Description

G-aenial Sculpt is a universal resin composite with nano-filler technology. This composite is radiopaque and easy to pack, sculpt and polish. It is also designed to be wear resistant and self-polishing to increase polish and luster over time. Due to its chameleon effect, it blends well with the surrounding tooth structure. G-Premio BOND is a universal bonding agent that is compatible with total-, self- and selective-etch techniques.

Clinical Evaluation Protocol (One Year)

A total of 148 G-aenial Sculpt with G-Premio BOND restorations were placed using the self-etch technique. The restorations were placed in 86 molars, 57 premolars and 5 anterior teeth (Figure 1). The classification of restorations was recorded, with 20 Class I, 116 Class II, 1 Class III, 3 Class IV and 8 Class V restorations (Figure 2).

Results at One-year Recall

Eighty restorations (54% of the total number of restoration placed) had been recalled by year one. They were evaluated in the following areas: esthetics, lack of sensitivity, resistance to fracture/chipping, resistance to marginal discoloration, and wear resistance. Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent.

Esthetics

Sixty-nine G-aenial Sculpt with G-Premio BOND restorations received an excellent rating of five for esthetics (Figure 3). Ten restorations received a rating of 4, of which 6 were deemed to be slightly opaque, and one restoration received a rating of 3 that was associated with marginal staining. The restorations received an overall rating of 4.8 for esthetics.

Lack of Sensitivity

Seventy-eight restorations were reported to have no sensitivity and received a rating of 5. Two restorations received a rating of 4 due to slight sensitivity (Figure 3).

Resistance to Marginal Discoloration

Seventy-four G-aenial Sculpt with G-Premio BOND restorations received an excellent rating of five for resistance to marginal discoloration (Figure 3). Four restorations received a rating of 4 due to slight discoloration, and one each received a rating of 3 and 4 due to evidence of microleakage.

Resistance to Fracture and Chipping

All recalled restorations received an excellent rating. None exhibited any fractures or chipping (Figure 3).

Wear Resistance

The wear resistance of the recalled restorations was excellent (Figure 3).

Consultant Comments

- “Excellent handling – packs well, not sticky and contours extremely well.”
- “The esthetics is exceptional. Often it is hard to tell where the filling is.”

Summary

Over a one-year period, the clinical performance of recalled G-aenial Sculpt with G-Premio BOND restorations was exceptional. Esthetics, lack of sensitivity, resistance to marginal discoloration, resistance to fracture/chipping, and wear resistance were excellent. At one year, G-aenial Sculpt with G-Premio BOND received a clinical performance rating of 99%.