. I keep two or three at the practice so one is always on hand. They are not expensive and last about 12 to 18 months. It's a very handy screening tool.

What's not so good

Cleaning and sterilising the Leaf Gauge can be a little difficult. It's best to separate all the leaves and cold sterilise. The leaves should be fanned so it can dry completely before use again.

Where did you get it

I picked mine up at a dental course but they are available from Fairway Dental (www.fairwaydental.com.au). □



Gendex GXS-700

by Dr Timothy Goh, Oxford Dental Practice, Unley, SA

We decided to replace our old X-ray machine that used chemicals and required traditional processing methods. Digital systems save a lot of time and actually end up being more cost effective. We ultimately settled on the Gendex GXS-700.

What's good about it

One of the most important reasons we purchased this unit was to reduce the radiation exposure to our patients. It also makes it extremely easy to transfer and file patient records.

The results appear very quickly. We take an X-ray and it comes up on the computer screen in front of the patient instantaneously. There is the ability to manipulate the size and contrast of the X-ray so we can see things more clearly.

The sensor on this unit ticks all the boxes. It has nice rounded edges, provides very quick results, and is a very solid piece of equipment. In fact, the sensor has been accidentally dropped multiple times during the three years we've owned it and it's still working fine. We've never had it repaired or replaced.

Most patients tolerate the sensor in their mouth very well. Those who do have a problem like the fact that the sensor is in their mouth for much less time.

I would encourage those dentists still using manual processing to seriously consider converting to digital. It can't be denied that this unit was extremely expensive but I've never regretted the purchase. It's one of the best investments I've made for my practice.

What's not so good

The only disadvantage of this system is that the sensor is connected to the unit by a cord. It's not quite as flexible as the old film systems and it can be a little difficult to position correctly.

Where did you get it

Henry Schein Halas (henryschein.com.au). □

i-CAT 17-19 Imaging System

by Dr Vas Srinivasan, Invisible Orthodontics,
Hervey Bay, QLD

Historically, dentists used a wall-mounted X-ray unit that produced two-dimensional results. Not only did that system have limitations with patients who gag, but the image could be distorted, elongated or shortened. A lot of guesswork was required to interpret the results. This cone beam imaging system has successfully solved all those problems.

What's good about it

The results from the i-CAT require no imagination and completely eliminate any guesswork. The images are perfectly clear and the treatment outcome for the patient is far more reliable. The cone beam also limits the radiation to one specific area rather than scatter it across the whole head.

The image can be colour-coded to contrast and differentiate various parts of the mouth and jaw. The image is presented at a scale of 1:1 so what we see is a very accurate representation. The image can also be rotated and viewed from all angles.

The results are created very quickly, depending on the quality you require. High-quality, high-resolution images take about 28 seconds. A lower-resolution, straightforward scan can take as little as four seconds.

While two-dimensional X-rays were fine in the past, cone beam technology has vastly improved dental imaging. I doubt there will be a practice in Australia relying on 2D within the next 10 years.

What's not so good

I would love it if I could scan just a single tooth so the radiation exposure was as minimal as possible. However, the cone beam results are so clear and unambiguous, I think the low dose of radiation is a very acceptable risk. This machine is also very expensive and may be beyond the reach of smaller practices.

Where did you get it

Henry Schein Halas.



DentaPort ZX

by Dr Koe Ean Ong, Laser Dentistry, Casuarina, NT

I use the DentaPort ZX for all my endo work. I have always liked Morita endodontic systems and have probably been through two or three different versions of the DentaPort over the years. I'm very happy with the unit I have now. It has solved a lot of my endo problems.

What's good about it

This powerful endodontic unit comes with an attached apex locator. It's such an accurate piece of equipment that only limited radiographs are required for working length determination. When I do take an X-ray, it's just to ensure that everything is right. The DentaPort ZX has never let me down.

When dealing with a highly calcified root canal, the apex locator function is very useful as a search tool. It will help you find and penetrate any highly calcified canals.

A big advantage of the DentaPort ZX is that any brand of files will fit the handpiece. It's not brand specific like a lot of other models and there's no need to buy-in to the manufacturer's files.

There's also an optional parallel beam curing light that can be added to the DentaPort ZX. I haven't taken this option yet, but I am seriously considering it.

A small negative with an earlier model was that in order to get a reading, the apex locator required an external electrode connected to the file. That issue has been resolved with the DentaPort ZX OTR. It's nice to know that Morita listens to what dentists say and improves the product accordingly.

What's not so good

Sometimes you get a false positive reading. Fortunately, if you are well versed in endodontics, it's very obvious when a false positive occurs. This tends to happen when the pulp chamber is flooded, so it's important to ensure they are completely dry.

Where did you get it

Henry Schein Halas.