

## Median Sternotomy Protocol

\*This guide is meant as a reference, and does not reflect the opinion of Symbios Medical Products. Placement technique is ultimately up to the surgeon. The physician performing this placement has given his recommendation on the following surgery for educational purposes only.

**Surgeon:** Dr. Terry S. Lowry

**Institution:** Southeastern Heart Center

**Pump used:** GOPump Dual Rapid Recovery System; Reorder #D300-F1002x2  
(300ml max vol \* 150ml/side \* 2ml/hr/catheter \* 10" fenestrated catheter)

**Drug concentration:** Pump filled with .5% Marcaine

### **Pre-incision infiltration:**

None

### **Catheter placement technique:**

Prior to sternal closure, the mid-point of the sternal plate is identified. The deep subcutaneous tissue overlying the pectoralis muscle is dissected laterally to create a small pocket (1-2cm in length).

The first needle introducer is inserted just anterior to the pectoralis muscle in a cephalad direction until the tip contacts the clavicle.

The needle is then removed and inserted in the lower aspect of the pocket in a caudal direction, again remaining anterior to the pectoralis muscle.

The needle exits on the anterior abdominal wound beyond the pacing wires and drains.



Create a small pocket



Introducing the needle

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### **Catheter placement technique cont.:**

The second introducer is then inserted over the needle and advanced into the pocket.

With both introducers in place, the pain catheter is inserted into the upper introducer and advanced until resistance is encountered.

At this point, the introducer is removed leaving the pain catheter in place. The catheter is then advanced through the second introducer.

The procedure is repeated for the opposite side. This placement should effectively anesthetize the anterior cutaneous branches of the intercostal nerves as they exit via the medial intercostal spaces.

### **Postoperative bolus technique:**

Marcaine .5%, 3-5ml/catheter

### **Wound closure & securing the catheter:**

The catheters are secured to the anterior abdominal wall with steri-strips and Tegaderm® dressings

### **Additional postoperative pain medications:**

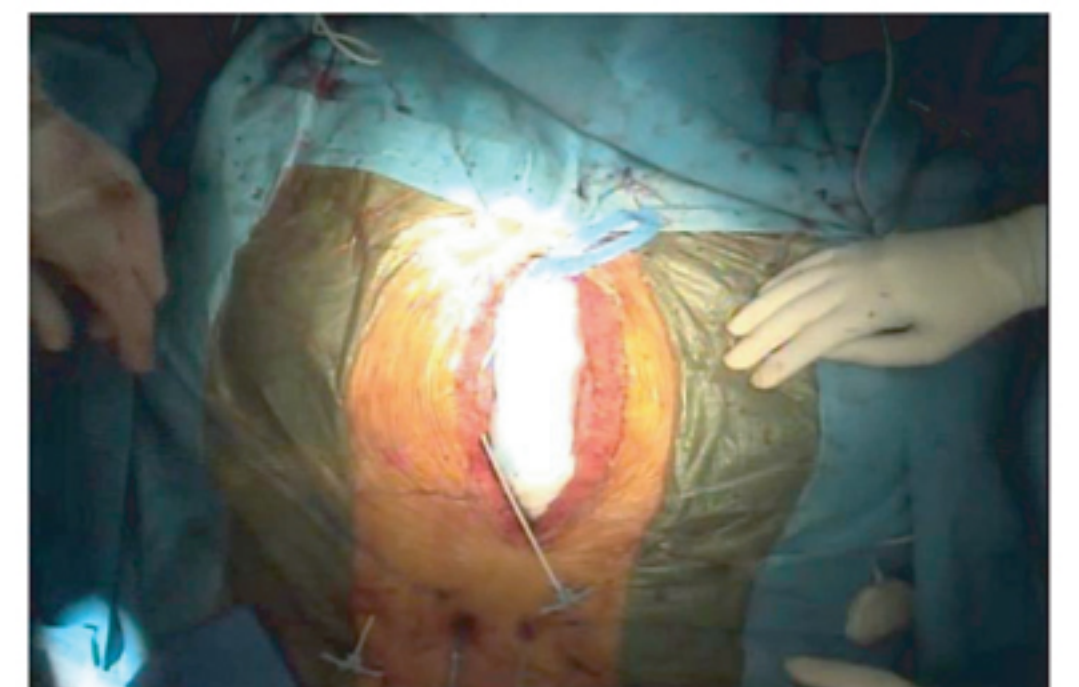
Patients are generally treated with a fentanyl patch (25mcg/hr) and PRN oxycodone.



Introducing the catheter



Advancing catheter through second introducer



Repeat on opposite side