

Proven and safe¹ - the Neuro System unique screw fixation



Receiver migration is one of the primary causes of device-related surgical complications in cochlear implantation². For users, this can be painful³ and even cause extrusion leading to more surgery. To ensure the long-term stability of the receiver, the Neuro System uses a unique screw fixation system, successfully used for over 13 years by numerous surgeons. A clinical study of 150 patients concluded that this unique screw fixation surgical technique efficiently prevents implant migration⁴ and an ongoing *clinical trial conducted in Denmark and Canada with 50 patients confirms these results with no cases of receiver migration*⁵.

Safe for all ages



The screw fixation technique attaches the receiver to the bone using two small biocompatible titanium screws. By avoiding any bone-bed drilling, it reduces the risk of any intracranial complications, such as hematoma, dura tearing or cerebrospinal fluid leakage^{6,7}.

The unique screw fixation system is designed so that the screws penetrate the bone at a typical depth of 1,7mm. This makes it a safe solution even for the thinner skulls of young children^{8,9} where the typical bone thickness is around 2mm⁹. On the contrary, when performing a bony bed, a 2.2mm deep recess is generally recommended¹⁰ and the procedure does not necessarily provide the accuracy required in paediatric cases¹¹.

1.7 mm



Safe, convenient and painless for MRI

According to the latest independent study by Todt et al, 2018¹² the unique screw fixation system of the Neuro Zti implant also plays a key role in achieving safe, convenient and painless MRI exams at 1.5 Tesla with magnet in place.

Neuro means reliability



The Neuro screw fixation system contributes to the outstanding overall safety and reliability of the Neuro System. The Neuro Zti implant has a Cumulative Survival Percentage (CSP) of 99.96% after 3 year¹³ making it one of the most reliable cochlear implants in the industry^{14,15,16}.

Finally, a recent survey showed that using screw fixation during an implantation can save surgeons up to 44 minutes in the operating room¹⁷. This is a relevant factor in the cost-benefit evaluation, for example in bilateral cases. This technique literally takes just a few seconds to secure the implant.

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