

Aortic Dissection and Related Aortic Syndromes

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REFERENCES

- Pacini D, Di Marco L, Fortuna D, et al: Acute aortic dissection: epidemiology and outcomes. *Int J Cardiol* 167: 2806, 2013. [PMID: 22882963]
- Olsson C, Thelin S, Stahle E, et al: Thoracic aortic aneurysm and dissection: increasing prevalence and improved outcomes reported in a nationwide population-based study of more than 14,000 cases from 1987-2002. *Circulation* 114: 2611, 2006. [PMID: 17145990]
- Hagan PG, Nienaber CA, Isselbacher EM, et al: The International Registry of Acute Aortic Dissection (IRAD): new insights into an old disease. *JAMA* 283: 897, 2000. [PMID: 10685714]
- Attias D, Stheneur C, Roy C, et al: Comparison of clinical presentations and outcomes between patients with TGFBR2 and FBN1 mutations in Marfan syndrome and related disorders. *Circulation* 120: 2541, 2009. [PMID: 19996017]
- Ohle R, Kareemi HK, Wells G, Perry JJ: Clinical examination for acute aortic dissection: a systematic review and meta-analysis. *Acad Emerg Med* 25: 397, 2018. [PMID: 29265487]
- Isselbacher EM, Bonaca MP, Di Eusano M, et al: Recurrent aortic dissection. Observations from the international registry of aortic dissection. *Circulation* 134: 1013, 2016. [PMID: 27587434]
- Ramanath VS, Oh JK, Sundt TM, et al: Acute aortic syndromes and thoracic aortic aneurysm. *Mayo Clin Proc* 84: 465, 2009. [PMID: 19411444]
- Ridge CA, Litmanovich DE: Acute aortic syndromes current status. *Thorac Imaging* 30: 193, 2015. [PMID: 25851925]
- Maitusong B, Sun HP, Xielifu D, et al: Sex-related differences between patients with symptomatic acute aortic dissection. *Medicine* 95: 1, 2016. [PMID: 26986151]
- Nienaber CA, Powell JT: Management of acute aortic syndromes. *Eur Heart J* 33: 26, 2012. [PMID: 21810861]
- Fan KL, Leung LP: Clinical profile of patients of acute aortic dissection presenting to the ED without chest pain. *Am J Emerg Med* 35: 599, 2017. [PMID: 27989538]
- Conzelmann LO, Hoffmann I, Blettner M, et al: Analysis of risk factors for neurological dysfunction in patients with acute aortic dissection type A: data from the German Registry for Acute Aortic Dissection Type A (GERAADA). *Eur J Cardiothorac Surg* 42: 557, 2012. [PMID: 22389344]
- Pacini D, Leone A, Belotti LMB, et al: Acute type A aortic dissection: significance of multiorgan malperfusion. *Eur J Cardiothorac Surg* 43: 820, 2012. [PMID: 23137559]
- Ohle R, Um J, Anjum O, et al: High-risk clinical features for acute aortic dissection: a case-control study. *Acad Emerg Med* 25: 378, 2018. [PMID: 29218798]
- Um SW, Ohle R, Perry JJ: Bilateral blood pressure differential as a clinical marker for acute aortic dissection in the emergency department. *Emerg Med J* 35: 556, 2018. [PMID: 30021832]
- Singer AJ, Hollander JE: Blood pressure. Assessment of interarm differences. *Arch Intern Med* 156: 2005, 1996. [PMID: 8823153]
- Hiratzka LF, Bakris GL, Beckman JA, et al: 2010 ACCF/AHA/AATS/ACR/ASA/SCA/SCAI/SIR/STS/SVM guidelines for the diagnosis and management of patients with thoracic aortic disease: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines, American Association for Thoracic Surgery, American College of Radiology, American Stroke Association, Society of Cardiovascular Anesthesiologists, Society for Cardiovascular Angiography and Interventions, Society of Interventional Radiology, Society of Thoracic Surgeons, and Society for Vascular Medicine. *Circulation* 121: e266, 2010. [PMID: 20233780]
- Rogers AM, Hermann LK, Booher AM, et al: Sensitivity of the aortic dissection detection risk score, a novel guideline-based tool for the identification of acute aortic dissection at initial presentation: results from the International Registry of Acute Aortic Dissection. *Circulation* 123: 2213, 2011. [PMID: 21555704]
- Chua J, Ibrahim I, Neo X, et al: Acute aortic dissection in the ED: risk factors and predictors for missed diagnosis. *Am J Emerg Med* 30: 1622, 2012. [PMID: 22306397]
- Kurabayashi M, Miwa N, Ueshima D, et al: Factors leading to failure to diagnose acute aortic dissection in the emergency room. *J Cardiol* 58: 287, 2011. [PMID: 21889877]
- Zhan S, Hong S, Shan-Shan L, et al: Misdiagnosis of aortic dissection: experience with 361 patients. *J Clin Hypertens* 14: 256, 2012. [PMID: 22458748]
- Biagini E, Lofiego C, Ferlito M, et al: Frequency determinants, and clinical relevance of acute coronary syndrome-like electrocardiographic findings in patient with acute aortic syndrome. *Am J Cardiol* 100: 1013, 2007. [PMID: 17826389]
- Suzuki T, Bossone E, Sawaki D, et al: Biomarkers of aortic diseases. *Am Heart J* 165: 15, 2013. [PMID: 23237129]
- Asha SE, Miers JW: A systematic review and meta-analysis of D-dimer as a rule-out test for suspected acute aortic dissection. *Ann Emerg Med* 66: 368, 2015. [PMID: 25805111]
- Paparella D, Giorgio P, Scarscia G, et al: D-dimers are not always elevated in patients with acute aortic dissection. *J Cardiovasc Med* 10: 212, 2009. [PMID: 19377387]
- Nitta K, Imamura H, Kashima Y, et al: Impact of a negative D-dimer on the initial assessment of acute aortic dissection. *Int J Cardiol* 258: 232, 2018. [PMID: 29422267]
- Parolari A, Tremoli E, Songia P, et al: Biological features of thoracic aortic diseases. Where are we now, where are we heading to: established and emerging biomarkers and molecular pathways. *Eur J Cardiothorac Surg* 44: 9, 2013. [PMID: 23293317]
- Diercks DB, Promes SB, Schuur JD, et al: Clinical policy: critical issues in the evaluation and management of adult patients with suspected acute nontraumatic thoracic aortic dissection. *Ann Emerg Med* 65: 32, 2015. [PMID: 25529153]
- Nazerian P, Mueller C, Soeiro AM, et al: Diagnostic accuracy of the aortic dissection detection risk score plus D-dimer for acute aortic syndromes: the ADVISED Prospective Multicenter Study. *Circulation* 137: 250, 2018. [PMID: 29030346]
- Litmanovich D, Bankier AA, Cantin L, et al: CT and MRI in diseases of the aorta. *Am J Roentgenol* 193: 928, 2009. [PMID: 19770313]
- Ohle R, Anjum O, Bleeker H, et al: Variation in emergency department use of computed tomography for investigation of acute aortic dissection. *Emerg Radiol* 25: 293, 2018. [PMID: 29404804]
- Gallagher MJ, Raff GL: Use of multislice CT for the evaluation of emergency room patients with chest pain: the so-called "triple rule-out." *Catheter Cardiovasc Interv* 71: 92, 2008. [PMID: 18098208]
- Takakuwa KM, Halpern EJ: Evaluation of a "triple rule-out" coronary CT angiography protocol: use of 64-section CT in low-to-moderate risk emergency department patients suspected of having acute coronary syndrome. *Radiology* 248: 438, 2008. [PMID: 18641247]
- Madder RD, Raff GL, Hickman L, et al: Comparative diagnostic yield and 3-month outcomes of "triple rule-out" and standard protocol coronary CT angiography in the evaluation of acute chest pain. *J Cardiovasc Comput Tomogr* 5: 165, 2011. [PMID: 21511557]
- Aboyans V, Boileau C, Bossone E, et al: 2014 ESC guidelines on the diagnosis and treatment of aortic diseases. *Eur Heart J* 35: 2873, 2014. [PMID: 25173340]
- Nordon JM, Hinchliffe RJ, Loftus JM, et al: Management of acute aortic syndrome and chronic aortic dissection. *Cardiovasc Intervent Radiol* 34: 980, 2011. [PMID: 21072634]
- Wu KS, Zhou JC, Li HY, et al: Antihypertensive therapy with nicardipine for patients with aortic disease is associated with more esmolol usage than urapidil. *J Thorac Dis* 6: 1765, 2014. [PMID: 25589971]
- Shah A, Khoynzhad A: Thoracic endovascular repair for acute type A aortic dissection: operative technique. *Ann Cardiothorac Surg* 5: 389, 2016. [PMID: 27563553]
- Roselli J Idrees J, Greenberg RK, et al: Endovascular stent grafting for ascending aorta repair in high risk patients. *Thorac Cardiovasc Surg* 149: 144, 2015. [PMID: 25312226]
- Li FR, Wu X, Yuan J, et al: Comparison of thoracic endovascular aortic repair, open surgery and best medical treatment for type B aortic dissection: a meta-analysis. *Int J Cardiol* 250: 240, 2018. [PMID: 29066151]
- Lee WA, Daniels MJ, Beaver TM, et al: Late outcomes of a single-center experience of 400 consecutive thoracic endovascular aortic repairs. *Circulation* 123: 2938, 2011. [PMID: 21646499]
- Midulla M, Renaud A, Martinelli T, et al: Endovascular fenestration in aortic dissection with acute malperfusion syndrome: immediate and late follow-up. *J Thorac Cardiovasc Surg* 142: 66, 2011. [PMID: 21683839]
- Trimarchi S, Eagle KA, Nienaber CA, et al: Importance of refractory pain and hypertension in acute type B aortic dissection (insights from the International Registry of Acute Aortic Dissection [IRAD]). *Circulation* 122: 1283, 2010. [PMID: 20837896]
- Nienaber CA, Powell JT: Management of acute aortic syndromes. *Eur Heart J* 33: 26, 2012. [PMID: 21810861]
- Pacini L, Digne F, Boumendil A, et al: Maternal complication of pregnancy in Marfan syndrome. *Int J Cardiol* 136: 156, 2009. [PMID: 18632169]