

UNIVERSITY HOSPITAL: Technology reduces stroke risk

Neurosurgery future arrives in London

BY JONATHAN SHER

jonathan.sher@sunmedia.ca

London brain surgeon Steve Lownie no longer has to wonder before finishing his delicate handiwork whether his efforts have left a patient at risk of complications such as stroke.



Steve Lownie

Lownie emerged yesterday at University Hospital after six hours repairing brain aneurysms — all the while monitoring detailed images of his patient's

brain.

Before now, that wouldn't have been possible in any operating room in North America.

The images were captured by a three-dimensional X-ray machine that provided a level of real-time oversight a doctor later described as the future of neurosurgery.

"That's a great new advance that's going to improve a surgeon's ability to see how they are doing in real time," said Dr. Bruce Pike, director of the McConnell Brain Imaging Centre in Montreal.

"This kind of imaging is clearly at the cutting edge."

see BRAIN | Page A9

BRAIN

Technology puts London on map

FROM PAGE A1

The \$2.2-million machine is bolted to the operating room floor. Its C-shaped arm is able to rotate around the patient and the surgical team to get images that in every other North American hospital can only be found in diagnostic centres.

Similar machines are in a few operating rooms in Europe and Japan.

Without that machine, neurosurgeons have two choices: Get poor-resolution, two-dimensional images from portable X-ray machines or wait until after surgery to take a

patient to another hospital wing.

That latter approach carries risks, as Lownie knows firsthand.

Thirteen years ago, he tried to repair a brain aneurysm in a woman who hours later suffered a stroke because a clamp he had inserted was too tight — something he didn't discover until images were taken.

The four-hour delay in getting images left the woman partially paralysed and with speech loss.

While she has mostly recovered, her right hand is perma-

nently impaired.

"We said to ourselves we could be (taking images) during surgery," Lownie, a student of pioneering brain surgeon Charles Drake, told hospital dignitaries and supporters who gathered yesterday to applaud the imaging advance.

"It's inspiring," said Dan Ross, president of the London Health Sciences Foundation.

"It's a day to feel good about the health care people get when they come (here)."

Jonathan Sher is a Free Press reporter.