



Cardio Policy: Pericardial Disease Interventions

POLICY NUMBER UM CARDIO_1369	SUBJECT Pericardial Disease Interventions		DEPT/PROGRAM UM Dept	PAGE 1 OF 4
DATES COMMITTEE REVIEWED 09/11/19, 12/11/19, 02/12/20, 01/13/21, 01/12/22, 01/11/23	APPROVAL DATE January 11, 2023	EFFECTIVE DATE January 27, 2023	COMMITTEE APPROVAL DATES 09/11/19, 12/11/19, 02/12/20, 01/13/21, 01/12/22, 01/11/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT	
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for Pericardial Disease Interventions.

II. DEFINITIONS

Pericardial syndromes include different clinical presentations of pericardial diseases with distinctive signs and symptoms that can be grouped in specific syndromes. The classical pericardial syndromes include pericarditis, pericardial effusion, cardiac tamponade and constrictive pericarditis. The etiology of pericardial diseases remains unresolved in many cases and may require invasive diagnostic procedures.

Pericardiocentesis - It is a procedure done to remove fluid that has built up in the sac around the heart (pericardium) using a needle and small catheter to drain excess fluid either fluoroscopy or echocardiography guided.

Pericardioscopy - This procedure permits visualization and biopsy of the pericardial sac with its epicardial and pericardial layers.

Intrapericardial treatment - This procedure involves introduction of antineoplastic treatment in patients with neoplastic pericardial effusion in setting of metastatic malignancy.

Pericardial window - A pericardial window is a cardiac surgical procedure to create a communication, or 'window', from the pericardial space to the pleural cavity. The purpose of the window is to allow a pericardial effusion (usually malignant) to drain from the space surrounding the heart into the chest cavity in order to prevent a large pericardial effusion and cardiac tamponade. A

pericardial window may be created by video-assisted thoracoscopy or balloon pericardiectomy by a percutaneous intervention.

Pericardiectomy - It is the surgical removal of a portion or all of the pericardium. It is also called pericardial stripping. The pericardium is a double-walled, membrane sac that surrounds the heart.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC is to improve patient care and health outcomes in a cost-effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care - Median Score 7-9

May be Appropriate Care - Median Score 4-6

Rarely Appropriate Care - Median Score 1-3

III. POLICY

Indications for approving a request for medical necessity are:

- A. Pericardiocentesis is indicated for symptomatic moderate to large effusion non-responsive to medical therapy. **(AUC Score 9)**^{1,2,3,5}
- B. Pericardiocentesis is indicated in case of a smaller effusion, when tuberculous, bacterial, or neoplastic pericarditis is suspected. **(AUC Score 7)**^{1,2,3,4}
- C. Pericardiocentesis is indicated in case of chronic (lasting more than three months), large pericardial effusion (greater than 20mm on echocardiography in diastole). **(AUC Score 9)**^{1,2,3,5}
- D. Pericardiocentesis is indicated in evidence of cardiac tamponade. **(AUC Score 9)**^{1,2,3,5}
- E. Intrapericardial instillation of medications like- triamcinolone, is indicated in refractory forms (failed conventional treatment of recurrent pericardial effusion) of Post pericardiectomy syndrome. **(AUC Score 7)**^{1,2,3,5}
- F. Intrapericardial instillation of cytostatic/sclerosing agent like cisplatin/Thiotepa is indicated in neoplastic recurrent pericardial effusion. **(AUC Score 7)**^{1,2,3,5}
- G. Intrapericardial instillation of fibrin glue along with pericardiocentesis may be performed in the setting of Post infarction Pericarditis and cardiac rupture. **(AUC Score 7)**^{1,2,3,5}
- H. Pericardial window may be indicated in neoplastic recurrent large pericardial effusion due to high recurrence rate. **(AUC Score 8)**^{1,2,3,5}
- I. Pericardiectomy is indicated to relieve constrictive pericarditis or to remove a pericardium that is calcified and fibrous. **(AUC Score 7)**^{1,2,3,5}
- J. Pericardial resection may be performed in severely symptomatic pericardial cyst after failed aspiration and intra pericardial instillation of sclerosing agent. **(AUC Score 6)**^{1,2,3,4,5}

Limitations:

- A. Pericardiocentesis for diagnostic purposes is not justified in cases of mild or moderate effusions (less than 20mm).
- B. Aortic dissection and post-infarction rupture of the free wall are contraindications to pericardiocentesis.

- C. Pericardiocentesis is relatively contraindicated in presence of uncorrected coagulopathy, thrombocytopenia less than 50,000/mm³, small posterior and loculated effusions.

IV. PROCEDURE

- A. In order to review a request for medical necessity, the following items must be submitted for review:

1. Cardiothoracic Surgeon's note that prompted request
2. Recent Echo/Cardiac CT/Cardiac MRI

- B. Primary codes appropriate for this service:

32601-Thoracoscopy, diagnostic (separate procedure); lungs, pericardial sac, mediastinal or pleural space, without biopsy.

32604-Thoracoscopy, diagnostic (separate procedure); pericardial sac, with biopsy.

32658-Thoracoscopy, surgical; with removal of clot or foreign body from pericardial sac.

32659-Thoracoscopy, surgical; with creation of pericardial window or partial resection of pericardial sac for drainage.

32661-Thoracoscopy, surgical; with excision of pericardial cyst, tumor, or mass.

33016-Pericardiocentesis, including imaging guidance, when performed

33017-Pericardial drainage with insertion of indwelling catheter, percutaneous, 6 years and older without congenital cardiac anomaly

33018-Pericardial drainage with insertion of indwelling catheter, percutaneous, any age with congenital cardiac anomaly

33019-Pericardial drainage with insertion of indwelling catheter, percutaneous, including CT guidance

33020-Pericardiotomy for removal of clot or foreign body (primary procedure).

33025-Creation of pericardial window or partial resection for drainage.

33030-Pericardiectomy, subtotal or complete; without cardiopulmonary bypass.

33031-Pericardiectomy, subtotal or complete; with cardiopulmonary bypass.

33050-Resection of pericardial cyst or tumor.

- C. Place/Site of Service: Inpatient Hospital (21)

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

1. 2015 ESC Guidelines for the diagnosis and management of pericardial diseases. The Task Force for the Diagnosis and Management of Pericardial Diseases of the European Society of Cardiology (ESC). *European Heart Journal*, Volume 36, Issue 42, 7 November 2015, Pages 2921–2964.
2. Pericardiocentesis in cardiac tamponade: indications and practical aspects. 15, N° 19 - 11 Oct 2017. *e-Journal of Cardiology Practice*.
3. Pericardial Disease. Little and Freeman et.al. *Circulation*. 2006; 113:1622-1632
4. Clinical Features, Natural History, and Management of Pericardial Cysts. Saqer Alkharabsheh.et.al. *Am J Cardiol* 2019; 123:159–163
5. Hendel RC, et. al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. *Journal of the American College of Cardiology*. March 2013, Volume 61, Issue 12, Pages 1305-1317.
6. NCQA UM 2022 Standards and Elements.