

Partnership tackles the root cause of dental problem

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A new chemical solution jointly developed by the University of Adelaide's Dental School and Australian company Dentalife could radically reduce the chance of infection associated with root canal work.

Every year millions of [root canal](#) treatments are performed globally (more than 22 million in the USA alone). The management of root [canal](#) bacteria helps to prevent complications such as oral and facial infections. These have a profound effect on the quality of life of patients. Adelaide Dental School has partnered with Dentalife to develop a new product and bring it to market.

"The Dental School has a long-term relationship with Dentalife. The company supplied chemicals that were used to carry out trials into the effectiveness of different dosing levels," says Associate Professor Giampiero Rossi-Fedele, Head of Endodontics at Adelaide Dental School, University of Adelaide.

Endodontics is the study of the science related to dental pulp and surrounding tissues. The use of effective disinfectants during root canal work is essential to reduce the chances of infections after treatment. There have been significant developments in endodontics during the last 10 years which has had a direct impact on the improvement of dental treatment.

During our research into [chemical](#) disinfectants we tested different doses and mixtures and assessed the effectiveness of each. It became apparent

that a new formulation of the chemicals was far more effective in controlling complications than currently available products," says Associate Professor Rossi-Fedele.

Dentalife Managing Director Andrew Stray immediately recognised the commercial potential of the new chemical formulation, given the promising preliminary results.

"In partnership with Adelaide Dental School we are excited to bring a new and highly effective product to market following trials and after applying for a patent," says Mr Stray.

"This product will plausibly improve the outcomes for people who have [root canal treatment](#). It will aim to increase the overall success rate, improve patients' quality of life and reduce the cost to patients as it will reduce the likelihood of additional treatments."

Development of this new product is an example of how collaboration between the Adelaide Dental School and commercial partners such as Dentalife can have a direct impact on people's lives.

"The product was identified as being effective in tackling dental [treatment](#) problems and is expected to be brought to the market in the next 18 months, once the validation trials are complete," says Kirsten Bernhardt, Commercial Manager, The University of Adelaide.

Provided by University of Adelaide

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