NOTES: The future of surgery

By: Elizabeth Corridan

SPRINGFIELD, Mass. (WGGB) – Imagine having surgery and leaving the hospital with no scar and getting back to work the very next day. It's the future of medicine and the path to getting there starts right here in western Massachusetts. A team of surgeons at Baystate Medical Center in Springfield is part of a study poised to revolutionize the field of surgery.

There is a new technique being tested called NOTES – natural orifice translumenal endoscopic surgery. NOTES uses a scope similar to the ones used for colonoscopies and endoscopies equipped with a tiny camera and surgical tools. It requires only a few tiny cuts or no incision at all. Surgeons feed the scope through the mouth, rectum or vagina.

So far, surgeons are focusing primarily on gall bladder removals but say the possibilities are huge. Dr. John Romanelli, Chief of Robotic and Bariatric Surgery at Baystate says, "If this develops the way it has the potential to, you are looking at scarless surgery with minimal post-op discomfort."

To date, less than 1000 surgical procedures have been done using NOTES worldwide. The national study underway at a handful of hospitals, including Baystate, will test the effectiveness and safety of the technique. Dr. Romanelli says the purpose of the study is three-fold. To prove NOTES can be done, to prove that it can be done safely, and to prove to the medical equipment companies that they should develop better technology.

Along with the cosmetic and reduced pain advantages, the minimal cutting reduces the patient's risk of infection. At this point, the biggest challenge to the study is technology. "Our imagination is advancing faster than the instrumentation," says Dr. Romanelli.

Until researchers can prove NOTES is really the way to go, companies will not spend the money to develop new tools. In the meantime, surgeons have their work cut out for them. They say it's worth it. "I really believe 10 years from now you will get your appendix out and be back at work the next day," says Dr. Romanelli.

Dr. David Desilets, Chief of Gastroenterology at Baystate agrees. He says, "We're excited. We're at the forefront of this kind of research. It's a potential shift in the way we deal with surgical patients."