Advanced Depth Perception

As 3D technology advances, the ability to become immersed in the pictures unfolding before your eyes is now stretching out from the movieplex and into people's homes. New 3D TV's are a fun part of this changing landscape, but they are not the only development. A 3D laparoscopic surgical system is now being utilized in several gynecologic surgeries by Barry Schlafstein, MD. The technology has brought him, and his patients, into a new dimension of care.

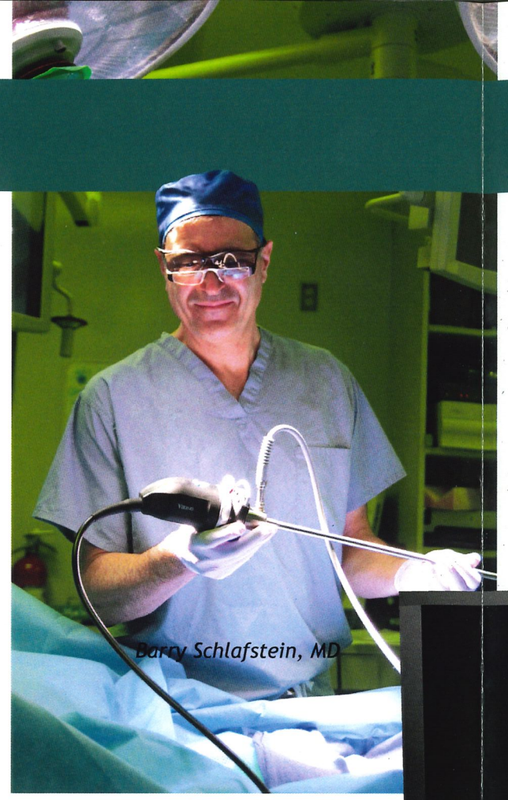
"This is similar to the technological evolution that you see in television, flat screen, HD, and now 3D," Schlafstein says. "Watching your favorite show in 3D is nice but probably not that big of a deal. However, having 3D imagery in the operating room is huge."

Dr. Schlafstein has discovered multiple benefits for surgery with the new 3D system. As you might expect, it all comes down to depth.

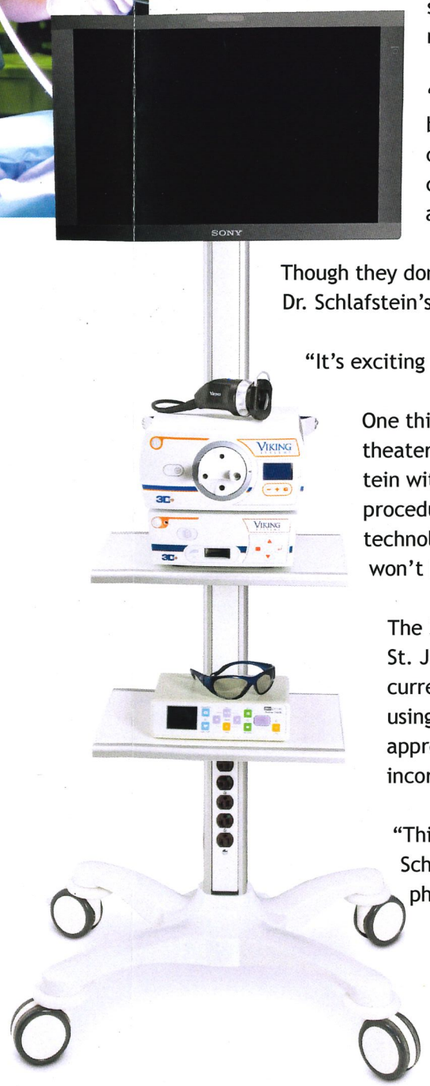
"The new camera and scope can now provide enhanced visual depth of the tissue planes," Schlafstein says. "There is so much more information available visually to the surgeon. With traditional 2D laparoscopy, surgeons use the visual cues from the laparoscope to interpret the third dimension in their mind. This new technology allows surgeons to appreciate spatial orientation directly on their monitor."

Suturing and dissection are two aspects of surgery that Dr. Schlafstein has found to be easier and more efficient with 3D laparoscopy.

"Suturing laparoscopically can be challenging, but it is remarkable how well you can perceive the orientation of the needle in 3D," Schlafstein says. "3D also facilitates meticulous dissection. The depth created by the enhanced visualization helps the surgeon distinguish different tissue planes. I can also see the full depth of the blood vessels better, which enhances my ability to secure them."



Barry Schlafstein, MD



Dr. Schlafstein can use the 3D technology for all of the procedures he did previously in 2D.

"And I feel I do them better," he says.

Laparoscopic surgery is in itself a highly beneficial advance from traditional, or open, gynecologic surgery. This surgery is minimally invasive and is performed through small incisions. The result, when compared with open surgery, is typically less blood loss, less pain, and a shorter recovery time. Gynecologic patients who undergo laparoscopic surgery are often able to go home the same or next day, and are able to return to normal activities more quickly.

Perceiving the tissue planes with greater precision is crucial in some cases. Dr. Schlafstein recently treated a patient whose uterus had adhered to the abdominal wall. This was due to scar tissue from an unrelated previous procedure by someone else, and it was causing the patient miserable pain. The area that Dr. Schlafstein needed to treat was extremely close to the patient's bladder.

"I told the patient that while the 3D laparoscopy could not guarantee that the bladder won't be affected by the surgery, it will help lower the chance," Schlafstein recalls. "And that is in fact what happened. I could see the depth of the tissue planes better and was able to safely avoid the bladder during the procedure."

Though they don't get to see the images in 3D (they are given a 2D copy of them), Dr. Schlafstein's patients are delighted to hear about this technology's benefits.

"It's exciting to be able to tell patients about it," Schlafstein says.

One thing that the laparoscopic system shares with movie theater tradition is the 3D glasses. Nurses assist Schlafstein with placing and removing the glasses during the procedure. Eventually, Schlafstein believes, the technology will advance to the point where glasses won't be necessary.

The 3D laparoscopy system is only available at St. Joseph's/Candler, and Dr. Schlafstein is currently the only OB/GYN physician in the area using it. But he believes other surgeons will soon appreciate the benefits of 3D and will be eager to incorporate the technology into their treatments.

"This is a major advance, a big jump forward," Schlafstein says. "I think once other physicians try it, they'll never go back."