Biofilm remover for dental water lines

The end users of our research

Our research has led to the development of a product to remove bacteria from dental units to make the dental surgery safer for dentists and patients alike.

Our research

Bacterial biofilms can grow in the tubing in dental units (chairs) as the water in them has a low flow rate favouring bacterial adhesion. As the water flows intermittently, the biofilm does not get flushed away and fresh liquid is provided for bacterial growth. Biofilm can potentially harbour pathogens which have the potential to cause infection in patients or dental professionals. Our research, in collaboration with local industry, has developed a safe new cleansing agent to remove and prevent regrowth of biofilm in dental unit water lines. This product is available for routine use in dental practices.

The benefits of our research

Our dental unit biofilm remover has proven efficacy against the bacteria that make up biofilm and inhibits its re-growth enabling a system to maintain water quality of < 200 cfu/ml, in line with Government quality guidelines. Development of the product resulted in an “outstanding achievement” award. Furthermore, introduction of this product onto the market has enabled our collaborators to increase their portfolio of in the healthcare sector, which has recently been recognised by their winning the Medilink East Midlands Export Achievement Award.

External links

Dentisan; Lord Stafford Awards