

Picture of excellence



Noel Perkins focuses on his passion for dental photography and how you can achieve the best results for yourself

Noel Perkins

Dentist at Crossbank Dental Care



Clinical photography is an essential tool for communication with our patients and other members of the dental team. It enhances the quality of clinical record keeping, improves patient education and can help mitigate patient complaint, which is especially important in the current dentolegal climate.

Good clinical photography enables patients 'to see what we see', which, in turn, facilitates co-diagnosis and provides a greater return on investment for the practice by increasing treatment acceptance rates.

It can also help dental professionals develop a case portfolio, which can be used for marketing purposes, such as on social media platforms.

Breaking down barriers

Lack of consistency and attention to detail are the biggest mistakes I see when evaluating dental photographs. It is essential to follow a reproducible photographic protocol to improve in both these areas, which can be adapted to each patient's needs.

The most common photographic errors relate to camera settings, focusing problems and depth of field, framing problems, and incorrect use of photographic accessories and magnification ratios.

The challenges of acquiring good photos often result from limited time and experience. As when learning any new skill, it is important to slow down when you first start out to speed up in the future.

It's important to invest in yourself as well – buying good quality equipment and investing in a hands-on training course are crucial.

It is also vital to adapt to each patient's requirements. You won't achieve a 'perfect' set of photos for every patient, as everyone's circumstances will be different and they may have limitations, such as restricted mouth

opening or painful oral mucosal conditions. Being aware of this and allowing for such situations will help you honestly evaluate your photos and to keep improving.

Equipment

Photography is an art and a science. It must start in the mind, with clear pre-visualisation of the desired outcome and knowledge of the means to achieve that outcome.

Good photography is all about managing and controlling the light delivered to your subject (such as teeth and face), so the flash system and lens are more important than the camera itself.

A reasonably priced digital SLR camera with a resolution of 10MP or greater will give good quality dental images.

Understanding how camera settings influence the picture, then combining this with effective composition skills and patient management, will give the best results. However, many dental photographers will often disagree on the best settings to use.

In the end, it largely comes down to personal preference and previous experience of which settings work best in different clinical situations. For example, most dental photographers use an aperture of F22 to F32 for intraoral photography, and apertures from F8 to F11 for portrait photography.

Consistency is essential to enable comparison images from different times, particularly when monitoring a dental condition or disease progression.

Understanding what effect different camera settings have on your images enables you to troubleshoot your photographs and make the necessary adjustments.

When it comes to the type of flash used, the usual suspects are the ring flash and the twin (dual point) flash. The ring flash is the most commonly used system in dentistry and produces relatively flat, shadow-free images as the flash is closer to the lens. The ring flash is useful for routine case documentation, surgical photography and occlusal photographs.

However, when a more 3D representation is required – for example, when working in the aesthetic zone – the

twin flash produces a superior image, as the flashes are further away from the lens. The operator can alternate between the flash systems as necessary, according to the clinical situation.

Optimising outcomes

There are various techniques and technologies that can be incorporated to improve predictability of clinical photography. For example, in the past, shade management had been qualitative in nature due to a lack of standardisation across the dental industry.

However, the emergence of the Elab shade matching protocol has provided a more scientific and quantitative approach that is revolutionising how dentists and dental technicians work together to achieve predictable aesthetic results.

Ultimately, though, there is no substitute for practical experience when it comes to perfecting a skill, and the same can be said of dental photography.

It is also important to reflect on your failures, for as philosopher and historian William Whewell said: 'Every failure is a step to success.' It is also important to learn from others, and I'd like to thank everyone who has taught me, inspired me and helped me to improve as a dental photographer.

My biggest leap forwards in the last two years was the opportunity to learn from Dr Silvestre Ripoll, who opened my eyes to the infinite possibilities with artistic dental photography, which is my current area of interest. In addition to lecturing at the ADI Study Clubs, I also hope to teach a hands-on course in the future, so I can pass on my knowledge and passion for dental photography. **D**

DEMONSTRATING THE PASSION of ADI members for dental excellence, Dr Perkins was one of the many speakers who have presented ADI Study Clubs so far this year. To discover other subjects available in the series, or additional membership benefits from the ADI, visit www.adi.org.uk. For details on upcoming ADI Study Clubs, which are free to members, or to book, visit www.adi.org.uk/studyclubs.