

AARON JENNINGS' STORY

Following two surgeries and radiotherapy to remove a benign brain tumor, Aaron Jennings contracted MRSA, which although successfully treated, left him requiring cranioplasty. He is the first patient in the USA to receive an OSSDSIGN® Cranial PSI, after the product was cleared by the FDA in January 2017.

In 2012, Aaron began suffering from headaches and vomiting, and investigations revealed a tennis ball-sized brain tumor. The tumor was removed by world-renowned neurosurgeon Dr Steven Giannotta and for a year all seemed well. "I did my follow up MRIs and everything looked good," Aaron says. "Then, between my one-year and two-year follow-up, the tumor grew back at a rapid pace, which is unusual for a benign meningioma at grade one."

Aaron returned to the hospital for more surgery and the tumor was removed again. He then had a course of low-dose fractionated radiation to eradicate any remaining tumor cells but suffered a major setback when he contracted MRSA. This was treated successfully by his doctors but it left him requiring a cranial implant.



"I feel like I have a better chance at life because of this plate from OssDsign."

The recurrence of Aaron's tumor and subsequent MRSA infection made him a high risk patient. The infected bone flap over the tumor site was removed in 2016 and Aaron was monitored for a year before he was given the all clear for cranioplasty. He discussed the option of an OSSDSIGN® Cranial PSI with his doctors after carefully considering the other alternatives. "OssDsign's plate with its calcium phosphate tiles theoretically allows the body to grow through the plate," he explains. "My thinking was that if an infection came back, my body would have a better chance at fighting it if there is fluid movement through the plate."



Before



After



The initial plate options were either titanium mesh or PEEK (polyetheretherketone); then, at the North American Spine Society conference in October last year, Aaron was introduced to Paul Byerley, the US national distributor for Swedish-based OssDsign. OSSDSIGN® Cranial PSI was cleared by the FDA in January 2017, just in time for Aaron to become the first patient in the US to be fitted with this new technology. "It's 3-D printed technology so it's a custom plate," he says. "They really did a great job of mimicking the other side so it looks right. The way they designed the plate, it's perfect, and it's pretty incredible how they can do that."

Aaron had his cranioplasty in June 2017 and made a quick recovery from what was his fifth brain surgery. He was back at work in a matter of weeks. "I feel great," he says. "I've been out in the field and that's been really successful so that's got my spirits back up; not that they're ever really down but it feels good to be back to my own self. The peace of mind that a piece of technology like this has given me helps me enjoy time with my family on a daily basis, instead of thinking: 'What if this? What if that?' I feel like I have a better chance at life because of this plate from OssDsign."

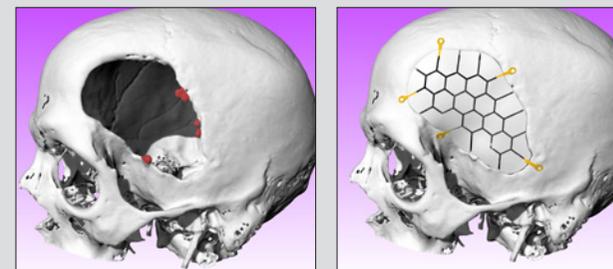
Aaron Jennings lives in southern California with his wife and two children and has a successful career as a regional manager in biomedical device sales. He leads a full and active life; balancing work and a busy family, and catching a few waves on his surfboard whenever time permits.

"I was impressed with OssDsign Cranial PSI's 3D customization, handling characteristics, ease of fixation, and aesthetic results."

Alex K. Wong, M.D.

Associate Professor of Surgery
Keck School of Medicine of USC

Aaron's professional expertise gave him unique access and insight into the options available to him with regard to cranioplasty. Each OSSDSIGN® Cranial is a patient-specific device created for a patient's unique anatomical requirements. OSSDSIGN® Cranial PSI is produced with precision molding of the biocompatible calcium phosphate material, combined with the latest technology in 3D printing of the titanium mesh embedded in the core of the implant's ceramic tiles. Thanks to the 3D printing and precision molding, the implant provides a good cosmetic outcome by naturally following the curvature of the skull.



A 3D image of Aaron's skull and implant.