

Dental photography: equipment and technique – part 2

CPD

This month, **Philip Wander** BDS MGDS RCS tackles portrait photography

EVERY face tells a story, and good “before and after” photographs will clearly enhance your patient’s understanding of the cosmetic techniques available, and will also help to market and demonstrate your skills to other patients. Good portrait photography helps to add value to your practice.

Lighting

The “ring flash” set-up, utilised for close-up photographs, has the flash very close to the lens, allowing the illumination of everything visible in the view-finder. It is ideal for detailed images and documentation, and is the standard equipment recommended for accreditation (BACD and AACD examinations), but for portraits it produces a flatter and possibly less appealing quality, often leaving a single reflection in the centre of the subject’s pupil, which gives a “beady eye”. In addition, when there is insufficient illumination in a room, “red eye” may also occur in the pupil.

For portraits and profiles, a magnification ratio of 1:15 can be set initially on the lens. As these camera systems have a 105mm macro lens, the patient is between five to seven feet away from the camera, so that the entire head can be photographed. This challenges the weaker flash to produce sufficient light on the subject, and therefore a wider aperture of f-stop 5.6 to f11 is necessary, depending on the flash system and ambient lighting.

However, reasonable portrait results are achievable. Better portrait lighting is achieved by removing the macro flash and holding it nearer to the subject or to one side, or by using special equipment studio lighting or a diffused flash system. A portrait flash diffuser in the shape of an “inverted dome” is

placed on a flashgun, and the light bounced off the wall or ceiling.

The custom flash diffuser was designed by a

professional wedding photographer, Gary Fong. Light from the flash is redirected in all directions. The result is smooth, even lighting without harsh reflections or deep shadows and “warmer” skin tones. The use of a silver or white “reflector” will act as a further source of soft lighting to further enhance a portrait.

Natural lighting can be used, provided there is sufficient illumination in your surgery, but this is too variable to be reliably consistent. You can tell the lighting used in a portrait by looking at the specular reflections in the eyes. Space is limited in a dental surgery, and the lens can therefore be changed for a shorter focal length to be closer to the subject.

Don’t get too close, or you will get a distorted image and a “fish eye” look!

Backgrounds

Non-distracting backgrounds are favoured, and colours most often selected are black, grey, blue and white. Sometimes the skin can take on a yellowish tone with a blue background, and therefore grey or black can be more neutral. These can be purchased as different colours and sizes of card (although some people prefer to use material such as felt). They should be a matt material.

- The lens can be set on “auto focus”
- Experiment with different poses – don’t just ask the patient to stare into the camera. They could look over their shoulder, turn their head and tilt their head up or down instead
- Ask the patient to moisten their lips and say either “Mississippi”, “Emma”, “eee” or “smile forever”. These words will allow photographs of the lip/teeth relationships
- The patient’s nose should be in the centre of the photograph
- Try to have a little extra light coming from each side of the face, for example using angle-poise lamps or “slave flashes” (extra flash guns synchronised with the main flash unit) to avoid the harshness of the main direct flash of the “on camera” flash gun
- The better the portrait, the more likely it is that the patient will relate to the image and be keen to proceed with the treatment
- Portrait photographs can be taken with the camera positioned horizontally (landscape format) and this is a

requirement for the accreditation examination. More typically, use the vertical format (portrait format) to give a more cropped and concise image

- Frame the picture so that you see the top of the patient’s hair and some of the area below their chin
- The patient should not be in an obviously dental environment (ie not sat in the dental chair) and their head should be upright and level
- The camera should be at the patient’s eye level, and should focus on the eyes
- If the flash causes the patient to blink, ask the subject to close their eyes until you say “open!”; then take the photograph immediately
- The subject should not be too close to the background to avoid shadows
- Exposure compensation may be necessary for patients with darker skin tones
- For a profile view for orthodontic and surgical purposes, the patient’s whole body should be at 90 degrees, as well as their head
- Remember for portraits that shorter or medium focal length lenses can be used (55mm-80mm) on an SLR camera to get a shorter working distance (3-4ft), resulting in less light being required, smaller apertures and facilitating easier focusing

Essential things to remember

- Subjects should be out of the dental chair
- The patient should be positioned in front of a plain, non-reflecting background
- Don’t forget to include the ears!
- Spectacles should be removed to avoid reflection and distraction
- The nose should be in the centre of the photograph
- The “red eye” effect is the reflection of the blood vessels of the retina straight into the camera lens. It can be avoided by asking the subject to stare at a bright light just before the



Portrait poses using diffused flash lighting

photograph is taken, or by removing the flash and “bouncing” the flash off the wall or ceiling. Some cameras have a red eye reduction mode – but be aware that there is a strobe effect prior to the main flash being fired

- Make your mark! For consistency, mark your position on your surgery floor, where you take your portraits. This will be about six feet from the subject in most cases, and this will give you a baseline for future cases
- Posing tips for portrait photographs – it is often easier to take an attractive portrait of a seated subject as people tend to be more relaxed when sitting
- Have your subject turn their face 45 degrees to the camera, then turn their head back towards the camera
- A portrait will appear more relaxed if the subject has a place to rest their hands
- Converse with your patient while you are setting up and shooting. A joke or a fun conversation will relax them and produce a more natural result

NB. It is good practice to respect the patient’s rights, so make a habit of getting a “model release form” signed by each subject, which is especially important if a portrait photograph has been taken.

Your patient may well be impressed and pleased with your dentistry but may not wish to share the photography with others!

Dr Philip Wander has over 40 years’ experience in both NHS and private practices in Manchester. He co-authored with Dr Peter Gordon the *BDJ* textbook *Dental Photography*, and has written numerous articles and lectured extensively on the topic. He is currently giving a series of hands-on courses on “Shoot your patients to build your practice”. For further information, contact Philip at info@dentalphotos.co.uk.



Light background; note shadows