

# Aesthetic inlays and onlays: the coming of age

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Dr Jackson will present a series of sessions on 'Aesthetic restorative excellence with inlays, onlays and metal free crowns' on Thursday 1 and Friday 2 May at the 2008 British Dental Conference and Exhibition, held at the Manchester Central Convention Complex.

CONFERENCE

There are many prominent teaching clinicians who feel that inlays and onlays (of whatever colour) are a grossly under-utilised restoration and that crowns are an over-utilised restoration.<sup>1,2</sup> I think it is worthwhile to examine some of the possible reasons for this unfortunate situation (for our patients) and see if the reasons for dentists' reluctance to incorporate these restorations into their routine services are really valid today.

## Reason 1: large amalgam fillings are easier and more affordable than inlays and onlays

Both terms (easier, affordable) are relative. Whether something is easy or not in dentistry depends on your training and how often you have done it. Our first amalgam filling or crown in dental school was not easy either. As for affordable, isn't that for the patient to decide? People generally buy what they want or what they perceive is in their best interest.

## Reason 2: it's just easier to do a crown than an onlay

Same response as above. However, I will agree that when doing a crown, the clinician is not faced with the decision of which cusps to keep and which to remove – you just unthinkingly remove them all. But as doctors, we have to ask, are we deserving of the patients' trust and their money, by only recommending that which we perceive (possibly because of lack of training or practice) as expedient?



Fig. 1 Before – fractured cusp, no caries present

## Reason 3: inlays and onlays are expensive

Not any more expensive than crowns or root canals! We have no trouble recommending these services when they are indicated. Maybe it would be easier for dentists to accept and recommend these restorations if an onlay (gold or tooth-coloured) was referred to, and thought of, as a partial crown and carried the same fee as a crown.

## Reason 4: crowns last longer and are more predictable

Although longevity is important and ingrained in the dental psyche, it is not

the only criterion of value. In the age of adhesive dentistry, respecting remaining tooth structure and aesthetics have become components of value as well. Keeping in mind that patients are living longer and want and expect to keep their teeth for a lifetime (something we tell them can be done), in most instances it is best to recommend a crown only when it is truly indicated. The name of the game in dentistry today is 'bank the tooth structure' for future use. Regarding durability, aesthetic inlays and onlays are not new any more. They have a track record, and it is good.<sup>3-5</sup> With today's materials, longevity is mainly a

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matter of diagnosis, correct treatment planning and proper execution of technique (Figs 1 and 2).

Although not aesthetic, well-done gold inlays and onlays are considered to have a proven durability and longevity similar to crowns. If aesthetics is not an issue, gold is still the standard and what I always recommend for second molars when a conservative indirect restoration is indicated. However, it is interesting the number of people, and the types of people, who still desire tooth-coloured or non-metal restorations even in these teeth.

### Reason 5: posterior direct resin restorations are less costly to the patient and can be done in one appointment

It is a fact that more and more patients today are selecting tooth-coloured restorations for their posterior teeth<sup>6</sup> and there is no question that well-placed Class I and Class II direct resin restorations are proving to be viable alternatives to amalgam.<sup>5,7</sup> However, the indications for these restorations do have limits. Generally, when the cavity is large or the tooth is under excessive functional demand (eg in a heavy bruxer or clencher), indirect restorations (resin or ceramic) are indicated. Certainly when a cusp is missing, many clinicians feel the standard of care is best satisfied by an indirect restoration. After all, there is no question that a laboratory technician working with mounted models at the bench is going to provide a more accurate occlusal morphology, contact and overall contour than we can by grinding all the blue spots in the mouth. It is also very difficult to achieve quality contacts in large restorations with poor



Fig. 2 After – indirect resin composite only at 15 years

tooth alignment or spacing. No matter how good the direct resin materials get, the above situations will usually be better served by indirect restorations in the same way that gold inlays/onlays are considered superior to large amalgams, especially those that replace cusps.

In conclusion, offering only low cost (at least initially) large fillings or expedient crowns to our patients, in those instances where they may not be the best our profession has to offer, is questionable and short-sighted. The bottom line in dentistry today, as it always has been, is to recommend treatment which, according to the clinician's professional judgment, is in the patients' best interest. This is usually what the clinician would select if he/she were the patient. The patient may not always want that particular service and decline to have it done, but they always deserve the choice.

The trend in dentistry is clearly towards more aesthetic and less invasive. Indirect resin and ceramic inlays and onlays are not only compatible with this trend but fulfill very nicely the restorative void between fillings and crowns.

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