

Surgeon sees many benefits to using new system for eye surgeries

Mississauga News

By Chris Clay

MISSISSAUGA - Trillium Health Partners is using a new three-dimensional surgical system officials say is benefiting both surgeons and patients.

Last August, Dr. Ike Ahmed became the first in Canada to use the TrueVision 3D surgical system to perform a complex cataract surgery when he did so at Credit Valley Hospital. The system uses multiple cameras to render a three-dimensional, real-time image, in this case an eye, on a screen in the surgery room.



New system for eye surgeries

Supplied photo

Dr. Ike Ahmed, chief of Trillium Health Partners' division of ophthalmology, conducts a complex cataract surgery last August using the TrueVision 3D surgical system. It was the first time the system was used for cataract surgery in Canada

Prior to bringing in the system, surgeons would use a microscope to see what they were doing. The new system allows a higher degree of precision than in the past and benefits both doctors and their patients, said Ahmed.

"When it comes to surgery in these small spaces, access and visualization are always challenges for surgeons," said Ahmed, noting sometimes they're operating on a space 1/200th of a millimetre in size. "(The system) allows us to maneuver and control the instruments in a much more effective manner."

The three-dimensional image allows doctors more precision and accuracy in measurements when, in the past, they would have had to rely on visual cues, said Ahmed.

"Critical to the procedure is the ability to visualize the angle in a comfortable, ergonomic way," said Ahmed. "(To be) able to place those devices appropriately in those small spaces, we typically have to tilt the head of the patients and flip the microscope."



Ahmed, chief of Trillium's division of ophthalmology, compared surgeons having the device to drivers having a vehicle that comes equipped with a rear-facing camera when parallel parking.

Surgeons who can be that much more accurate and precise will benefit patients. For example, it reduces the risk of error and, with more accuracy and less cutting, it means faster recovery times for patients, said Ahmed.

As well, the new system is letting surgeons operate in cases where, in the past, they weren't able to.

And there are other benefits. Ahmed said using the system means he's not hunched over a microscope during cataract surgeries, which can last around 90 minutes, and therefore isn't suffering from cramped shoulders and a strained neck at the end.

"You're more comfortable and less stressed with less muscle fatigue and that means better patient care," said Ahmed, adding some of his colleagues have been forced to retire due to serious neck problems from long surgeries.

It's also a valuable teaching tool for medical students and it helps keep the rest of the surgical staff engaged because they can see what the surgeon is seeing.

For the inaugural surgery using the system, Ahmed had a microscope ready and planned to use it for parts of the procedure. However, the system was so comfortable and effective he used it for the whole process.

The system is now used regularly in eye surgeries at the hospital and Ahmed said he sees the potential to use the system in other forms of surgeries.

"Advanced technology like this allows our eye surgeons to deliver the highest quality and safest procedures for our patients," said Ahmed.