

Advancing Accuracy

Dawood and Tanner Improve Dental Patient Care with 3D Printing

Founded over 25 years ago in London, UK, Dawood and Tanner is a specialized dental practice that covers all aspects of dentistry, from implantology to orthodontistry and beyond. The practice strives to be at the forefront of digital dentistry advancement, and has pioneered 3D printing since 1999. To achieve that goal, Dawood and Tanner brought 3D printing in-house to pursue more innovative and effective patient care.

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I can see our 3D printer enabling us to better train staff and surgeons of the future, and ultimately becoming even more integral to all aspects of the dentistry we practice.”

Dr. Andrew Dawood
Dawood and Tanner





Dr. Andrew Dawood preparing for surgery using a patient-specific 3D printed model.

Improving Treatment

Since adopting 3D printing, Dr. Andrew Dawood and his team have elevated treatment for all their patients. Many procedures use 3D printed implant and surgical guides as integral parts of the treatments. The ability to plan surgery using a 3D printed model allows for minimally invasive procedures, reduced operation times and improved patient care. But what makes these models particularly unique is their realistic hard and soft tissue and differentiation between bone, teeth and gums.

Highly precise and anatomically accurate, the 3D printed models and customized surgical guides are produced within hours of the patient's first visit. Producing surgical guides in a variety of colors and textures lets surgeons prepare for complex surgeries ahead of time, resulting in less-invasive surgical procedures, more accurate surgical planning and

improved patient satisfaction. That's why Dawood and Tanner chose an Objet260 Dental Selection™ for their in-house 3D printing, to take advantage of its multi-color, multi-material capabilities.

"With an in-house 3D printing solution that can produce 3D printed models overnight and unsupervised, we can ensure an accurate model is created within hours. This means that we can now see a patient on a Monday morning and have an accurate, tailored and specific treatment plan based on a 3D printed model of the affected area the very next day," Dawood says.

Planning advanced maxillofacial dental surgery is one way Dawood and Tanner employ their printer. When preparing for advanced surgeries such as a mandible reconstruction, visibility of the impacted area and practice are essential.

Expert Surgical Planning

A mandible reconstruction is an incredibly complex surgery with lots of variables,” Dawood explains. “Having access to an in-house 3D printer has simply revolutionized the way we can treat these complicated injuries. Most notably, we were able to provide implant restorations on the day of surgery, something which would never have been possible without our Stratasys 3D printer.”

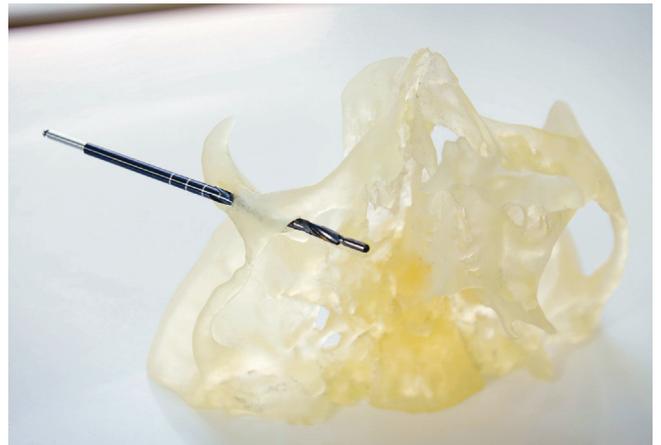
The practice has reduced surgical time by hours, allowing the team to provide better treatment and increase the number of patients they are able to treat. Surgeons also use the models to explain the procedure to patients, making informed consent faster and easier.

“As we move forward, I can see our 3D printer enabling us to better train staff and surgeons of the future, and ultimately becoming even more integral to all aspects of the dentistry we practice. From multi-material, multi-color surgical guides, to prosthodontic models and anatomical models, the Objet260 Dental Selection provides us with the utmost flexibility and fits perfectly into our pristine dental environment,” Dawood concludes.

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Dr. Andrew Dawood
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The team at Dawood and Tanner created a patient-specific 3D printed model of a patient's fibular to plan for a mandible reconstruction.



3D printed surgical guide produced on the Stratasys Objet260 Dental Selection 3D Printer.

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