## **AtriCure**

## TRANSITIONAL PAIN

The Pain the Patient Takes Home









# What is Transitional Pain?

Patients undergoing thoracic procedures leave the hospital with pain, this acute post-operative pain hasn't been well defined. This period of pain is defined as **Transitional Pain**.

## Transitional Pain: The Pain the Patient Takes Home

In Hospital

Pain the patient takes home

3 Months

~3 Days\*

#### Transitional Pain is an important part of the post-surgical recovery process.

Because patients takes several weeks to months to recover after cardiothoracic surgery, transitional pain is an important part of the recovery process from a pain management perspective.

Cardiothoracic surgery patients can be in significant pain for a long period of time following surgery. Patients can take several weeks/months before they have greater than 80% recovery from their pain symptoms. Cardiothoracic surgery is painful with long recovery periods due to the invasive nature of the procedure.3

#### **Post-Surgical Transitional Pain**

Transitional pain begins when the patient leaves the hospital. Lasting until the patient recovers from surgery, or until the onset of chronic pain at 3 months.<sup>2</sup>

## Transitional Pain, if not managed correctly can be a precursor to chronic pain.

#### **Post-Surgical Pain**

Surgery/ Acute Pain

## Transitional Pain

Day  $3^*$  – 3 Months

 $Day 1-3^*$ Post-Op

Post-surgical pain that is not managed or controlled effectively can lead to chronic pain.

Prevention of chronic pain begins with the surgical procedure, and continues throughout the transitional pain period. Effective pain management during the first 3 months following surgery can be an effective strategy in limiting the onset of chronic pain.<sup>4-5</sup>

#### **Chronic Pain**

#### >3 Months

## **Post-Surgical** Pain Management

When patients are recovering from surgery in the hospital setting, there are more options available from anesthesia or nursing providers for pain management.

Upon leaving the hospital, options for pain management are decreased and leave the patient with minimal options to treat their transitional pain

## Patients have limited options for pain management upon leaving the hospital.

Pain does not have to be part of surgical recovery, minimizing pain will enhance recovery.

- Dr. David Caparrelli



#### **In-Hospital Pain Management**

- **Epidural**
- Para-vertebral block
- Patient-controlled analgesia (PCA)
- Regional blocks
- Local blocks
- Oral medications
- Nurses/support
- Acute pain service
- 24/7 care



#### **At Home Pain Management**

- Oral medication
- Topical solutions
- Rest, Ice, Compression, Elevation (RICE)

#### References

<sup>1</sup>CMC pioneers 'almost painless' approach: Cardiac surgery without opioids. New Hampshire Union Leader, Catholic Medical Center, Aug 15, 2021. https://www.unionleader.com/news/health/cmc-pioneers-almost-painless-approach-cardiac-surgery-without-opioids/article\_1b0e57d8-0660-5fe9-aa94-5954fc67787a.html.

<sup>2</sup>Schug, S.A. et al. (2019). The IASP classification of chronic pain for ICD-11: chronic postsurgical or posttraumatic pain. PAIN, 160(1):45-54.

<sup>3</sup>Fagundes, C.P. et al. (2015). Symptom recovery after thoracic surgery: Measuring patient-reported outcomes with the MD Anderson Symptom Inventory. J Thorac Cardiovasc Surg, 150(3):613–9.

<sup>4</sup>Blichfeldt-Eckhardt M.R., Andersen, C., Ørding, H., Licht, P.B. & Toft, P. (2018). From acute to chronic pain after thoracic surgery: the significance of different components of the acute pain response.

J Pain Res, 11:1541-8. doi: 10.2147/JPR.S161303. PMID: 30147358; PMCID: PMC6101742.

<sup>5</sup>Gan, T.J. (2017). Poorly controlled postoperative pain: prevalence, consequences, and prevention. J Pain Res, 10:2287-98. doi: 10.2147/JPR.S144066. PMID: 29026331; PMCID: PMC5626380.

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