Barton adds robot to its surgical team

By Heather Gould

Have you ever met a surgeon with three arms? Well, Barton Memorial Hospital has just acquired one. The daVinci surgical robot has found a home at the hospital.

The $1.75 million contraption is a rarity in small hospitals like Barton and is found more often in big name medical centers. The hospital said it acquired the daVinci for several reasons. It provides better patient care and increases community health resources. Patients will not have to travel to others facilities for this higher level of care. And, hopes the hospital, the daVinci will actually attract out-of-area patients to the town for state-of-the-art treatment.

“For a small hospital to have such a big machine is really bringing us to the forefront,” said Barton spokeswoman Rebecca Wass.

Three arms are positioned over a stretcher upon entering the operating room — two rods with small pincers which will be used to do the actual surgery and one rod with a light on the end to illuminate the surgical site. The surgeon uses his hands to manipulate these through a 3-D console on the side of the room, which magnifies the view ten times actual size.

The daVinci’s “hands” — which can be changed out depending on the needs of the surgeon or the type of surgery — are extremely small, some only a few fractions of an inch in size, less than even the tip of a human finger. And their dexterity exceeds that of the human body. The daVinci can rotate all the way around — 360 degrees — whereas the human wrist can turn 270 degrees.

This allows for maneuvering precisely in tight spaces — such as the packed inside of a human body — making surgery much less invasive. Not like the old days, when the doctor split a patent open from stem to stern. Now the incision must only be large enough for one of the daVinci’s arms to fit through, not the whole hand of the surgeon.

The daVinci can work within a “sub-one millimeter” area, said surgeon Dr. Gerald Scott Welker, one of two practitioners at Barton certified to use the machine, the other being gynecologist Dr. Gary Willen. Sitting at the console, Welker manipulates the daVinci to stitch up a piece of guaze less than an inch wide. During actual surgery, another physician will monitor the operation bedside and can also view it on a screen mounted above the table, providing extra guidance to the surgeon.

The daVinci has several other advantages over a solely human surgeon, said Welker. For one, the machine itself never gets tired from standing on its feet and the ergonomic design of the console helps the surgeon stay comfortable. The machine can correct for inadvertent movements, such as tremors, a slip of the hand or the patient shifting position. And, it can be monitored and often be repaired from a remote site through an internet hookup. “Sometimes something shows up before we know anything is wrong,” said Welker.

Despite the doctor’s remove from the patient, the three-dimensional, up close and personal view of this surgery actually makes it feel more “hands on,” said Welker. “It feels much more like you’re in the patient’s body.”

According to Barton Health Chief Financial Officer Dick Derby, the daVinci will not result in any increased costs for surgery at the hospital.

On March 14 Bob St. Angelo will be the second patient to undergo surgery using the daVinci. He will have his gallbladder removed. The 65-year-old is retired from the Horizon and owns a small notary business. He likes to fish, hike and bike and hopes to get back in the saddle after his health problem is resolved.

St. Angelo said he doesn’t exactly understand how the machine works, but is doing his homework and putting himself in Dr. Welker’s good hands. If all goes well, St. Angelo plans on becoming an ambassador of sorts for the machine. “Don’t get me wrong, I don’t particularly like to go through these procedures... (but) I’m going to be exposed to the public with this. I’m going to have people I know asking me about this and I want to be able to talk to them from a knowledgeable standpoint in case they ever have a problem. Or even a total stranger, I can explain it to. I like to be able to educate people and enlighten them as to what is involved.”

St. Angelo is the one who dubbed the daVinci “Leonardo.”