

Two products I cannot live without...

Dental therapist **Lorena Pivoda**¹ extols the virtues of rubber dam and metal clamps.

Modern dental therapists use rubber dam!

As a dental therapist, the first dental product that I cannot live without is rubber dam.

The vividly coloured rubber dam isolation shown in Figure 1 is from Incidental Ltd.

What is a dental rubber dam?

A dental dam, rubber dam or tooth isolation is the outer splash of pink surrounding the teeth in Figure 1. This is made from a latex or latex free (nitrile) flexible square of material and comes in various colours and textures – light, medium, heavy, extra heavy.

Benefits for patients

The reason why tooth isolation is important during dental treatment from a patient perspective is to protect the airway from accidental aspiration and to protect the soft tissues such as the cheek and tongue from the working field. Moreover, tooth isolation



Fig. 1 Before and after photos of a composite restoration on permanent second premolar and first molar

controls saliva, avoids contamination of dental materials and reduces discomfort. Having a dental dam will allow restorative materials, cements and linings to adhere to dry tooth tissue and increase their effectiveness.

Benefits for clinicians

Personally, using dental dam means that I provide gold standard treatment. It provides an aseptic environment; improves access and

the visibility of my working field; and it makes my dentistry brilliantly, satisfyingly safer!

Some patients are surprised when as dental therapists we use dental dam for their dental treatment. They might point out that for the previous restorative 'filling', this 'sheet' was not used and 'now you're covering my entire mouth and [sometimes] nose!' From my experience patients become anxious about having the rubber dam, especially when it takes a little longer to position or the clamp holding it in place jumps off the tooth. I would feel the exact same. Or worse, fear that part of my tooth had broken. This thankfully has not happened and will not happen with good quality equipment. The key is reassurance and explanation to the patient prior to the treatment. As with any operating surgical treatment, such as drapes to cover those areas not involved in the operational field to prevent bacterial contamination, similarly in dentistry we use the rubber dam isolation.

Rubber dam: tips on photography

Dental care professionals (DCPs) invest a lot of time in their education, including hands-on skills, and good quality equipment.

Author information

¹Lorena is a 2021 graduate of Peninsula Dental School with a BSc (Hons) dual qualification in dental therapy and dental hygiene. Lorena was named Highly commended Best Dental Therapist at the prestigious Private Dentistry Awards in 2021 and 2022 and in 2023 was awarded Best Dental Therapist at the Private Dentistry Awards & Clinical Dentistry Awards. She has completed the 'Totally Therapist' programme in Minimal Invasive Aesthetic Dentistry, Level 7 Postgraduate Diploma in Aesthetic Therapy at Fresh Dental Institute London. Lorena is also a member of the British Society of Dental Hygiene & Therapy (BSDHT) and the British Society of Periodontology (BSP).

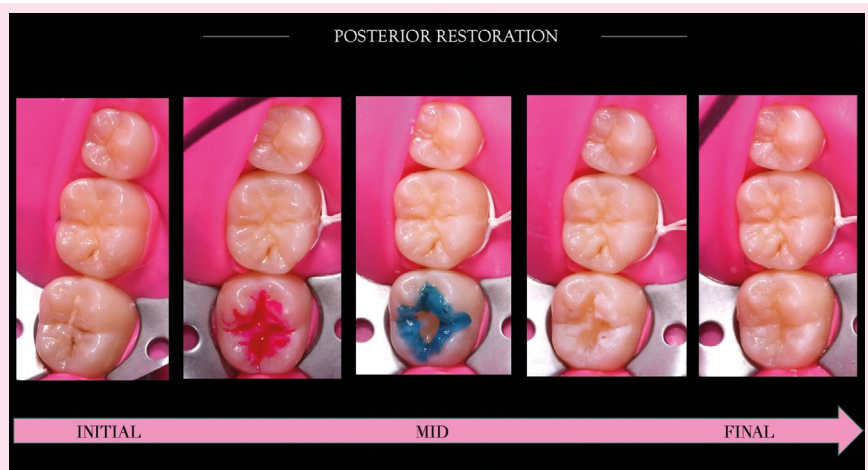
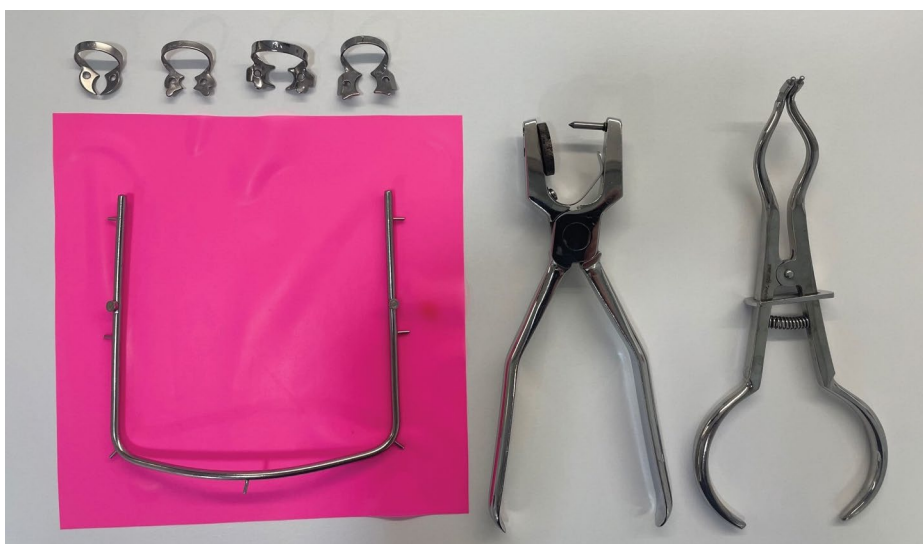


Fig. 2 Clinical progress and gallery workflow ability (shutter speed f/29)



Box 1 Dental dam kit (Fig. 3)

1. Frame
2. Punch
3. Forceps
4. Clamps
5. Dental rubber dam.

and help to isolate and provide clear vision of the working field (Fig. 3). There are numerous rubber dam clamps available depending on the manufacturer, wingless (Fig. 4) or wingless.

My tips for clamp placement

Personally, I find it easier to place my clamp on the rubber dam and apply it to the tooth all in one go. Some clinicians prefer to place the clamp first, followed by the rubber dam stretched over the clamp. Both ways work beautifully, however you must ensure you floss between the teeth for a smooth transition. Ensure you're not clamping the soft tissue if you're placing all in one go and that you are not clamping the wrong tooth; consider markings and your dental nurse's help. If your clamp is not stable and/or jumps off, check whether it is the correct size and that the claws engage with the tooth. When placing a clamp on a non-working restorative tooth I place a little local anaesthetic for patient comfort. Another tip is that you can use the clamp shown in Figure 5 where you may have teeth missing in the arch or a heavily subgingival cavity where you may need a larger subgingival field of work.

Fig. 3 Dental dam kit



Fig. 4 Winged clamp in use



Fig. 5 Alternative clamp to use, for example when there are teeth missing in the arch

Taking photographs during a rubber dam procedure is important to let your patient know what happened and why. Your set-up is important: we all know the components of a camera but having the correct camera settings, ISO, flash power and picture style are all essential to master. For example, you want to make sure when taking intra oral views to half press the shutter while focusing; once focus is locked, reframe right or left to show all teeth; an example is shown in Figure 2. All of these camera adjustments play a part. The aperture value controls the amount of light recorded. The smaller numbers, such as f/6, allow more light in, the bigger the number such as f/32 lets less light in. This is something I have noticed when taking intra-oral posterior shots and has helped me to achieve a clearer photo.

The importance of good photography skills in dentistry covers a multitude of aspects:

- Dento-legal records
- Accurately record the dentition
- Diagnostic – Consultation – Treatment aid
- Referrals

- ◆ Cosmetic smile design/communicating with the laboratory
- ◆ Oral and maxillofacial surgery
- ◆ Adjunct to radiographic image
- ◆ Clinical progress
- Visualising workflow
- Visual aid in education.

Taking digital photographs in dentistry equips me with the basic armamentarium for keeping good records. I can communicate the initial findings effectively to patients, plan cosmetic treatment and show before and after workflow. Displaying a photo to patients helps to earn their trust in your capability as a clinician and helps you to express meaningful likely outcomes.

What about metal clamps?

The second dental product I cannot live without is another part of the dental dam kit (Box 1): metal clamps. Metal clamps (or rubber dam clamps) are a stainless-steel piece of equipment used to anchor the dam to the tooth

Useful resources

1. Cochran M A, Miller C H, Sheldrake M A. The efficacy of the rubber dam as a barrier to the spread of microorganisms during dental treatment. *J Am Dent Assoc* 1989; **119**: 141–144.
2. General Dental Council. Scope of practice. 2013. Available at: <https://www.gdc-uk.org/standards-guidance/standards-and-guidance/scope-of-practice> (accessed February 2024).
3. Patel S, Hamer S A. simple guide to using dental dam. *Br Dent J* 2021; **230**: 644–650.
4. Pocket Dentistry. Rubber dam. 2015. Available at: <https://pocketdentistry.com/rubber-dam/> (accessed February 2024).

What about you?

What two dental products could you not live without? Contact bdjteam@nature.com and share your favourites.

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