Treatment with composite crowns

Dr Jacob Krikor discusses how the use of composite crowns can be a more affordable treatment option for both the patient and the clinician.

Every day, as a dentist, I am confronted with treatment problems and challenges. With time you learn what works and what doesn’t and you start using your experience to solve these problems.

In the last few years, I have started using composite crowns more often as a compromise for when the patient cannot afford porcelain bonded or ceramic crowns or to fix a broken tooth temporarily. Essentially, the results achieved are so pleasing the patient does not return for an alternative crown.

I use this solution predominantly in the front, but I have performed the same procedure on a few pre-molars and the results were very satisfactory.

Advantages of the direct-composite crown technique:
- Start to finish by one operator
- Saves time for the patient with a same-day crown
- Less expensive for the patient (you can afford to charge less)
- Less expensive for the dentist (less time and no lab bills involved)
- Easy technique
- Easy to correct if you do not like the shade or the shape.

Disadvantages include:
- Composite is not as hard-wearing as ceramic or metal crowns.
- Can discolour with time (but can be polished to refresh)

In this patient case this lady visited the practice enquiring about the possibility of enhancing the look of her lower teeth that have become discoloured and deteriorated. (Fig 1)

After discussing the options she agreed to have them restored with composite since she could not afford to have the ceramic crowns. The patient had a full upper denture.

A case study
After applying the local anaesthetic and in this case I decided to apply it locally both buccally and lingually, I prepared the teeth to the desired shape.

Choosing the crown form is the tricky part. I tend to give this step most time; because the shape I give this crown form will be the final shape the tooth will have hopefully for many years to come.

I use strip-off crowns from DE Healthcare Products and I shape the crown forms to fit the prepared teeth and use a diamond bur to adjust the crown neck. The tooth is then treated with the etching agent and after drying, the bonding agent is applied – in this case I use Denpul Prime and Bond.

I have been using a composite from Coltène called Synergy. Synergy is very easy to work with as it does not stick to the instruments for normal fillings and it has a smooth consistency. It is also easy to polish after curing. I then fill the crown form with composite and place it over the prepared teeth, removing any excess composite with a probe. (See Fig 3). Finally, I light-cure the composite and remove the crown form.

The patient was very pleased with the results and when reviewed several weeks after the treatment she had no symptoms to report. The composite crown is not to replace lab made crowns, but is an excellent solution when you are looking for quick and affordable treatment.