



The Instagram dilemma: selecting resin composite or glass-ionomer?

Sharan Sidhu

Institute of Dentistry, Queen Mary University of London

Composite resins are widely used in contemporary restorative dentistry as the material of choice for direct restoration. They are reasonably durable, possess good aesthetic qualities and show acceptable physical properties as well as wear resistance. Hence, they are useful to replace lost tooth structure in most situations including wear cases. However, they are not inherently adhesive to tooth structure without the use of an intermediary in the form of a dentine adhesive, and long-term adhesion to dentine remains challenging. In general, the technique for their placement is relatively exacting and has the potential to impact on longevity of these restorations.

Glass-ionomer cement materials comprise another group of materials for direct restoration. Their distinct advantages include adhesion to tooth structure and fluoride release, an important anti-caries property. However, they lack the physical properties required for use in loadbearing areas and harsh environments. Nevertheless, despite not being as durable as composite resins, they are potentially an alternative option in some scenarios. They may also be particularly suited to certain situations such as root surfaces and in patients at high risk of caries.

A question that is often raised is whether one material is better than the other. While the clinical performance of a material may be significantly superior in some parameters, it may be similar or inferior to another material in other aspects. In this era of social media and visual appeal, is the selection of materials dependent on its Instagrammable properties, or by basic understanding and fundamental principles regarding their use? Perhaps it is more prudent to consider the most appropriate material for any given situation. The location, extent of damage, access and other requirements may dictate the decision to select one material over another. This presentation will cover a general overview regarding the selection of these materials and illustrated in the form of vignettes.

<Biography>

Dr Sidhu obtained her degree in dentistry (BDS) from the National University of Singapore and subsequently completed her postgraduate training in the UK, including a clinical Master's and a PhD at the University of London. Her academic career has included positions at the National University of Singapore, Guy's Hospital in London (UK) and Newcastle University (UK) prior to her current position at Queen Mary University of London. She also holds an honorary position at Hokkaido University in Japan.

Dr Sidhu is a restorative dentist and prosthodontist. She has many years of experience as an educator and clinical academic, and has been invited as external examiner at all levels from undergraduate to postgraduate and PhD levels, both within the UK as well as internationally. Her research interests are primarily in dental materials, particularly adhesive materials, and she has published well over 100 papers in peer-reviewed journals. She has received several awards and grants throughout her academic career, including the IADR Toshio Nakao Fellowship Award in 2001. She has been on funded research sabbaticals to research centres and laboratories in the US, Japan and Australia.

Dr Sidhu has been appointed on several international grant funding and awards committees such as the IADR Innovation in Oral Care Awards Committee and IADR Heraeus Kulzer Travel Award Committee. She has previously been on the editorial board of the *Journal of Dental Research* and is currently a member of the editorial boards of the *Journal of Adhesive Dentistry* and *Japanese Dental Science Review*. She is also a frequent reviewer for several journals and has edited a book, *Glass-ionomers in Dentistry* (Springer).