WHAT IS MINIMALLY INVASIVE CARDIAC SURGERY?

Most cardiac operations today are performed through a full sternotomy, which involves splitting the breastbone along its entire length. This approach provides excellent exposure to the heart and is used for the vast majority of cardiac operations. In recent years, however, less invasive approaches for heart surgery have been developed that use much smaller incisions that involve splitting only a portion of the breastbone or that avoid splitting the breastbone entirely. Minimally invasive incisions measure about 2 inches compared to 8 to 10 inches required for standard sternotomy incisions. Specialized handheld instruments are used to project the dexterity of the surgeon’s hands through these small incisions to safely perform the operation on your heart.

WHAT ARE THE POTENTIAL BENEFITS OF MINIMALLY INVASIVE CARDIAC SURGERY?

There is early evidence that such minimally invasive approaches translate into:

- Better cosmetic appearance of the wound.
- Fewer wound-healing complications.
- Reduced hospital stays.
- Reduced recovery time.
- Reduced physical activity precautions.

The smaller incisions associated with minimally invasive cardiac operations have subjectively resulted in smaller scars and, in certain cases, scars in locations that are routinely covered with clothing (e.g., bra, bikini top). Since less tissue is disrupted with smaller incisions, there is a significant reduction in wound-healing complications, including infections.

WHAT MINIMALLY INVASIVE CARDIAC OPERATIONS DOES ARKANSAS HEART HOSPITAL HAVE TO OFFER?

The AHH Minimally Invasive Cardiac Surgical Program currently offers the following operations using minimally invasive approaches:

- Mitral valve repair and replacement
- Aortic valve replacement
- Tricuspid valve repair and replacement
- Atrial septal defect closure (ASD closure)
- Patent foramen ovale closure (PFO closure)
- Surgical MAZE with Left Atrial Appendage Management
IS A MINIMALLY INVASIVE CARDIAC OPERATION RIGHT FOR ME?

Your surgeon will meet with you to discuss your eligibility and options for minimally invasive cardiac surgery. Your surgeon will explain the operation and its risks and benefits. You will have the opportunity to ask any questions you or your family may have prior to your surgery.

WHAT SHOULD I EXPECT AFTER MY MINIMALLY INVASIVE CARDIAC OPERATION?

You will undergo the previously stated postoperative routine as previously discussed with open sternotomy surgery. Once you are discharged from the hospital, you will see your surgeon in 7 – 10 days for further postoperative management and care.

This is still open heart surgery and with that you can be expected to have incisional pain and discomfort as well as a postoperative period of recovery that will include some lethargy. If you are an appropriate candidate for a minimally invasive option, this will be discussed with you by your surgeon at the time of consultation.

Because we are still stopping the heart to provide optimal view through a smaller incision, you will still be put on a bypass machine to circulate your blood throughout the surgery. This will be obtained by making a small 2 inch incision in your right groin to access your femoral artery. This incision will be closed in the operating room once bypass is removed and natural flow obtained. Please refer to surgical incision care as previously stated for open sternotomy surgery.

WHAT PRECAUTIONS MUST I TAKE AFTER MY HOSPITAL DISCHARGE?

We ask that you follow the same general precautions outlined for cardiac operations performed through a standard sternotomy, with the following exceptions:

- **Lifting restrictions.** Although there are no bones cut during this surgery, your incisions will take 4-6 weeks to completely heal. During this time we ask that you refrain from heavy lifting (over 15-20 pounds) with the affected extremity. This could cause extreme discomfort.

- **Driving restrictions.** Routinely you may drive once you can comfortably operate the automobile without the use of narcotics. You will be released to drive after your surgical postoperative evaluation.

- **Return to work.** If returning to your occupation does not interfere with any restrictions, you may consider returning to work as approved by your surgeon. It is generally a good idea to work on a limited schedule (e.g., half-day) for the first few days to week back at work. You will still experience some occasions of lethargy and SOB until you are recovered from your surgery.