Full arch rubber dam for restorative procedures

By Dr Christopher C.K. Ho



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The application of rubber dam is recommended to achieve adequate isolation for many dental procedures, helping to provide a clean, dry environment and minimising contamination from saliva and blood.

It also plays a crucial role in preventing ingestion or aspiration of instruments, tooth debris, dental materials, medicaments, irrigants or other foreign bodies. As well as the provision of isolation and moisture control, there is the added benefit of retraction of lips, cheeks and tongue. This allows improved access, visualisation and protection of soft tissues from rotary instrumentation. The use of coloured rubber dam helps to achieve better visualisation of the teeth with a contrasting colour of the rubber dam material.

It is often commented that placement of the rubber dam is a difficult procedure and that the time it takes to apply the dam is excessive. The other concern for dentists is that it can be uncomfortable for the patient while the dam is being placed due to the stretching required to seat the dam.

The author utilises a technique that has been very useful in his practice in isolating a full arch very quickly and comfortably for the patient. This is particularly useful when working on multiple teeth with direct procedures like the removal of amalgam and caries and placement of restorations. It can also be effectively used in the preparation and cementation of indirect restorations, e.g. porcelain veneers/onlays/crowns.

This technique is a useful one to have in your armamentarium for utilisation within clinical practice and is illustrated in Figures 1-9.



Figure 1. Rubber Dam: use of Flexidam (Roeko). This rubber dam is non-latex and consists of a very flexible material that is able to withstand stretching and has high tear resistance. Holes are punched in the 12 and 22 positions.

About the author

Dr Christopher Ho received his Bachelor of Dental Surgery with First Class Honours at the University of Sydney. He has completed postgraduate studies in the Graduate Diploma in Clinical Dentistry in Oral Implants at the University of Sydney and Masters of Clinical Dentistry in Prosthodontics with Distinction from Kings College, London. Dr Ho is a lecturer on aesthetic and implant dentistry locally and internationally. He has a referral-based private practice in prosthodontic and implant dentistry in Sydney, Australia.



Figure 2. Upper arch.



Figure 4. Rubber dam clamps are placed on the molars and depending on the isolation required, clamps can be placed anywhere from the 2nd premolar to the 2nd molar.



Figure 6. Rubber dam in place.



Figure 8. Rubber dam in place (occlusal view).



Figure 3. A slit technique is used to join the holes punched so that they are joined.



Figure 5. The rubber dam is stretched over the clamps and then the front part of the dam is carefully directed under the labial sulcus, which effectively isolates the teeth.



Figure 7. A quick setting putty/bite registration material is then used to seal the palate.



Figure 9. Rubber dam in place (frontal view).