Commercially available retrograde carriers are difficult to clean and keep free from a build-up of debris, particularly those caused by amalgam residue. Moreover, they are delicate and can be damaged easily under pressure. Because of this problem, it might be more cost effective to modify a standard disposable hypodermic syringe and needle for retrograde fillings which can be disposed of after use.

The materials required for making a retrograde carrier are a 5ml disposable hypodermic syringe, an 18-gauge (G) needle and a piece of stainless steel wire with a diameter of 0.5mm. The bevelled tip of the 18-G needle is cut to modify it to the applicator tip (Figure 1). Care should be taken that the bevelled end will drop into a sharps container after cutting.

Method

An old diamond bur is used to round off the jagged edges of the cut end of the needle. The applicator tip should be sufficiently long for sections to be cut from its tip when blockages occur during surgery, but not so long that tremors are unduly magnified.

It may be bent to about 50°, depending on the operator’s own preference. Following this, the plunger is separated from the hypodermic syringe. The black rubber stop at the end of the plunger is also separated. The stainless steel wire is threaded through both the applicator tip and the rubber stop and a kink is made at the end of the rubber stop (Figure 2). This will ensure that the wire remains engaged to the rubber stop.

The rubber stop is then reattached to the plunger, which is pushed back to the needle end of the syringe. The remaining