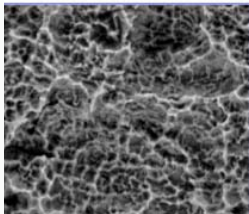


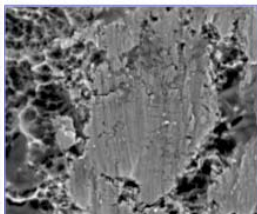
The first rotating titanium brush for effective cleaning of implants:

Tigran Brush No 1

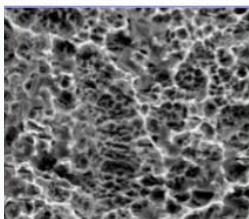
- Shortens treatment time significantly
- Effective surface cleaning
- Predictable debridement results
- Gentle on the implant surface



Untreated implant surface

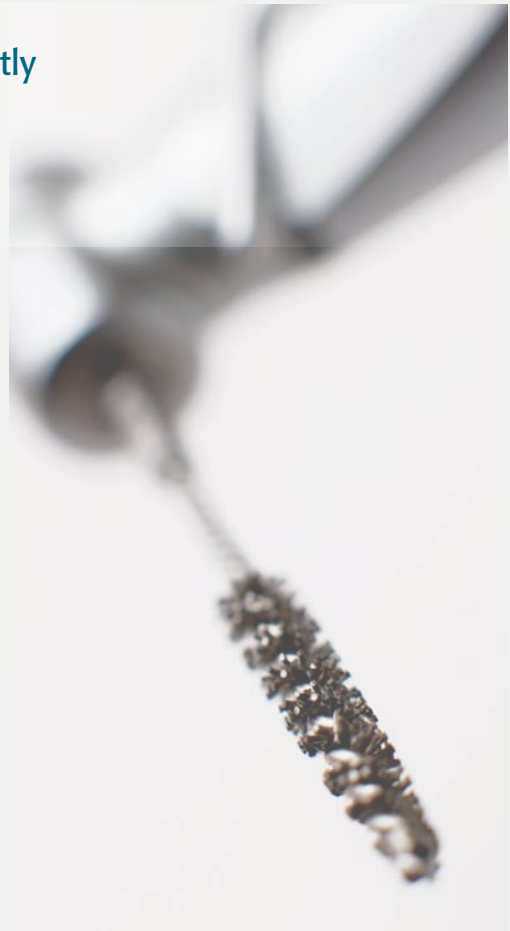


Implant cleaned with titanium curette



Implant cleaned with titanium brush

Whereas the titanium brush only has minor impact on the implant structure, using a curette may damage the implant surface and impede the removal of granulation tissue, calculus and other macro-structures.



Following bone loss caused by peri-implantitis, parts of the implant surface becomes exposed to inflammatory cells, microbes and organic contaminants.

Before steps towards regenerating the lost bone and reosseointegration of the implant can be taken, the exposed implant surface must be clean from any contamination that could hamper the treatment outcome. This typically means removing granulation tissue, calculus and other macrostructures that have accumulated on the surface, and then clean the surface from microbial debris, toxins and protein film. Ideally, before the regenerative procedure takes place, the implant surface should be clean, aseptic and with the original macro- and micro architecture intact.



Cleaning and Conditioning of Implant Surfaces in Surgical Treatment of Peri-implantitis Osseous Defects with Tigran Brush No 1



Debridement in Three Steps

Cleaning and conditioning of exposed implant surfaces, often called implant debridement, is typically performed in three steps.

- First, access to the surface and removal of the diseased tissue that has replaced the healthy bone and soft tissue is obtained by a surgical procedure.

Titanium Debridement Brush for More Effective Cleaning

- The second step involves mechanical cleaning of the implant surface to remove concretions, tissue remnants and pus from the surface. This step also often includes instrumentation of the adjacent bone walls to remove necrotic bone and inflammatory tissues. Mechanical debridement is typically performed with a curette or burr, but most preferably a suitable brush with stiff bristles. Because of the architecture of the implant surfaces (threads, retention elements, roughness) the mechanical debridement is often both time-consuming and labour intensive.



Tigran Brush No 1 has stiff titanium bristles, which shortens treatment time and allows for more effective surface cleaning and predictable results. Also, the debridement brush is more gentle to the implant surface than other mechanical methods.

The mechanical debridement is important in order to remove larger contaminants, but has little effect on microbes, biofilms and proteins that also contaminate the surface. Using a titanium brush for debridement eliminates the risk of cross contamination.

- A third step typically includes the use of agents like antibiotics, detergents, solvents or oxidizing solutions that effectively kill all the microbes and disrupts and dissolves any remaining biofilm or protein pellicle. This final step might also include using laser- or UV-light to burn off any remaining organic material.

Implant Ready for Bone Regeneration

Following a proper 3-stage procedure for implant debridement, the implant is rinsed in sterile saline to remove the last traces of organic debris and to remove the chemical agents used for cleaning the surface. Finally, bleeding into the defect area from the adjacent bone is obtained by poking the bone with a sharp instrument. This ensures that the implant surface is quickly covered in fresh blood and is thus protected from further contamination during the following regenerative procedure. Bone regeneration in defects caused by peri-implantitis is preferably carried out with a non-resorbable material such as porous titanium granules.

The brush should preferably be used in conjunction with a rinser such as sterile saline.

For single use only

Do not re-use – risk for protein cross contamination. Therefore, do not re-sterilize.

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Tigran