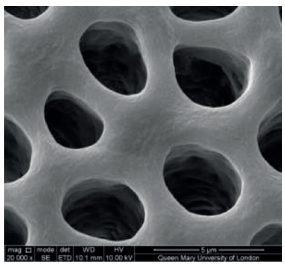
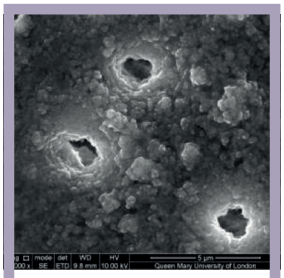
VARDIS
SWITZERLAND
BIOMIMETIC DENTAL SCIENCE

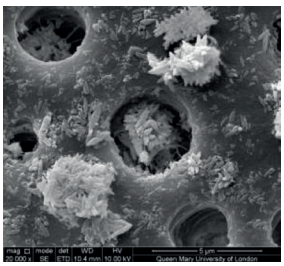
Effective and superior occlusion of dentine tubules for the treatment of dentine hypersensitivity using Curodont™ D'Senz

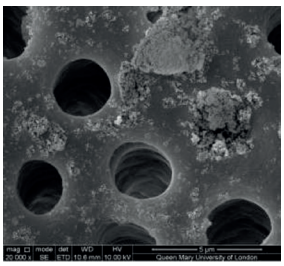
RESULTS

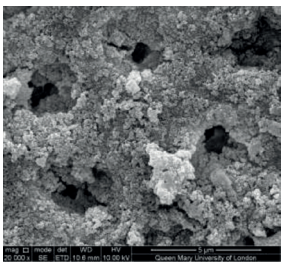
D'senz demonstrated greater reduction in the number of open tubules compared to the other desensitizing toothpastes, with a significant reduction in both the number and the diameter of the open dentine tubules, which was evident for all the treated samples.

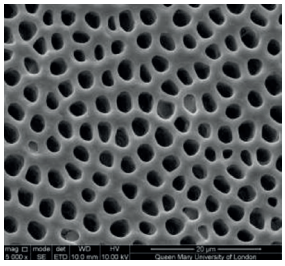

Untreated


D'Senz


Pro-Argin and Calcium Carbonate toothpaste


Calcium phosphosilicate and Bioactive Glass toothpaste


Strontium Acetate based toothpaste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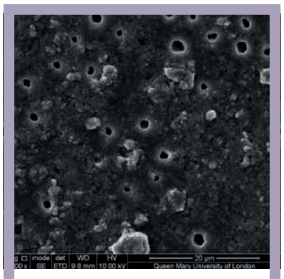
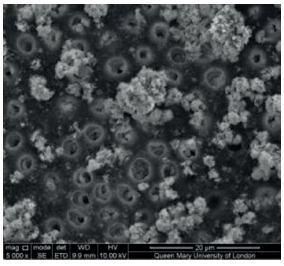
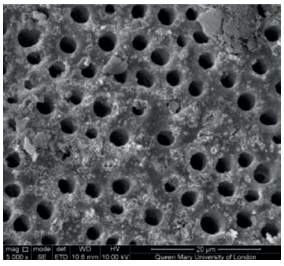
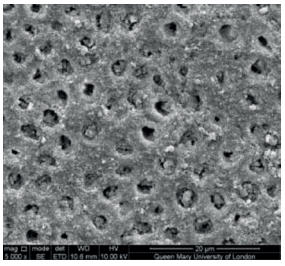

D'Senz


Pro-Argin and Calcium Carbonate toothpaste


Calcium phosphosilicate and Bioactive Glass toothpaste


Strontium Acetate based toothpaste

STUDY ESSENTIALS

20 Dentin Discs
(5 discs x 4 groups)

In vitro study

London,
UK

IMPLICATION FOR PRACTICE

Curodont™ D'Senz ability in occluding the dentine tubules makes it an effective desensitizing product for the treatment of dentine hypersensitivity.

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STUDY INFORMATION

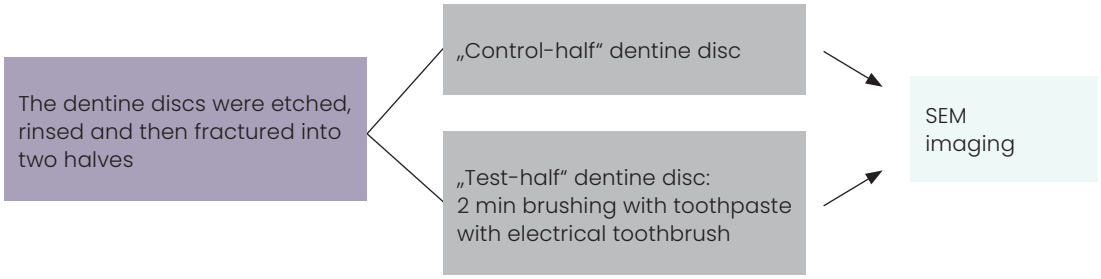
Title: An In Vitro Comparison of A Novel Self-Assembling Peptide Matrix Gel and Selected Desensitizing Toothpastes in Reducing Fluid Flow by Dentine Tubular Occlusion*

Products Tested:
- Curodont D'SENZ gel
- Pro-Argin (5% Arginine) and Calcium Carbonate toothpaste
- Calcium phosphosilicate and (Novamin) Bioactive Glass toothpaste
- Strontium Acetate based toothpaste

Scope & Methodology: Mid-coronal dentine discs with a thickness of 1 mm were sectioned from caries-free human molars. The discs were etched with 6% citric acid for 2 minutes, halved and subjected to a 2-minute brushing with D'senz and three selected desensitizing toothpastes. The ability of the desensitizing gel and toothpastes to occlude the dentine tubules was assessed and compared before and after brushing using Scanning Electron Microscopy (SEM).

Samples: 20 Dentin discs from mandibular & maxillary molars (5 discs for each of the 4 tested groups).

Procedure:



Conclusion: The results suggest that Curodont D'Senz is effective in blocking the dentine tubules and may therefore have the potential to be an effective desensitizing product for the treatment of Dentine Hypersensitivity.

*Reference
Robert Hill, Xiaohui Chen, Dominikus A. Lysek, David Gillam (2020) An In Vitro Comparison of A Novel Self-Assembling Peptide Matrix Gel and Selected Desensitizing Toothpastes in Reducing Fluid Flow by Dentine Tubular Occlusion. J Dent Maxillofacial Res Volume 3(1): 1–11.

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