

GİRİŞ

Kardiyak tamponat, tıbbi veya travmatik yolla perikardiyal boşlukta yeterli sıvı biriktiğinde kalbe baskı yaparak kardiyojenik şok tablosuna yol açan acil klinik bir durumdur (1). Kardiyak tamponat, kardiyojenik şok ve kardiyak arrest gibi hayatı tehdit edici acil klinik bir durum olduğundan acil tedavi edilmesi gereken klinik bir tanıdır. Perikardiyal efüzyon hemodinamik bozukluğa yol açmayan anatomik bir tanı iken, kardiyak tamponat ise hemodinamik bozukluğa neden olan fizyolojik ve klinik bir tanıdır (2).

EPİDEMİYOLOJİ

Kardiyak tamponat görülme insidansı Amerika Birleşik Devletleri'nde 10.000 nüfus başına iki vakadır. Kardiyak tamponat; özellikle sepsis, göğüs travması, metastatik kanser ve akut koroner sendrom hastalarında daha yüksek mortalite oranları taşır (3). Kardiyak tamponat, erkeklerde kadınlara göre biraz daha yaygın görünmektedir. Malignite ve böbrek yetmezliğine bağlı kardiyak tamponat yaşlı bireylerde daha sık görülür (4).

ETİYOLOJİ

Kardiyak tamponatın en sık sebebi malign hastalıklardır. Ülkemizde ise tüberküloz perikarditidir(5). Perikardiyal efüzyonun tamponata doğru ilerleme olasılığı

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KAYNAKLAR

- 1.Yacoub M, Quintanilla Rodriguez BS, Mahajan K. Constrictive-Efussive Pericarditis. StatPearls Publishing; Treasure Island (FL): July 25, 2022.
- 2.Flounders JA. Cardiovascular emergencies: Pericardial effusion and cardiac tamponade. *Oncol Nurs Forum* 2003;30:48-55.
3. Ahmed Al-Ogaili, Cardiac tamponade incidence, demographics and in-hospital outcomes: analysis of the national inpatient sample database, *J Am Coll Cardiol*. 2018 Mar, 71 (11_Supplement) A1155
4. C Yarlagadda, TX O'Brien, RF Kelly, et al. Cardiac tamponade Practice Fundamentals, Background, Pathophysiology (2021)<https://emedicine.medscape.com/article/152083-overview#a6>
- 5.Şevketoğlu E, Salihoğlu B, Hasbal C, et al. Akut romatizmal kardite bağlı kardiyak tamponad. *Bakırköy Tıp Dergisi* 2005; 1:120- 122.
- 6.LeWinter M.M, Kabbani S, In Braunwald E, et al. Perikard hastalıkları. *Kalp Hastalıkları (Türkçe çevirisi)*. Edisyon İstanbul Nobel tıp kitabevi, 2004, sayfa 1757-1780.
- 7.Ady Orbach, Jorge E. Schliamser, et al. Contemporary evaluation of the causes of cardiac tamponade: Acute and long-term outcomes. *Pubmed: 26202654Cardiol J* 2016;23(1):57-63.
- 8.Gonzales MS, Basnight MA, Appleton CP, Experimental cardiac tamponate, hemodynamic and doppler echocardiographic reexamination of right and left heart ejection dynamics to the phase respiration. *J Am Coll Cardiol* 1991; 18: 243.
- 9.Spodick DH. Braunwald E, Zipes DP, et al. Pericardial diseases. *Heart Disease a Textbook of Cardiovascular Medicine*. 6th ed. Philadelphia: WB Saunders Comp, 2001:1823-76.
- 10.Spodick DH. Acute cardiac tamponade. *N Engl J Med* 2003;349:684-90.
- 11.Spodick DH. Threshold of pericardial constraint: The pericardial reserve volume and auxiliary pericardial functions. *J Am Coll Cardiol* 1985;6:296-9.
- 12.Fowler NO, Gabel M, Buncher CR. Cardiac tamponade: A comparison of right versus left heart compression. *J Am Coll Cardiol*. 1988;12:187-93.
- 13.Edgar Argulian,, Franz Messerli, Misconceptions and Facts about Pericardial Effusion and Tamponade review volume 126, issue10, p858-861,october 2013
- 14.Ristić AD, Seferović PM, Ljubić A, et al. Pericardial disease in pregnancy. *Herz*. 2003;28:209-15.
- 15.Dr. Jesper K. Jensen, Assoc. Prof Steen Poulsen et al. Cardiac tamponade: a clinical challenge *E-Journal of Cardiology* 15Vol. 15, N° 17 - 27 Sep 2017
- 16.Argulian E.Herzog E.Halpern et al. hypertension with cardiac tamponade.*Am J Cardiol*. 2012; 110: 1066-1069
- 17.Rowan S.B.Krantz M.J.Paradoxical decrease in blood pressure after relief of cardiac tamponade: the role of sympathetic activity.*Med Sci Monit*. 2006; 12: CS16-CS19Published:July 25, 2013 DOI:<https://doi.org/10.1016/>
18. Eric Stashko 1, Jehangir M. MeerIn: Cardiac Tamponad StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan.2022 Aug 8.Affiliations expand PMID: 28613742
- 19.Rahul G Argula , Smita I Negi, Jose Banchs, Role of a 12-lead electrocardiogram in the diagnosis of cardiac tamponade as diagnosed by transthoracic echocardiography in patients with malignant pericardial effusion Affiliations expandComparative Study *Clin Cardiol*. 2015 Mar;38(3):139-44. doi: 10.1002/clc.22370. Epub 2015 Feb 18PMID: 25694103
20. K P Ang , R B Nordin , S C Y Lee , Diagnostic value of electrocardiogram in cardiac tamponade ffilitions expand PMID: 30846663. 2019 Feb;74(1):51-56.
- 21.Alper Uçak,Arif Selçuk, Ahmet Ertürk Yedekçi Role of the chest X-ray in an initial diagnosis of cardiac GATA Haydarpaşa Eğitim Hastanesi, Kalp ve Damar Cerrahisi Kliniği, Anestezi ve Reanimasyon Kliniği, İstanbul, Türkiye
- 22.European Society of Cardiology (ESC).2015 ESC Guidelines for the diagnosis and management



- of pericardial diseases: European Society of Cardiology (ESC) Task Force on the Diagnosis and Management of Pericardial Diseases Approved by: European Society of Cardio-Pthoracic Surgery (EACTS). *Eur Heart J*. 2015 Nov 7;36(42):2921-64.
23. Mager A, Birnbaum Y, Adler Y, et al. The anteroposterior pericardial sac diameter measured by echocardiography correlates with the volume of pericardial effusion and with effort dyspnea. *Eur J Echocardiogr* 2005; 6:358-62.
24. Gillam LD, Guyer DE, Gibson TC, et al. Hydrodynamic compression of the right atrium: a new echocardiographic sign of cardiac tamponade. *Circulation* (1983) 68:294-301. doi:10.1161/01.
25. Fast J, Wielenga RP, Jansen E, et al. Abnormal wall movements of the right ventricle and both atria in patients with pericardial effusion as indicators of cardiac tamponade. *Eur Heart J* (1986) 7(5):431-6. doi:10.1093/oxfordjournals.eurheartj.a062085
26. Leimgruber PP, Klopfenstein HS, Wann LS, Brooks HL. The hemodynamic derangement associated with right ventricular diastolic collapse in cardiac tamponade: an experimental echocardiographic study. *Circulation* (1983) 68:612-20.
27. Aqel RA, Aljaroudi W, Hage FG, et al. Left ventricular collapse secondary to pericardial effusion treated with pericardiocentesis and percutaneous pericardiotomy in severe pulmonary hypertension. *Echocardiography* (2008) 25:658-61. doi:10.1111/j.1540-8175.2008.00661.
28. Alejandro Pérez-Casares, Sergi Cesar, Laia Brunet-Garcia, echocardiographic evaluation of Pericardial effusion and Cardiac Tamponade Review published: 24 April 2017 doi: 10.3389/fped.2017.00079
29. Merce J, Sagrista-Sauleda J, Permanyer-Miralda G, et al. Correlation between clinical and Doppler echocardiographic findings in patients with moderate and large pericardial effusion: implications for the diagnosis of cardiac tamponade. *Am Heart J* (1999) 138:759-64. doi:10.1016/S0002-8703(99)70193-6
30. Bull RK, Edwards PD, Dixon AK. CT dimensions of the normal pericardium. *Br J Radiol* (1998) 71:923-5. doi:10.1259/bjr.71.849.10195005
31. Himelman RB, Kircher B, Rockey DC, Inferior vena cava plethora with blunted respiratory response: a sensitive echocardiographic sign of cardiac tamponade. *J Am Coll Cardiol* (1988) 12(6):1470-7. doi:10.1016/S0735-1097(88)80011-1
32. Fisher JD, Krumerman AK. Tamponade detection: did you look at the heart borders (redux)? *Pacing Clin Electrophysiol*. 2011;34:8.
33. Cruz I, Stuart B, Caldeira D., et al. Animals with cardiac tamponade complicating aortic dissection controlled pericardiocentesis: experience heart and a center without vascular surgery. *Eur Heart J Acute Cardiovascular Care*, 2015 April 4 (2): 124-8.
34. Halpern DG, Argulian E, Briasoulis A, et al. A novel pericardial effusion scoring index to guide decision for drainage, *Crit Pathw Cardiol*, 2012,
35. Arsen D, Ristić, Massimo Imazio, Yehuda Adler Triage strategy for urgent management of cardiac tamponade: a position statement of the European Society of Cardiology Working Group on Myocardial and Pericardial Diseases *European Heart Journal*, Volume 35, Issue 34, 7 September 2014, Pages 2279-2284,
36. Caterina Chiara De Carlini, Stefano Maggolini Pericardiocentesis in cardiac tamponade: indications and practical aspects *Eur Heart Vol. 15, N° 19 - 11 Oct 2017*