Global dental implant manufacturer Straumann has announced that it has purchased about 12 per cent of RODO Medical’s shares for an undisclosed sum. The U.S. company has developed a novel system that simplifies the implant restoration process significantly. RODO Medical’s Smileloc System is a retention mechanism utilizing shape memory properties of nitinol, a nickel-titanium alloy, which has been used in stents and other medical devices, including orthodontic archwires and endodontic files, for many years. It allows for easy fixation of crowns or dentures to implant abutments without the need for retaining screws or cement, the two main methods for securing restorations, the latter of which has been associated with complications. “Smileloc is an innovative concept,” said Straumann’s CEO Marco Gadola. “The first clinical results are promising and I agree with the developers that, when it becomes commercially available, it might substitute some of the current fixture technology.”

Cochrane reports no evidence for

Superior long-term success of dental implants

The researchers reviewed randomised clinic trials conducted around the world from the group’s own database. From this, the only statistically significant difference observed was in relation to surface preparations, with smoother (turned) surfaces being found to be less prone to bone loss associated with periimplantitis than were rougher surfaces.

Similar results were reported by the group in a series of earlier reviews, of which the first was published in 2002. In the most recent update, two of the review authors independently compared 38 different implant types, which had been placed in 27 trials involving more than 1,500 patients, ranging from the early 1980s to early 2014.

According to Cochrane, there are more than 1,300 different dental implants available on the market today. The total value of fixed tooth replacements was estimated to be US$3.4 billion in 2011, a figure that some analysts expect to almost double in the next five years owing to the increasing demand of an ageing population and more dentists starting to place dental implants.

Save patients over US $5,000 per year

A number of studies have linked periodontitis to systemic diseases, such as diabetes, and complications in pregnancy. Now, new research has provided additional evidence that receiving treatment for periodontal disease may result in reduced health care costs and fewer hospitalisations for pregnant patients and individuals with certain chronic conditions.

In the study, researchers at the University of Pennsylvania reviewed insurance claims data of almost 340,000 individuals who had been diagnosed with periodontitis and were either pregnant or had one of the following conditions: Type 2 diabetes, coronary artery disease, cerebrovascular disease and rheumatoid arthritis. They found that treating periodontal disease was associated with statistically significant decreases in annual medical costs of 40.2 per cent (US$2,840) for diabetes patients, 40.9 per cent (US$5,681) for patients with cerebrovascular disease, 10.7 per cent (US$1,090) for patients with coronary artery disease, and 73.7 per cent (US$2,433) for pregnant patients. In addition, a significant decrease in hospital admissions was observed in some of the groups. “These cost-based results provide new, independent, and potentially valuable evidence that simple, non-invasive periodontal therapy may improve health outcomes in pregnancy and other systemic conditions,” the researchers concluded. The study, titled “Impact of Periodontal Therapy on General Health: Evidence from Insurance Data for Five Systemic Conditions,” was published in the August issue of the American Journal of Preventive Medicine.

Periodontal therapy may