

Diastolic Dysfunction

Bibliography of One Hundred Key Papers

-
- Aguire FV, Pearson AC, Lewen MK, McCluskey M, Labovitz AJ.** *Usefulness of Doppler echocardiography in the diagnosis of congestive heart failure.*
Am J Cardiol. 1989;63:1098-1102.
-
- Albanna II, Eichelberger SM, Khoury PR, et al.** *Diastolic dysfunction in young patients with insulin-dependent diabetes mellitus as determined by automated border detection.*
J Am Soc Echocardiogr. 1998;11:349-355.
-
- Anning PB, Grocott MR, Lewis MJ, Shah AM.** *Enhancement of left ventricular relaxation in the isolated heart by an angiotensin-converting enzyme inhibitor.*
Circulation. 1995;92:2660-2665.
-
- Appleton CP, Jensen JL, Hatle LK, Oh JK.** *Doppler evaluation of left and right ventricular diastolic function: a technical guide for obtaining optimal flow velocity recordings.*
J Am Soc Echocardiogr. 1997;10:271-292.
-
- Arrighi JA, Soufer R.** *Left ventricular diastolic function: physiology, methods of assessment, and clinical significance.*
J Nucl Cardiol. 1995;2:525-543.
-
- Betocchi S, Chiariello M.** *Effects of antihypertensive therapy on diastolic dysfunction in left ventricular hypertrophy.*
J Cardiovasc Pharmacol. 1992;19(suppl 5):S116-S121.
-
- Betocchi S, Piscione F, Villari B, et al.** *Effects of induced asynchrony on left ventricular diastolic function in patients with coronary artery disease.*
J Am Coll Cardiol. 1993;21:1124-1131.
-
- Bonow RO.** *Radionuclide angiographic evaluation of left ventricular diastolic function.*
Circulation. 1991;84:1208-1215.
-
- Bonow RO, Vitale DF, Bacharach SL, Maron BJ, Green MV.** *Effects of aging on asynchronous left ventricular regional function and global ventricular filling in normal human subjects.*
J Am Coll Cardiol. 1988;11:50-58.
-
- Boudoulas H.** *Diastolic time: the forgotten dynamic factor. Implications for myocardial perfusion.*
Acta Cardiol. 1991;46:61-71.
-
- Brecker SJ, Lee CH, Gibson DG.** *Relation of left ventricular isovolumic relaxation time and incoordination to transmitral Doppler filling patterns.*
Br Heart J. 1992;68:567-573.
-
- Briguori C, Betocchi S, Losi MA, et al.** *Noninvasive evaluation of left ventricular diastolic function in hypertrophic cardiomyopathy.*
Am J Cardiol. 1998;81:180-187.
-

Bibliography of One Hundred Key Papers

- Brogan WC 3rd, Hillis LD, Flores ED, Lange RA.** *The natural history of isolated left ventricular diastolic dysfunction.* **Am J Med.** 1992;92:627-630.
-
- Brutsaert DL, Rademakers PE, Sys SU, Gillebert TC, Housmans PR.** *Analysis of relaxation in the evaluation of ventricular function of the heart.* **Prog Cardivasc Dis.** 1985;28:143-163.
-
- Brutsaert DL, Sys SU, Gillebert TC.** *Diastolic failure: pathophysiology and therapeutic implications [published erratum appears in J Am Coll Cardiol. 1993;22:1272].* **J Am Coll Cardiol.** 1993;22:318-325.
-
- Brutsaert DL, Sys SU.** *Diastolic dysfunction in heart failure.* **J Card Fail.** 1997;3:225-242.
-
- Carroll JD, Hess OM, Hirzel HO, Turina M, Krayenbuehl HP.** *Left ventricular systolic and diastolic function in coronary artery disease: effects of revascularization on exercise-induced ischemia.* **Circulation.** 1985;72:119-129.
-
- Caso P, Galderisi M, Cioppa C, et al.** *Regional diastolic function in normotensive versus hypertensive subjects: comparison using Doppler myocardial imaging.* **G Ital Cardiol.** 1997;27:901-907.
-
- Cerisano G, Bolognese L, Carrabba N, et al.** *Doppler-derived mitral deceleration time: an early strong predictor of left ventricular remodeling after reperfused anterior acute myocardial infarction.* **Circulation.** 1999;99:230-236.
-
- Choi BW, Bacharach SL, Barbour DJ, Leon MB, McCarthy KE, Bonow RO.** *Left ventricular systolic dysfunction diastolic filling characteristics and exercise cardiac reserve in mitral stenosis.* **Am J Cardiol.** 1995;75:526-529.
-
- Cohn JN, Johnson G.** *Heart failure with normal ejection fraction. The V-HeFT study. Veterans Administration Cooperative Study Group.* **Circulation.** 1990;81(2 suppl):III48-III53.
-
- Cuocolo A, Sax FL, Brush JE, Maron BJ, Bacharach SL, Bonow RO.** *Left ventricular hypertrophy and impaired diastolic filling in essential hypertension. Diastolic mechanisms for systolic dysfunction during exercise.* **Circulation.** 1990;81:978-986.
-
- Dahlstrom U, Pehrsson K, Pouleur H.** *Diastolic dysfunction in heart failure. Further studies on diagnosis and therapy are necessary [In Swedish].* **Lakartidningen.** 1995;92:1355-1358.
-
- Davie AP, Francis CM, Caruana L, Sutherland GR, McMurray JJ.** *The prevalence of left ventricular diastolic filling abnormalities in patients with suspected heart failure.* **Eur Heart J.** 1997;18:981-984.
-
- De BB, Bronzwaer JG, Heyndrickx GR, Paulus WJ.** *Comparative effects of ischemia and hypoxemia on left ventricular systolic and diastolic function in humans.* **Circulation.** 1993;88:461-471.
-
- Eberli FR, Apstein CS, Ngoy S, Lorell BH.** *Exacerbation of left ventricular ischemic diastolic dysfunction by pressure-overload hypertrophy. Modification by specific inhibition of cardiac angiotensin converting enzyme.* **Circ Res.** 1992;70:931-943.
-



-
- Eichhorn EJ, Willard JE, Alvarez L, et al.** *Are contraction and relaxation coupled in patients with and without congestive heart failure? [see comments].*
Circulation. 1992;85:2132-2139.
-
- Flesch M, Schiffer F, Zolk O, et al.** *Contractile systolic and diastolic dysfunction in renin-induced hypertensive cardiomyopathy.*
Hypertension. 1997;30(3, pt 1):383-391.
-
- Gaasch WH.** *Diastolic dysfunction of the left ventricle: importance to the clinician.*
Adv Intern Med. 1990;35:311-340.
-
- Garcia MJ, Ares MA, Asher C, Rodriguez L, Vandervoort P, Thomas JD.** *An index of early left ventricular filling that combined with pulsed Doppler peak E velocity may estimate capillary wedge pressure.*
J Am Coll Cardiol. 1997;29:448-454.
-
- Garcia MJ, Thomas JD, Klein AL.** *New Doppler echocardiographic applications for the study of diastolic function.*
J Am Coll Cardiol. 1998;32:865-875.
-
- Genovesi EA, Marabotti C, Palombo C, Giaconi S.** *Left ventricular filling: relationship with arterial blood pressure, left ventricular mass, age, heart rate and body build.*
J Hypertens. 1991;9:345-353.
-
- Gillebert TC, Leite-Moreira FA, de Hert SG.** *Relaxation-systolic pressure relation. A load-independent assessment of left ventricular contractility.*
Circulation. 1997;95:745-752.
-
- Gotzsche O, Darwish A, Gotzsche L, Hansen LP, Sorensen KE.** *Incipient cardiomyopathy in young insulin-dependent diabetic patients: a seven-year prospective Doppler echocardiographic study.*
Diabet Med. 1996;13:834-840.
-
- Gotzsche O, Sihm J, Lund S, Schmitz O.** *Abnormal changes in transmitral flow after acute exposure to nitroglycerin and nifedipine in uncomplicated insulin-dependent diabetes mellitus: a Doppler echocardiographic study.*
Am Heart J. 1993;126:1417-1426.
-
- Grayson JM, Spann JF.** *Recognition and treatment of diastolic heart failure.*
Heart Dis Stroke. 1994;3:216-220.
-
- Grossman W.** *Diastolic function and heart failure: an overview.*
Eur Heart J. 1990;11(suppl C):2-7.
-
- Grossman W.** *Diastolic dysfunction in congestive heart failure.*
N Engl J Med. 1991;325:1557-1564.
-
- Haber HL, Powers ER, Gimple LW, et al.** *Intracoronary angiotensin-converting enzyme inhibition improves diastolic function in patients with hypertensive left ventricular hypertrophy.*
Circulation. 1994;89:2616-2625.
-
- Hayashida W, Donckier J, Van MH, Charlier AA, Pouleur H.** *Load-sensitive diastolic relaxation in hypertrophied left ventricles.*
Am J Physiol. 1998;274(2, pt 2):H609-H615.
-
- Henein MY, Amadi A, O'Sullivan C, Coats A, Gibson DG.** *ACE inhibitors unmask incoordinate diastolic wall motion in restrictive left ventricular disease.*
Heart. 1996;76:326-331.
-

Bibliography of One Hundred Key Papers

- European Study Group on Diastolic Heart Failure.** *How to diagnose diastolic heart failure.*
Eur Heart J. 1998;19:990-1003.
-
- Inoue T, Fujito T, Asahi S, Hoshi K, Sakai Y, Morooka S.** *Impaired left ventricular diastolic filling occurs in diabetic patients without atherosclerotic coronary artery disease.*
Am J Med Sci. 1997;313:125-130.
-
- Ishida Y, Meisner JS, Tsujioka K, et al.** *Left ventricular filling dynamics: influence of left ventricular relaxation and left atrial pressure [published erratum appears in Circulation. 1986;74:462].*
Circulation. 1986;74:187-196.
-
- Jain A, Avendano G, Dharamsey S, et al.** *Left ventricular diastolic function in hypertension and role of plasma glucose and insulin. Comparison with diabetic heart.*
Circulation. 1996;93:1396-1402.
-
- Kato R, Yokota M, Ishihara H, Sobue T.** *Correlation between left ventricular contractility and relaxation in patients with idiopathic dilated cardiomyopathy.*
Clin Cardiol. 1996;19:413-418.
-
- Klein AL, Hatle LK, Taliencio CP, et al.** *Prognostic significance of Doppler measures of diastolic function in cardiac amyloidosis. A Doppler echocardiography study.*
Circulation. 1991;83:808-816.
-
- Kyle RA, Gertz MA, Greipp PR, et al.** *Long-term survival (10 years or more) in 30 patients with primary amyloidosis.*
Blood. 1999;93:1062-1066.
-
- Leite-Moreira FA, Gillebert TC.** *Nonuniform course of left ventricular pressure fall and its regulation by load and contractile state.*
Circulation. 1994;90:2481-2491.
-
- Leite-Moreira FA, Gillebert TC.** *Myocardial relaxation in regionally stunned left ventricle.*
Am J Physiol. 1996;270(2, pt 2):H509-H517.
-
- Little WC, Downes TR.** *Clinical evaluation of left ventricular diastolic performance.*
Prog Cardiovasc Dis. 1990;32:273-290.
-
- Little WC, Ohno M, Kitzman DW, Thomas JD, Cheng CP.** *Determination of left ventricular chamber stiffness from the time for deceleration of early left ventricular filling.*
Circulation. 1995;92:1933-1939.
-
- Little WC, Warner JJ, Rankin KM, Kitzman DW, Cheng CP.** *Evaluation of left ventricular diastolic function from the pattern of left ventricular filling.*
Clin Cardiol. 1998;21:5-9.
-
- Litwin SE, Grossman W.** *Diastolic dysfunction as a cause of heart failure.*
J Am Coll Cardiol. 1993;22(4 suppl A):49A-55A.
-
- Machii T, Yokota M, Nagata K, Ishihara H, Iwase M, Sobue T.** *Effect of dobutamine and OPC-18790 on diastolic chamber stiffness in patients with idiopathic dilated cardiomyopathy.*
J Cardiovasc Pharmacol. 1997;29:265-272.
-
- Manolas J.** *"Accurate" noninvasive detection of diastolic dysfunction by current techniques: fact or fancy?*
Acta Cardiol. 1995;50:7-12.
-



-
- Marino P, Prioli AM, Destro G, Lo SI, Golia G, Zardini P.** *The left atrial volume curve can be assessed from pulmonary vein and mitral valve velocity tracings.*
Am Heart J. 1994;127(4, pt 1):886-898.
-
- Matter C, Nagel E, Stuber M, Boesiger P, Hess OM.** *Assessment of systolic and diastolic LV function by MR myocardial tagging.*
Basic Res Cardiol. 1996;2:23-28.
-
- Meyer TE, Casadei B, Aurigemma GP, Gaasch WH.** *Which indexes of filling behavior should be used to characterize left ventricular diastolic function when changes in heart rate and atrioventricular delay occur?*
J Am Soc Echocardiogr. 1997;10:689-698.
-
- Mittmann C, Eschenhagen T, Scholz H.** *Cellular and molecular aspects of contractile dysfunction in heart failure.*
Cardiovasc Res. 1998;39:267-275.
-
- Mockel M, Stork T.** *Diastolic function in various forms of left ventricular hypertrophy: contribution of active Doppler stress echo.*
Int J Sports Med. 1996;17(suppl 3):S184-S190.
-
- Muscholl MW, Kurzidim K, Pfeifer M, Blumberg F, Riegger GA, Elsmer D.** *Assessment of left ventricular diastolic filling in arterial hypertension: comparison of pulsed Doppler echocardiography and acoustic quantification.*
Am J Hypertens. 1998;11(8, pt 1):1032-1036.
-
- Nishimura RA, Tajik AJ.** *Evaluation of diastolic filling of left ventricle in health and disease: Doppler echocardiography is the clinician's Rosetta Stone.*
J Am Coll Cardiol. 1997;30:8-18.
-
- Oh JK, Appleton CP, Hatle LK, Nishimura RA, Seward JB, Tajik AJ.** *The noninvasive assessment of left ventricular diastolic function with two-dimensional and Doppler echocardiography.*
J Am Soc Echocardiogr. 1997;10:246-270.
-
- Packer M.** *Diastolic function as a target of therapeutic interventions in chronic heart failure.*
Eur Heart J. 1990;11(suppl C):35-40.
-
- Pak PH, Maughan L, Baughman KL, Kass DA.** *Marked discordance between dynamic and passive diastolic pressure-volume relations in idiopathic hypertrophic cardiomyopathy [published erratum appears in Circulation. 1996;94:2668].*
Circulation. 1996;94:52-60.
-
- Paulus WJ.** *Paracrine coronary endothelial modulation of diastolic left ventricular function in man: implications for diastolic heart failure.*
J Card Fail. 1996;2(4 suppl):S155-S164.
-
- Paulus WJ, Bronzwaer JG, Felice H, Kishan N, Wellens P.** *Deficient acceleration of left ventricular relaxation during exercise after heart transplantation.*
Circulation. 1992;86:1175-1185.
-
- Pinamonti B, Di LA, Sinagra G, Camerini F.** *Restrictive left ventricular filling pattern in dilated cardiomyopathy assessed by Doppler echocardiography: clinical, echocardiographic and hemodynamic correlations and prognostic implications. Heart Muscle Disease Study Group.*
J Am Coll Cardiol. 1993;22:808-815.
-

Bibliography of One Hundred Key Papers

- Pinamonti B, Zecchin M, Di LA, Gregori D, Sinagra G, Camerini F.** *Persistence of restrictive left ventricular filling pattern in dilated cardiomyopathy: an ominous prognostic sign.* **J Am Coll Cardiol.** 1997;29:604-612.
-
- Rademakers FE, Rogers WJ, Guier WH, et al.** *Relation of regional cross-fiber shortening to wall thickening in the intact heart. Three-dimensional strain analysis by NMR tagging.* **Circulation.** 1994;89:1174-1182.
-
- Regolisti G, Coghi P, Orlandini G, et al.** *Effects of reduced preload on diastolic filling in essential hypertensive patients with increased left ventricular mass.* **Am J Hypertens.** 1997;10(4, pt 1):447-453.
-
- Ruzumna P, Gheorghiadu M, Bonow RO.** *Mechanisms and management of heart failure due to diastolic dysfunction.* **Curr Opin Cardiol.** 1996;11:269-276.
-
- Sabbah HN, Stein PD.** *Pressure-diameter relations during early diastole in dogs. Incompatibility with the concept of passive left ventricular filling.* **Circ Res.** 1981;48:357-365.
-
- Sagastagoitia D, Morillas M, Murga N, et al.** *Functional and organic components of diastolic dysfunction in hypertensive heart disease: therapeutic implications.* **Eur Heart J.** 1993;14(suppl J):107-109.
-
- Scalia GM, Greenberg NL, McCarthy PM, Thomas JD, Vandervoort PM.** *Noninvasive assessment of the ventricular relaxation time constant (τ) in humans by Doppler echocardiography.* **Circulation.** 1997;95:151-155.
-
- Schmitz L, Koch H, Bein G, Brockmeier K.** *Left ventricular diastolic function in infants/children, and adolescents. Reference values and analysis of morphologic and physiologic determinants of echocardiographic Doppler flow signals during growth and maturation.* **J Am Coll Cardiol.** 1998;32:1441-1448.
-
- Shunkert H, Dzau VJ, Tang SS, Hirsch AT, Apstein CS, Lorell BH.** *Increased rat cardiac angiotensin converting enzyme activity and mRNA expression in pressure overload left ventricular hypertrophy. Effects on coronary resistance, contractility, and relaxation.* **J Clin Invest.** 1990;86:1913-1920.
-
- Schwinger RHG, Böhm M, Schmidt U, et al.** *Unchanged protein levels of SERCA II and phospholamban, but reduced Ca^{2+} uptake and Ca^{2+} -ATPase activity of cardiac sarcoplasmic reticulum from dilated cardiomyopathy patients compared with patients with nonfailing hearts.* **Circulation.** 1995;92:3220-3228.
-
- Shiels P, MacDonald TM.** *Isolated diastolic heart failure—what is it?* **Postgrad Med J.** 1998;74:451-454.
-
- Sitzler G, Stablein A, Böhm M.** *Diastolic dysfunction of the heart. A frequently overlooked cause of chronic heart failure [In German].* **Dtsch Med Wochenschr.** 1996;121:70-76.
-
- Sobue T, Yokota M, Iwase M, Ishihara H.** *Influence of left ventricular hypertrophy on left ventricular function during dynamic exercise in the presence or absence of coronary artery disease.* **J Am Coll Cardiol.** 1995;25:91-98.
-



-
- Soufer R, Wohlgeleinter D, Vita NA, et al.** *Intact systolic left ventricular function in clinical congestive heart failure.*
Am J Cardiol. 1985;55:1032-1036.
-
- Stevenson LW, Sietsema K, Tillisch JH, et al.** *Exercise capacity for survivors of cardiac transplantation or sustained medical therapy for stable heart failure.*
Circulation. 1990;81:78-85.
-
- Stuyvers BD, Miura M, ter Keurs HE.** *Dynamics of viscoelastic properties of rat cardiac sarcomeres during the diastolic interval: involvement of Ca²⁺.*
J Physiol. 1997;502(pt 3):661-677.
-
- Swynghedauw B.** *Molecular mechanisms of myocardial remodeling.*
Physiol Rev. 1999;79:215-262.
-
- Tardif JC, Rouleau JL.** *Diastolic dysfunction.*
Can J Cardiol. 1996;12:389-398.
-
- Tei C, Dujardin KS, Hodge DO, Kyle RA, Tajik AJ, Seward JB.** *Doppler index combining systolic and diastolic myocardial performance: clinical value in cardiac amyloidosis [see comments].*
J Am Coll Cardiol. 1996;28:658-664.
-
- Tenenbaum A, Motro M, Hod H, Kaplinsky E, Vered Z.** *Shortened Doppler-derived mitral A wave deceleration time: an important predictor of elevated left ventricular filling pressure.*
J Am Coll Cardiol. 1996;27:700-705.
-
- Thomas JD, Garcia MJ, Greenberg NL.** *Application of color Doppler M-mode echocardiography in the assessment of ventricular diastolic function: potential for quantitative analysis.*
Heart Vessels. 1997;12:135-137.
-
- Udelson JE, Bonow RO.** *Diastolic dysfunction as a cause of heart failure.*
Hosp Pract (Off Ed). 1993;28:49-56.
-
- Vanoverschelde JL, Essamri B, Michel X, et al.** *Hemodynamic and volume correlates of left ventricular diastolic relaxation and filling in patients with aortic stenosis.*
J Am Coll Cardiol. 1992;20:813-821.
-
- Vanoverschelde JL, Raphael DA, Robert AR, Cosyns JR.** *Left ventricular filling in dilated cardiomyopathy: relation to functional class and hemodynamics.*
J Am Coll Cardiol. 1990;15:1288-1295.
-
- Vasan RS, Benjamin EJ, Levy D.** *Prevalence, clinical features and prognosis of diastolic heart failure: an epidemiologic perspective.*
J Am Coll Cardiol. 1995;26:1565-1574.
-
- Vasan RS, Benjamin EJ, Levy D.** *Congestive heart failure with normal left ventricular systolic function. Clinical approaches to the diagnosis and treatment of diastolic heart failure.*
Arch Intern Med. 1996;156:146-157.
-
- Vilacosta I, Roman JA, Rollan MJ, et al.** *Prevalence and relevance of a septal diastolic notch during dobutamine stress echocardiography.*
Eur Heart J. 1998;19:669-673.
-

Bibliography of One Hundred Key Papers

- Villari B, Campbell SE, Schneider J, Chiariello M, Hess OM.** *Sex-dependent differences in left ventricular function and structure in chronic pressure overload.*
Eur Heart J. 1995;16:1410-1419.
-
- Villari B, Vassalli G, Schneider J, Vassalli G, Chiariello M, Hess OM.** *Age dependency of left ventricular diastolic function in pressure overload hypertrophy.*
J Am Coll Cardiol. 1997;29:181-186.
-
- Vitarelli A, Sciomer S, Schina M, Luzzi MF, Dagianti A.** *Detection of left ventricular systolic and diastolic abnormalities in patients with coronary artery disease by color kinesis.*
Clin Cardiol. 1997;20:927-933.
-