

PREP Panel Clinical Evaluation

Palifique Estelite paste

FJT Burke and RJ Crisp

Primary Dental Care Research Group, University of Birmingham School of Dentistry

Product

Palifique Estelite

Description

Composite restorative material

Manufacturer

Tokuyama Dental Corp

1-38-9 Taito-ku

Tokyo

Japan

UK supplier

Minerva Dental

Courtney House

Oxford Street

Cardiff CF24 3DT

Tel: 02920 490504

Fax: 02920 482139

Email: info@minervadental.co.uk

Methods

Explanatory letters, questionnaires and packs of Palifique Estelite were distributed in June 2003. The practitioners were asked to use the materials and return the

questionnaire. Twelve members of the

PREP Panel were selected at random for

participation in this evaluation, the average time since graduation being 23 years.

— USED TO CLINIC THIS STUDY BY THE EVALUATORS.

Filtek Z250, A110 and Z100 (6), Dyract (2), Spectrum (2), Filtek Supreme (1), Point 4 (2), Esthet X (1), Durafil (1), and Prodigy (1). Four of the respondents used more than one material.

The evaluators rated the ease of use of their current composite material as follows:



Evaluation of the kit and material after familiarisation

Evaluators rated the presentation of the kit in three respects:

The completeness of the system



The arrangement of the components



The overall presentation



The evaluators rated the instruction leaflet as follows:



Comments about the instruction leaflet included "Pictorial guide always better as an aide-mémoire" and "Paper is fragile – laminate please".

All the evaluators stated that the pre-loaded tips worked satisfactorily.

Evaluation of Palifique Estelite paste in clinical use

The total number of restorations placed during the evaluation was 858:

Anterior	Class V	278
	Class III	288
Posterior	Class I	124
	Class II	168

All the evaluators said that for most Class I restorations a freehand placement

technique was used and that for Class III restorations they used a matrix. The

majority of Class V and Class II

restorations were placed with a matrix.

The evaluators and their dental nurses

assessed the dispensing and placement of

Palifique Estelite paste as follows:



Evaluators rated the viscosity of the material as follows:



using their usual system. One other

evaluator said that it did not polish as well

as Z250.

Nine evaluators said that the restorations polished to a high gloss and the same

number said that the number of shades

provided was adequate. The remaining

evaluators said: "Shades B1, B2 and C2

needed", "C and D shades needed" (2) and

"Need more options, eg A2 and opaque

white shades".

The overall aesthetic quality of Palifique

Estelite restorations was assessed as

follows:



The completeness of the system



The arrangement of the components



The overall presentation



The evaluators rated the instruction leaflet as follows:



Comments about the instruction leaflet included "Pictorial guide always better as an aide-mémoire" and "Paper is fragile – laminate please".

Changes considered essential to the acceptability of Palifique Estelite paste included "Increase opacity/decrease translucency and improve colours".

Nine of the evaluators said they would buy Palifique Estelite paste if it were available at average cost.

Final comments included "Excellent – the best I have used" (2), "Great for anterior restorations – not so sure about use for posteriors", "Easy to use and good shades", "Didn't stick to instruments" (2) and "Easy to express from compules".

Discussion and conclusions

The Palifique Estelite paste system has been subjected to an extensive evaluation in clinical practice by 12 members of the PREP Panel in which 858 restorations were placed. Based on this the following conclusions may be made.

Presentation

The material scored well in terms of completeness of the system and arrangement of the components, though overall presentation did not score quite as well. The instruction leaflet scored well but perhaps the addition of illustrations and

Palifique Estelite paste scored slightly better for ease of use than the materials previously used. Evaluators and their nurses gave Palifique Estelite paste an almost perfect rating for dispensing and placement. The rating achieved for the viscosity of the material was just slightly on the viscous side of perfect.

Aesthetic quality

Palifique Estelite achieved a high rating for overall aesthetic quality of the restorations. The rating for translucency/opacity was a near ideal median score.

That nine of the evaluators would buy the material indicates its positive reception.

Manufacturer's comments

Sunao Urabe, President,
Tokuyama Dental Corporation

We are pleased to have received the thorough evaluation of our resin composite material Palifique Estelite by the PREP Panel and we were delighted with the exceptional outcome of the evaluation. The comments were greatly appreciated and we will benefit from them in the development of our future products.

The overall aesthetic quality is our primary concern when it comes to resin composite materials. Receiving a high rating in that category has fuelled our confidence in our future efforts to benefit dentistry. We will first be looking at ways to improve the presentation of the product, which was pointed out in the evaluation, in order to produce an even more satisfactory material.