

# MARKETPLACE

## Back to basics

**Tony Beale** looks at a simple aesthetic composite system



**Figure 1:** Amalgam restorations prior to being replaced by an Amelogen composite restoration



**Figure 2:** Amalgam restorations as shown in Figure 1, replaced with Amelogen composite



**Figure 3:** Amelogen composite showing syringe presentation



**Figure 4:** Amelogen composite showing 'Tips' delivery presentation

### Composites and practitioners

Composite resins are now widely used in dentistry allowing dental practitioners the opportunity to create 'lifelike' restorations that can truly mirror the characteristics of natural teeth.

From their earliest introduction in the 1960s, they have sometimes proved challenging when used, and current systems now offer a wide variety of choice with some products requiring relatively high levels of skill when being placed. These skills can take time to learn and require much time in placing.

Realising that some practitioners would prefer a more simplistic composite system that does not require them to undertake the application of more sophisticated and complex layering techniques, the Ultradent company introduced Amelogen to the market.

The Amelogen composite system is simple and is also affordable. It is a material that is suited to the fabrication of both anterior and posterior restorations and has a varied range of different dentine, enamel and translucent composite shades that can be matched using the VITA shade guide.

### The Amelogen system

Amelogen is a state-of-the-art, hybrid Bis – GMA material that is 76% filled by weight (61% by volume), and has an average particle size of only 0.7 microns. It has an excellent consistency, making it easy to handle with little if any risk of 'slumping'. However, its viscosity can be reduced or modified by using Ultradent's Composite Wetting Resin.

Handling is further enhanced by its reluctance to adhere to instruments when being placed, and being radiopaque is easily identified on radiographs. Its handling characteristics make it well suited to the fabrication of class 1, 2, 3, 4 and 6 restorations, and for direct veneers.

When cured, the material has excellent wear resistance together with good optical properties, high strength, and polishability. It fluoresces well and offers good levels of translucency allowing easy shade matching and blending. It is suggested that wherever possible, cervical areas should

be used to determine basic dentine shades, as this is where enamel tends to be thinner.

Amelogen is available in a choice of delivery systems – either syringes or ready-to-use tips. The unique Quadraspense syringe has a quadrant shaped tip that will deliver the material in four individual portions thus allowing the clinician to use small increments of material with minimal wastage. If desired, the Quadraspense tip can be removed, leaving a Kleen sleeve in place that will permit larger amounts of composite to be placed.

When using Amelogen for direct applications, it is suggested that syringe delivery be used and, for larger restorations, an initial layer of 1mm be applied to bonded/prepared surfaces, followed by incremental layers of 2mm, each of which must then be light cured prior to any further build ups.

The Amelogen composite system has 14 shades (seven dentines, three enamels, three translucents, and one opaque). Layering techniques can be simple, with smaller restorations possibly only requiring an application of an enamel shade. A 1, 2, or 3 layer technique can easily be built up, and translucent shades can be used to create effects such as incisal halos, discolourations, enamel specks and also for mamelon definition. The Opaque White shade can be useful where translucency needs to be reduced.

The Amelogen composite system succeeds in meeting the requirements of those dental practitioners that are looking for a basic, uncomplicated and affordable aesthetic composite that can be placed using simplified layering techniques.

Basic Kits comprising of seven popular shades, or complete kits with 15 shades with bonding components. **ID**

**ALL ITEMS MENTIONED** are available from Optident Ltd, international Development Centre, Valley Drive, Ilkley LS29 8AL. For more, call 01943 605050, email [sales@optident.co.uk](mailto:sales@optident.co.uk) or visit [www.optident.co.uk](http://www.optident.co.uk).