The Importance of Documentation in Micro Dentistry
Nicholas Gibb discusses the benefits of the dental operating microscope in recording treatment plans

With the wide acceptance of the dental operating microscope in endodontics and other dental specialties the use of routine documentation is now possible and desirable.

What is Documentation?

Documentation is the recording of images and data in different formats.

Why incorporate Documentation?

This is important for many reasons:
• Accurate recording of patient data, anatomy, conditions and results
• Documentation provides material for analysis, review of cases and resultant improvement of techniques
• Documentation provides images for education and presentation.
• Medical/legal requirements
• To provide information for nursing staff and patient education

Types of Documentation

Documentation can be provided through the microscope or externally. Without the dental microscope Intraoral Cameras provide excellent images, as does photography, and now it is possible to have continuous hands free Intraoral Video documentation via a light mounted Micro Video Camera.

With the Dental Operating Microscope the choice of documentation types is even wider; multiple types of digital photography, digital SLR photography, video documentation, combined video and digital stills photography and assistant microscopes.

Which types of combinations to use

Determine your criteria (patient records, presentations, education, staff participation, referral information, legal).

How to achieve quality images

Through the dental microscope a beamsplitter is required. With Global, different beamsplitter configurations are available depending on imaging required.

A camera mount is required to suit camera of choice (digital, film, video).

Dr Benjamin Watkins DDS & Dr Pirooz Zia BDS, MSChD
12th March 2011 9am - 1.30pm
Of interest to the whole Team
1/ Key Prosthetic Considerations For Restoring Anterior Single Tooth Implants: A Prosthodontist’s Perspective suita whole team
• Historical advancements in anterior implant aesthetics
• The 5 most important keys to successful implant aesthetics
• The effect the emergence profile has on soft tissue aesthetics
• The key criteria for the selection of prefabricated vs. custom implant abutments
• Advanced concepts to improve the appearance of malpositioned implants
2/ A Practical Review of Modern Endodontic Diagnosis: All the practical clinical steps necessary to gather the information required to make an accurate pulpal and perapical diagnosis will be reviewed. [4 hour verifiable CPD]
Cost: £275 (Dentist) £185 (ACP) exc VAT

Dr Massimiliano Di Giosia DDS Cert Orofacial Pain (USA)
19th March 2011 9am - 1.30pm
Of interest to Dentists and DCPs
Introduction to dental sleep medicine, the role of the dentist in the management of snoring and obstructive sleep apnoea [4 hour verifiable CPD]
Cost: £250 (Dentist) £175 (DCP) exc VAT

Dr Jason Smithson BDS (Lond), DipRestDent RCS(Eng)
2nd April 2011 9am - 5pm
Of interest to Dentists
Direct resin artistry: anterior and posterior including a live demonstration of the techniques used. Microscope with video feed [6 hour verifiable CPD]
Cost: £350 exc VAT

Dr Marc Cooper DDS
12th May (evening) 13th May 2011 9am – 4.30pm
Of interest to Dentists
The power of ownership and leadership. The course aims to enable dentists to become and operate as powerful leaders of their practices [8.5 hour verifiable CPD]
Cost: £495 exc VAT
What do you want to achieve?

1. Routine continuous video/images for nursing staff and patients: Use a 95/5 beamsplitter, this provides increased camera depth of focus.

A conventional C-Mount video adapter tube and C-Mount camera will provide the required results.

Continuous video images enable the dental nurse to participate in and anticipate the operators requirements, the monitor must be positioned in the nurses line of sight.

2. A binocular assistant scope also enables full participation by the nurse. If this option is chosen a 50/50 beamsplitter should be used.

3. Capture of specific still images. For convenience use a digital stills camera of choice.

A 50/50 beamsplitter is required plus a digital camera mount, (X-Mount) with adapter to suit camera model. These cameras can be adjusted (eg. zoom) independently of microscope: high quality low cost cameras are available.

4. Combination (Video & Digital stills) provides very flexible documentation. Use a 50/50 beamsplitter, X-Mount adapter and the appropriate camera mount.

5. Digital SLR with a 50/50 beamsplitter and camera mount.

All these options can be added to the Global Dental Microscope with ease, this upgrade facility is important as operators requirements may vary with time. These instant microscope upgrades are an important Global facility not found on all microscopes. Camera specifications are continuously improving hence the need for upgrade compatibility.

Many operators use the same camera as they are comfortable with unit and results and do not see the need to upgrade. This demonstrates that documentation should follow the operator’s requirements and skills.

The global perspective on documentation

Digital Documentation

SLR X-Mount & Digital X-Mount Adapters

Automatic Framing – Capture the exact replica of what you see.

“Framing” is automatic. Images are recorded with virtually no interruption to the treatment.

Easy Upgrade – Modular design allows for upgrading your camera at little or no cost to change the adapter.

Efficient Archiving – Entire procedures can be electronically  
documented; allowing for efficient archiving in patient records.

No Blurring – The wide optical path of the X-Mount and  
SLR Mount allows for faster shutter speeds, thus reducing  
blurring.

Video Documentation

Communication/Archive

– Record the procedure, let the patient watch the procedure, communicate clearly what treatment is needed and why.

Capture the entire procedure for communicating to colleagues, referring dentists, the patient’s parent, your study club, and insurance companies.

Educate and persuade your patient

The greatest benefit: gain patient acceptance of treatment. Those cracks that cannot be seen with the naked eye can easily be seen through the microscope and then shown to the patient via the camera image.

Superior to Intraoral Cameras – Images are magnified optically, not electronically; making the resolution of the microscope’s video image far superior to traditional Intraoral cameras. Also, unlike Intraoral cameras, the microscope/video camera allows you to document the actual procedure.

More Light – The patented Virtual Beamsplitter provides a clear image to the video camera while removing less than five per cent of the light from the user. Other beamsplitters rob the user of 20 per cent or more of the light.

Greater Depth of Field – The Virtual Beamsplitter also provides incredible depth of field for the video image.

Flexibility – Camera can be placed on either side of the microscope for user convenience.

‘Many operators use the same camera as they are comfortable with unit and results and do not see the need to upgrade.

This demonstrates that documentation should follow the operator’s requirements and skills’