

Why CAS?

Computer assisted surgery (CAS) is taking visualization and surgical accuracy to new heights in the operating room. First utilized in neurosurgical procedures, where precision is of the utmost importance and millimeters matter, CAS technologies are now being utilized in neuro, spine, ENT, orthopaedic and trauma surgery. Surgeons may choose to use CAS for many reasons:

- Ability to plan the surgery with a 3-D computer model of the patients anatomy; potentially saving valuable time in the OR
- Allows for better visualization of anatomy, which is particularly important when minimally-invasive techniques are used
- Provides the surgeon with real-time feedback on the exact location of instruments and implants and offers the ability to correct potential errors during surgery
- CAS does not replace the surgeon's skills. With CAS in the OR, it may aid in the surgeon's confidence, especially when operating in and around delicate anatomy

CAS technology may also offer potential benefits to the patient:

- Allows for minimally invasive techniques which may lead to smaller incisions, shorter post-operative rehabilitation and less blood loss^{1,2,3,4}
- A 3-D computer model of the patient's own unique anatomy is created, guiding the surgeon to more accurately place implants based on your unique anatomy
- In procedures where multiple X-rays might be used (such as spine and trauma surgeries), CAS may limit the number of X-rays taken and lessen the amount of radiation exposure⁵

Computer assisted surgery is cutting-edge medical technology that offers many benefits to both the surgeon and the patient.

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