Answering the Demand for an Everyday Composite Restorative

with Paradigm[™] Nano Hybrid Universal Restorative

Paradigm™ Nano Hybrid Universal Restorative

Your reliable, easy-to-use, everyday restorative.



- Easy to polish
- Excellent for everyday anterior and posterior restorations
- Excellent handling holds its shape does not slump
- Excellent strength and wear resistance
- Easily blends with the surrounding teeth through outstanding chameleon effect.

Introduction to Clinical Cases by Clarence Tam

Starting with the two cases below, the next few issues of Everything Dental will include a diverse collection of 'everyday' clinical cases demonstrating the versatility and ease of building naturomimetic direct composite restorations using a smart composite such as Paradigm™ Nano Hybrid Universal Restorative by 3M ESPE.

I elected to use Paradigm[™] Nano Hybrid Universal Restorative in these cases for both functional and aesthetic reasons. Functionally, the material exhibits a compressive strength of approximately 385MPa, which mimics enamel's compressive strength at 384MPa very closely (dentin's compressive strength is 297MPa).

The flexural strength of dentin is 165.6MPa, and Paradigm[™] Nano Hybrid Universal Restorative is an extremely close match at approximately 158MPa. The very low polymerisation contraction of 1.7% falls within my acceptable limit of < 1.8%. The combination of a hard-to-beat chameleon effect as well as physical prowess makes this 'supercomposite' a one-stop wonder for Class Ills, Vs and posterior multi-surface restorations in general. It's ease of polishing is a pleasure.

Clinical Case 1: Class V Restored with Paradigm[™] Nano Hybrid Universal Restorative







Patient presented with an old Class V restoration with deep leakage and recurrent caries. After completing the micro air abrasion (diagram 2) using 50 micron aluminium oxide, etch, 2% CHX (aq) was applied. After following my adhesive protocol, I chose to restore the Class V with a single shade of 3M[™] ESPE[™] Paradigm[™] in an A3 shade.

Clinical Case 2: Restoring a large MO Amalgam & replacing it with Paradigm™ Nano Hybrid Universal Restorative





This patient presented with deep distal caries in addition to deep recurrent caries around the old amalgam on the MO aspect. After excavation of the decay, we used 3 rounds of caries detector to ensure a hard dentin base before placing a Triodent™ V3 sectional anatomic matrix system to build up the marginal ridges before restoring the occlusal aspect as a Class I restoration.











A single shade of 3M[™] ESPE[™] Paradigm[™] in A3 was used in this case as it exhibited the perfect blend of opacity: translucency, resulting in a superb chameleon effect and invisible finish.

The tight fit of this matrix system ensured minimal flash and very natural buccal andpalatal embrasures, which were further refined using 3M™ ESPE™ Sof-Lex™ Extra-Thin Coarse Discs before final finishing and polishing using 3M[™] ESPE[™] Sof-Lex[™] Spiral Finishing and Polishing Wheels. These flexible, aluminium-oxide-impregnated fingers are capable of polishing even the deepest of fissures without wiping out precious anatomy.



Dr. Clarence Tam, HBSc, DDS Cosmetic and General Dentistry

Clarence is originally from Toronto, Canada, where she completed her doctor of dental surgery and general practice residency at the University of Western Ontario and the University of Toronto, respectively. She is well-published to both the local and international dental press, writing articles, reviewing and developing prototype products and techniques in clinical dentistry. She frequently and continually lectures throughout New Zealand and Australia. Clarence is the chairperson of the New Zealand Academy of Cosmetic Dentistry. She is an accreditation candidate and sustaining member of the American Academy of Cosmetic Dentistry and seeks to be the first in New Zealand and Australia to gain accredited status with them. Clarence is a product evaluator for a number of dental companies including Henry Schein Shalfoon, 3M ESPE, Kuraray-Morita, GC Australasia, SDI, Coltene-Whaledent, Dentsply/Triodent/Rhondium and a Voco fellow in Australasia. Clarence maintains a private practice limited to cosmetic and restorative dentistry in Newmarket, Auckland.

3M Australia Pty Limited

ABN 90 000 100 096 Building A, 1 Rivett Rd North Ryde NSW 2113 1300 363 878 www.3MESPE.com.au

3M New Zealand Limited

94 Apollo Drive Rosedale Auckland 0632 Ph: 0800 80 81 82 www.3MESPE.co.nz

