New heart surgery technique minimizes trauma to patient

By David Theodoro, M.D.

Minimally invasive heart surgery is still relatively new and relatively rare. Techniques using small incisions to perform delicate heart surgery have been significantly practiced for only about a half-dozen years.

Unlike the conventional breast plate-splitting open-heart surgery we are familiar with, “mini-invasive” heart surgery:

• causes far less pain
• reduces blood loss
• reduces the time of return to a full, normal lifestyle
• is cosmetically pleasing.

Most importantly, mini-invasive heart surgery is a safe, viable option for heart surgery candidates who require valve replacement or repair, treatment of arrhythmias or mitral valve prolapse, a condition in which the heart’s left upper and left lower chambers don’t close properly.

Less trauma equals less pain
The procedure is defined as mini-invasive because of the small keyhole-like incision through which the heart surgeon gently separates the ribs to access the heart. This approach spares the sternum (breastbone), thus sparing the patient much of the post-operative pain.

By comparison, typical heart surgery begins with blunt force: the breast bone is “cracked,” split open and later reattached, which leads to added post-operative pain and an extended recovery period.

When the sternum is divided, eight weeks are required for bone healing. The trauma from stretching open the sternum, cutting through bone and muscle often lingers well beyond eight weeks.

A quality of life alternative
In contrast, mini-invasive heart patients normally resume driving in seven to 10 days and can return to a reasonably full level of activities in three to four weeks. Letting the sternum remain intact also avoids the risk for infection and other complications.
associated with traditional open-heart procedures.

Safety is always the highest priority of any surgical procedure and surgical team. Heart surgery groups that perform mini-invasive surgery regularly report outcomes that are as safe as conventional open-heart surgery.

The cosmetic benefits of mini-invasive heart surgery are significant.

For women, the incision is made in the same location — under the mammary fold — where breast implant surgeries are performed. The 2- to 4-inch slit is well-concealed, hidden under the breast. For men, the incision is made in a corresponding location, with the end result being a blemish on the right side of the chest rather than an unsightly 10-inch scar across the center.

By and large, patients who undergo mini-invasive heart surgery are surprised by their lack of discomfort, their short hospital stay, their speedy recovery, and they are delighted by the cosmetically pleasing results.

Cardiovascular surgeon David Theodoro, M.D., is a member of the SSM Heart Institute, who specializes in minimally invasive heart surgery. Learn more about cardiac surgery and The SSM Heart Institute by calling 314/647-8269.