

PERI-IMPLANTITIS PREVENTION THE KEY TO LONG-TERM SUCCESS

Swiss Research Development





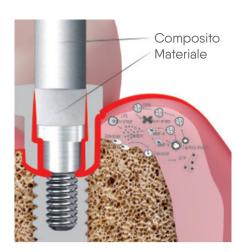
Reference:

Rasperini G., Antonini M., Eli M., Roncucci R., Pellegrini G., Silver-based gum for sealing the emergence of abutment screw: microbiological study, Europerio 7, 2012 Vien, Poster Session.



How would you feel about knowing that a gauze had been left in your hip replacement?

In prosthetic rehabilitation dental implants, the abutments remain unsealed or plugged up with several types of material (e.g. cotton pellets, gutta-percha, Teflon or wax). These techniques do not permit to create an antibacterial sealing, with consequent bacterial growth and oral malodour in the internal parts of the implants (Rimondini et al. 2001, Park et al. 2012) (Gross et al. 1999, Al-Omari et al. 2010). Quirynen and van Steenberghe (1993) observed the presence of a significant quantity of microorganism in the apical part of the abutment screw and claimed the microbial leakage at the abutment fixture interface as the most probable origin of bacterial contamination. In a further study, Quirynen et al. (1994) proved the existence of bacterial leakage along with the components of



the Brånemark implant system, both at A-I interface and from the access hole of the abutment. Hermannet al. (2001) and Broggini et al. (2003) suggested that bacterial leakage at the level of alveolar bone was one of the most important causes of chronic inflammation and marginal bone resorption around two-piece

What is Silverplug?

SilverPlug® is a medical device designed to fill up the implant tunnel and made by polymer containing Silver Zeolite. SilverPlug® considerably reduces the percentage of the anaerobic bacteria, the most pathogenic bacteria for peri-implants tissue. The reduction of bacteria contamination preserves surrounding soft tissue from inflammatory processes. Silver is generally used as an antiseptic agent in medical topical gels and bandages to reduce

the bacterial count and improve the healing of wound infection (Wilkinson et al. 2011). A recent preliminary study reports the potential effect of a silver-based gum (SilverPlug®) on reducing the total bacterial amount and the percentage of anaerobic bacteria in the inner space of the fixture (Rasperini et al. 2012).

SilverPlug

Solid and easy to manipulate

Easy to **compress** for a perfect filling of the implant tunnel

Easy to insert and remove

Antibacterial effect. no release of chemicals

The silver seal

SilverPlug® fits perfectly to the abutment tunnel of each implant system thanks to its shape and elastic consistency. SilverPlug® is solid and easy to manipulate. You can quickly insert SilverPlug® or remove it from the tunnel. You can use SilverPlug® to seal the tunnel of screw-retained crowns, abutments or Toronto. SilverPlug® doesn't release any chemicals. SilverPlug® considerably reduces the percentage of the anaerobic bacteria in the peri-implant tissues. After sealing

the tunnel with SilverPlug®, you can plug the access hole with any composite or proceed with cementation of the crown with any temporary or definitive cement. SilverPlug® is a medical device intended to seal the implant tunnel. Thanks to its chemicals, SilverPlug® remains unaltered. The reduction of bacteria contamination preserves the soft tissue from mucositis, the first step towards the periimplantitis. SilverPlug® reduces mucositis. SilverPlug® helps to eliminate the inflammation around the implant, which usually occurs after loading and is the main cause of bone











1. SilverPlug® in a screwed ceramic crown; 2. SilverPlug® in a titanium abutment; 3/4. Tissues around implant after 4 years loading with a screwed ceramic crown sealed with SilverPlug®; 5. Radiographic image 48 months away showing the stability of bone levels

L'80% of "healthy" implants

show mucositis around the gums.

The mucositis around implants, combined with low adherence to a protocol of oral hygiene at home, increases the risk of peri-implantitis. (5th ITI Consensus Conference). Thanks to SilverPlug®, the mucositis decreases drastically. Healthier gums are more efficient to prevent periimplantitis.

70% of implants in the world are sealed with teflon, il 20% with cotton and 10% with other inadequate materials

The use of inadequate materials to seal the implant tunnel is responsible for the persistence of bacteria which provoke periimplantitis and very serious systemic diseases.

The smartest and certified tool to seal the implant tunnel

The use of material specifically designed and certified to seal the implant tunnel protects your implants from peri-implantitis thus avoiding any legal implication.















Implant sterilization

Abutment sterilization

SilverPlug® in site