Benefits of CT scanning

Dr Avik Dandapat discusses the need for training in dental CT scanning

Dental CT scanning is becoming rapidly the gold standard in pre-diagnosis used in implantology. The technology gives the operating surgeon a huge amount of useful data to use. But with this technology comes both responsibility to prescribe the scans correctly using specific clinical criteria and the ability to interpret the images and relate this importantly to the surgical field.

At present there is little training available specifically in interpretation of the scan data and how to manipulate the data to gain the most out of a scan image which is probably why many implant dentists are still resorting to traditional 2D images and surgical guess work. The CT scans tend to be taken by those dentists doing larger implant cases but the planning can benefit even the single implant case when there is a clinical doubt.

In order to promote the use of the 3D information which also allows dentists to plan efficiently, the dimensions of the implant to be placed and the proximity to sensitive structures such as the sinus floor or inferior dental nerve one must gain an understanding of how the technology of CBCT works and how the computer lays the information on screen.

So the specific areas we have to look at training in are:

Before surgery
1. Prescribing a CT scan (when, why and how).
2. Referral Criteria.
3. Risk versus Benefit analysis for a CT scan.
4. The exposure levels for the numerous machines available.
5. Hospital medical CT vs In practice CBCT exposure.

Interpretation
1. How Simplant works.
2. What the graphic designer does to produce the 3D image.
3. How this can be manipulated and used effectively.
4. How distance can be accurately calculated on a CT scan.
5. Slice angle analysis.
6. When to refer a scan for radiological assessment by a radiologist.
7. The use of radio-opaque markers to orientate the Implant surgeon.
8. Understanding of good data and bad data from a scan.

Surgery
1. Bring the whole thing together for accurate surgery.
2. The use of stents – materialise 3D stereolithographic stents.
3. Pros and cons of the use of these.

What it all means

Hence as dentists we must provide sufficient information to the patient to give us the best chance of success in our implant plans. CBCT is here to stay and is a technology dentists consider placing implants should think about as an integral part of the treatment process.

Training centre opens

Digital imaging company Vat-tech & E-wo recently opened its new training facility in Feltham, Middlesex. A new initiative, the imaging centre’s facilities are available to dental professionals and their teams. Its purpose is to help the profession better understand dental digital radiography, its potential and its capabilities.

We have always believed that the digital imaging requirements of dentists vary from practice to practice. So we offer a range of options and systems to meet the needs of every one, be it general or specialist. Be it large, medium or small.

Our competitors take a different approach, preferring the single solution route. Only you can decide who has it right. But a few facts may help you make that decision.

Unlike others, we design, manufacture and develop our software entirely in house. Our painstaking attention to detail is reflected not only in the quality of our products, but in the support, after sales care and training we provide (we even have our own training centre). In short we control every aspect of manufacture and distribution, leaving nothing to chance.

We should also add that, because of the way we work, our prices are also extremely competitive. You will always get a premium product but you will not pay a premium.

So there you have it. If you are thinking of investing in dental imaging equipment do you want choice or no choice? The choice is yours.

For further details, advice on the most suitable solution for your requirements or to arrange a demonstration:

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About the author

Dr Avik Dandapat is a holder of the Diploma in Implant Dentistry from the Royal College of Surgeons, London. This qualification has been attained by less than 100 dentists worldwide and is regarded as the “gold standard” in implant training in the UK. To contact him, call 0118 954 5927, email team@dentalsurgerycentre.com or visit www.dentalsurgerycentre.com