

Postoperative Pain Management

This information is shared for educational purposes and based upon information published by AMA, Medicare and professional societies about postoperative analgesia. AtriCure believes this information to be correct, but encourages healthcare providers to check with their payers regarding postoperative analgesia as a separate and distinct service following a range of cardiothoracic procedures, such as but not limited to open thoracic procedures, NUSS and/or VATS procedures.

FDA Regulatory Clearance: AtriCure's cryoICE® cryoablation probes are sterile, single use devices intended for use in the cryosurgical treatment of cardiac arrhythmias by freezing target tissues, creating an inflammatory response (cryonecrosis) that blocks the electrical conduction pathway. The probe is also intended for use in blocking pain by temporarily ablating peripheral nerves. (K142203, 12/4/14)

Health Policy Statements: citations are available upon request

- Per Medicare Contractor, First Coast Options, "Based on Medicare rules, regulations, and Correct Coding Initiative (CCI) edits, CPT codes 64400-64530 (Nerve blocks) may be reported on the date of surgery if performed for postoperative pain management rather than as the means for providing the regional block for the surgical procedure... Modifier 59 may be reported to indicate that the injection was performed for postoperative pain management, and a procedure note should be included in the medical record" (LCD-L33933, March 15, 2018).
- Per the American Society of Anesthesiologists, "Placement of epidurals and peripheral nerve blocks for postoperative pain control is separate and distinct from surgical anesthesia services... A provider may bill for a postoperative pain procedure as a service separate from the anesthetic if the pain procedure is employed primarily for postoperative analgesia... One means of portraying that the block's primary purpose is to be a postoperative analgesic is to dictate or record details about the procedure in the chart in a location separate from the anesthetic record". (October 28, 2015).

Physician's Professional Fee

CPT ¹	Description	Work RVU	Total Facility RVUs	2019 Facility \$
Primary Surgical Procedures may include, but not limited to:				
21743	Reconstructive repair of pectus excavatum or carinatum; minimally invasive approach (Nuss), with thoracoscopy	Contractor priced		
32480	Removal of lung, other than pneumonectomy; single lobe (lobectomy)	25.82	42.67	\$1,538.10
32505	Thoracotomy; with therapeutic wedge resection (e.g., mass, nodule), initial	15.75	26.88	\$968.92
32663	Thoracoscopy, surgical; with lobectomy (single lobe)	24.64	40.42	\$1,456.99
32666	Thoracoscopy, surgical with therapeutic wedge resection (e.g., mass, nodule), initial unilateral	14.50	25.11	\$905.12
Postoperative Pain Management as a separate service is at the physician's discretion:				
64400	Injection, anesthetic agent; trigeminal nerve, any division or branch	1.11	2.08	\$74.98
64420	Intercostal nerve, single	1.18	1.92	\$69.21
64421	Intercostal nerves, multiple, regional block	1.68	2.64	\$95.16
64620	Destruction by neurolytic agent, intercostal nerve	2.89	5.00	\$180.23
64999	Unlisted procedure, nervous system	Contractor priced		

References

¹AMA CPT 2019 Professional Edition.

Facility Technical Component:

The patient's medical record should contain documentation describing the need for postoperative pain control (G00-G99).² Coding and reimbursement based upon the physician's documentation may include:

ICD-10	Diagnosis	ICD-10	PCS			
G89.12	Acute post-thoracotomy pain	01580ZZ	Destruction of Thoracic Nerve, Open Approach			
G89.18	Other acute post procedural pain	01584ZZ	Destruction of Thoracic Nerve, Percutaneous Endoscopic Approach			
MS-DRG ³	Description	Weights	Geometric mean LOS	Arithmetic mean LOS	2019 Medicare Payment	
163	Major chest procedure with MCC	4.9193	9.7	12.1	\$27,394	
164	Major chest procedure with CC	2.5689	4.8	5.9	\$14,305	
165	Major chest procedure with w/o CC/MCC	1.8524	2.9	3.5	\$10,315	
166	Other respiratory system O.R. procedures with MCC	3.498	7.9	10.2	\$19,480	
167	Other respiratory system O.R. procedures with CC	1.8976	4.3	5.6	\$10,567	
168	Other respiratory system O.R. procedures without CC/MCC	1.3416	2.4	3	\$7,471	

Peer Reviewed Literature

Bucerius, Jan, et al. "Pain is significantly reduced by cryoablation therapy in patients with lateral minithoracotomy." *Ann Thor Surg* 70.3 (2000):1100-1104.

Sepsas, Evangelos, et al. "The role of intercostal cryoanalgesia in post-thoracotomy analgesia." *Int Card Thor Surg* 16.6 (2013):814-818.

Kim, Sunghoon, et al. "Use of transthoracic cryoanalgesia during the Nuss procedure." *J Thor Card Surg* 151.3 (2016):887-888

Keller, Benjamin A., et al. "Intercostal nerve cryoablation versus thoracic epidural catheters for postoperative analgesia following pectus excavatum repair: Preliminary outcomes in twenty-six cryoablation patients." *J Ped Surg* 51.12 (2016):2033-2038.

Graves, Claire, et al. "Intraoperative cryoanalgesia for managing pain after the Nuss procedure." *J Ped Surg* 52.6 (2017):920-924.

Morikawa, Nicole, et al. "Cryoanalgesia in Patients Undergoing Nuss Repair of Pectus Excavatum: Technique Modification and Early Results." *J Lap Adv Surg Tech* 28.9 (2018):1148-1151.

References

² ICD-10-CM Official Guidelines for Coding and Reporting FY 2019, Chapter 6: Diseases of the Nervous System (G00-G99).

³ Optum 360. DRG Expert 2019.

For questions and/or additional information, please contact AtriCure's Healthcare Reimbursement Helpline at (888)-347-6403, or online form which can be found at: www.AtriCure.com/health-economics-and-reimbursement.

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