

14 Reference

Kapitola 1: Fyzikální principy echokardiografie

1. Kremkau FW. Diagnostic ultrasound: principles and instruments (ed 4). Philadelphia, WB Saunders, 1998.
2. Powis RL, Schwartz RA. Practical Doppler ultrasound for the clinician. Baltimore, Williams & Wilkins, 1991.
3. Hatle L, Angelsen B. Doppler ultrasound in cardiology: physical principles and clinical applications (ed 2). Philadelphia, Lea & Febiger, 1985.
4. Baker DW. The present role of Doppler techniques in cardiac diagnosis. *Progr Cardiovasc Dis* 1978;21:79-91.
5. Omoto R, Yokote Y, Takamoto S, et al. The development of real-time two-dimensional Doppler echocardiography and its clinical significance in acquired valvular regurgitation. *Jap Heart J* 1984;25:325-340.
6. Thomas JD, Rubin DN. Tissue harmonic imaging: why does it work? *J Am Soc Echocardiogr* 1998;11:803-808.

Kapitola 2: Technika echokardiografického vyšetření

1. Du Bois D, Du Bois EF. A formula to estimate the approximative surface area if height and weight be known. *Arch Int Med* 1916;17:863-871.
2. Sahn DJ, DeMaria A, Kisslo J, Weyman A. Recommendations regarding quantitation in M-mode echocardiography. Results of a survey of echocardiographic measurements. *Circulation* 1978;58:1072-83.
3. Weyman AE, Doty WD. Left ventricle. In: Weyman AE, ed. *Cross sectional echocardiography*. Philadelphia: Lea and Febiger, 1982:267.
4. Henry WL, DeMaria A, Gramiak R, et al. and the American Society of Echocardiography. Committee on Nomenclature and Standards. Report on two-dimensional echocardiography. *Circulation* 1980;62:212-222.
5. American Society of Echocardiography. Doppler Standards nad Nomenclature Committee. Recommendations for terminology and display Doppler echocardiography. Raleigh, NC. American Society of Echocardiography. 1984.
6. Hatle L, Brubakk A, Tromsdal A, Angelsen B. Noninvasive assessment of pressure drop in mitral stenosis by Doppler ultrasound. *Br Heart J* 1978;40:131-140.
7. Folland ED, Parisi AF, Moynihan PF, et al. Assessment of left ventricular ejection fraction and volumes by real-time two-dimensional echocardiography. *Circulation* 1979;60:760-766.
8. Teichholz L, Kreulen T, Herman MV, Gorlin R. Problems in echocardiographic volumes de-

termination: echocardiographic-angiographic correlation in the presence or absence of asynergy. *Am J Cardiol* 1976;37:7-11.

Transezofageální vyšetření

9. Rafferty TD. Basics of transesophageal echocardiography. New York. Curchill Livingstone. 1995.
10. Seward JB, Khandheria BK, Edwards WD, et al. Biplane transesophageal echocardiography: anatomic correlations, image orientation, and clinical applications. *Mayo Clin Proc* 1990;65:1193-1213.
11. Seward JB, Khandheria BK, Freeman WK, et al. Multiplane transesophageal echocardiography: image orientation, examination technique, anatomic correlations, and clinical applications. *Mayo Clin Proc* 1993;68:523-551.
12. Nanda NC, Domanski MJ. Atlas of transesophageal echocardiography. Baltimore. Williams & Wilkins. 1998.

Kapitola 3: Hodnocení struktury a funkce srdečních oddílů

1. Devereux RB, Pickering TG, Alderman MH, Chien S, Borer JS, Laragh JH. Left ventricular hypertrophy in hypertension. Prevalence and relationship to pathophysiologic variables. *Hypertension* 1987;9 [suppl II]: II-53 - II-60.
2. De Simone G, Devereux RB, Roman MJ, Alderman MH. Relation of obesity and gender to left ventricular hypertrophy in normotensive and hypertensive adults. *Hypertension* 1994;23:600-606.
3. Levy D, Savage DD, Garison RJ, et al. Echocardiographic criteria for left ventricular hypertrophy: The Framingham Heart Study. *Am J Cardiol* 1987;59:956-960.
4. Lauer MS, Anderson KM, Larson MG, Levy D. A new method for indexing left ventricular mass for differences in body size. *Am J Cardiol* 1994;74:487-491.
5. De Simone G, Daniels SR, Devereux et al. Left ventricular mass and body size in normotensive children and adults: Assessment of allometric relations and impact of overweight. *J Am Coll Cardiol* 1992;20:1251-1260.
6. De Simone G, Devereux RB, Daniels SR, Koren MJ, Meyer RA, Laragh J. Effect of growth on variability of left ventricular mass: assessment of allometric signals in adults and children and their capacity to predict cardiovascular risk. *J Am Coll Cardiol* 1995;25:1056-1062.
7. Daniels SR, Kimball TR, Morrison JA, Khoury P, Meyer RA. Indexing left ventricular mass to account for difference in body size in children and adolescents without cardiovascular disease. *Am J Cardiol* 1995;76:699-701.
8. Hense HW, Gneiting B, Muscholl M, et al. The associations of body size and body composition with left ventricular mass: Impacts for indexation in adults. *J Am Coll Cardiol* 1998;32:451-457.
9. Bella JN, Devereux RB, Roman MJ et al. Relations of left ventricular mass to fat-free and adipose body mass. The Strong Heart Study. *Circulation* 1998;98:2538-2544.
10. Schiller NB, Skioldebrand C, Schiller E, et al. Canine left ventricular mass estimated by two-dimensional echocardiography. *Circulation* 1983;68:210-216.
11. Byrd BF III, Wahr D, Wang Z, Bouchard A, Schiller NB. Left ventricular mass and volume/mass ratio determined by two-dimensional echocardiography in normal adults. *J Am Coll Cardiol* 1985;6:1021-1029.
12. Reichek N, Helak J, Plappert T, St.John Sutton M, Weber KT. Anatomic validation of left ventricular mass estimates from clinical two-dimensional echocardiography: initial results. *Circulation* 1983;67:348-352.

Hodnocení globální systolické funkce levé komory

13. Schiller NB. Two-dimensional echocardiographic determination of left ventricular volume, systolic function and mass. Summary and discussion of the 1989 recommendations of the American Society of Echocardiography. *Circulation* 1991;84 [suppl I]: I-280 - I-287.
14. American Society of Echocardiography Committee on Standards. Subcommittee on Quantitation of Two-Dimensional Echocardiograms. Recommendations for quantitation of the left ventricle by two-dimensional echocardiography. *J Am Soc Echocardiogr* 1989;2:361-367.
15. Folland ED, Parisi AF, Moynihan PF, et al. Assessment of left ventricular ejection fraction and volumes by real-time, two-dimensional echocardiography. A comparison of cineangiographic and radionuclide techniques. *Circulation* 1979;60:760-766.
16. Lewis JF, Kuo LC, Nelson JC, et al. Pulsed Doppler echocardiographic determination of stroke volume and cardiac output: clinical validation of two new methods using the apical window. *Circulation* 1984;70:425-431.
17. Otto CM, Pearlman AS, Gardner CL, et al. Experimental validation of Doppler echocardiographic measurement of volume flow through the stenotic aortic valve. *Circulation* 1988;78:435-441.

Hodnocení diastolické funkce levé komory

18. Nishimura RA, Tajik AJ. Evaluation of diastolic filling of the left ventricle in the health and disease: Doppler echocardiography is the clinician's Rosseta stone. *J Am Coll Cardiol* 1997;30:8-18.
19. Appleton CP, Firstenberg MS, Garcia MJ, Thomas JD. The echo-Doppler evaluation of left ventricular diastolic function. *Cardiology Clinics* 2000;18:513-546.
20. Rakowski H, Appleton, Chan KL, et al. Canadian consensus recommendations for the measurement and reporting of diastolic dysfunction by echocardiography: from the investigators of Consensus on Diastolic Dysfunction by Echocardiography. *J Am Soc Echocardiogr* 1996;9:736-60.
21. 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.
22. Rossvol O, Hatle LK. Pulmonary venous flow velocities recorded by transthoracic Doppler ultrasound: relation to left ventricular diastolic pressures. *J Am Coll Cardiol* 1993;21:1687-1696.
23. Garcia MJ, Thomas JD, Klein AL. New Doppler echocardiographic applications for the study of diastolic function. *J Am Coll Cardiol* 1998;32:865-875.
24. Brun P, Tribouilloy C, Duval AM, et al. Left ventricular flow propagation during early filling is related to wall relaxation: a color M-mode Doppler analysis. *J Am Coll Cardiol* 1992;20:420-432.
25. Garcia MJ, Smedira NG, Greenberg NL, et al. Color M-mode Doppler flow propagation velocity is a preload insensitive index of left ventricular relaxation: animal and human validation. *J Am Coll Cardiol* 2000;35:201-208.
26. Sohn DW, Chai IH, Lee DJ, et al. Assessment of mitral annulus velocity by Doppler tissue imaging in the evaluation of left ventricular diastolic function. *J Am Coll Cardiol* 1997;30:474-80.
27. Garcia MJ, Rodriguez L, Ares MA, Griffin BP, Thomas JD, Klein AL. Differentiation of constrictive pericarditis from restrictive cardiomyopathy: assessment of left ventricular diastolic velocities in the longitudinal axis by Doppler tissue imaging. *J Am Coll Cardiol* 1996;27:108-114.
28. Oh JK, Appleton CP, Hatle LK, Nishimura RA, Seward JB, Tajik AJ. The noninvasive assessment of left ventricular diastolic function with two-dimensional Doppler echocardiography. *J Am Soc Echocardiogr* 1997;10:246-70.

29. Ito T, Suwa M, Kobashi A, Hirota Y, Kawamura K. Ratio of pulmonary venous to mitral A velocity is useful marker for predicting pulmonary capillary wedge pressure in patients with left ventricular systolic dysfunction. *J Am Soc Echocardiogr* 1998;11:961-5.
30. Nagueh SF, Middleton KJ, Kopelen HA, Zoghbi WA, Quinones MA. Doppler tissue imaging: A noninvasive technique for evaluation of left ventricular relaxation and estimation of filling pressures. *J Am Coll Cardiol* 1997;30:1527-33.
31. Farias CA, Rodriguez L, Garcia MJ, Sun JP, Thomas JD. Assessment of diastolic function by tissue Doppler echocardiography: Comparison with standard transmitral and pulmonary venous flow. *J Am Soc Echocardiogr* 1999;12:609-17.
32. Garcia MJ, Palac RT, Malenka DJ, Terrel P, Plehn JF. Color M-mode Doppler flow propagation velocity is a relatively preload-independent index of left ventricular filling. *J Am Soc Echocardiogr* 1999;12:129-137.
33. Stugaard M, Smiseth O, Risøe C, Ihlen H. Intraventricular early diastolic filling during acute myocardial ischemia. Assessment by multigated color M-mode Doppler Echocardiography. *Circulation* 1993;88:2705-2713.
34. Garcia MJ, Smedira NG, Greenberg NL, et al. Color M-mode Doppler flow propagation velocity is a preload insensitive index of left ventricular relaxation: Animal and human validation. *J Am Coll Cardiol* 2000;35:201-8.

Vyšetření pravostranných oddílů a hodnocení tlaků v plicnici

35. Kitabatake A, Inoue M, Asao M, et al. Noninvasive evaluation of pulmonary hypertension by a pulsed Doppler technique. *Circulation* 1983;58:302-309.
36. Berger M, Haimowitz A, Van Tosh A, Berdoff RL, Goldberg E. Quantitative assessment of pulmonary hypertension in patients with tricuspid regurgitation using continuous wave Doppler ultrasound. *J Am Coll Cardiol* 1985;6:359-365.
37. Yock PG, Popp RL. Noninvasive estimation of right ventricular systolic pressure by Doppler ultrasound in patients with tricuspid regurgitation. *Circulation* 1984;70:657-662.
38. Lee RT, Lord CP, Plappert T, St John Sutton M. Prospective Doppler echocardiographic evaluation of pulmonary artery diastolic pressure in the medical intensive care unit. *Am J Cardiol* 1989;64:1366-1370.
39. Masuyama T, Kodama K, Kitabatake A, Sato H, Nanto S, Inoue M. Continuous-wave Doppler echocardiographic detection of pulmonary regurgitation and its application to noninvasive estimation of pulmonary artery pressure. *Circulation* 1986;74:484-492.
40. Kircher BJ, Himelman RB, Schiller NB. Noninvasive estimation of right atrial pressure from the inspiratory collapse of the inferior vena cava. *Am J Cardiol* 1990;66:493-496.
41. Hammarstrom E, Wranne B, Pinto FJ, Puryear J, Popp RL. Tricuspid annular motion. *J Am Soc Echocardiogr* 1991;4:131-9.

Kapitola 4: Echokardiografie u nemocných s ischemickou chorobou srdeční

1. Foster E, Cooper SG. Echocardiography in the coronary care unit: management of acute myocardial infarction, detection of complications, and prognostic implications. Otto CM (ed): *The Practice of Clinical Echocardiography*. Philadelphia. WB Saunders, 1997: 195-216.
2. Pearlman AS, Otto CM. Role of echocardiography in evaluating patients presenting to the emergency room with acute chest pain: diagnosis and patient triage. Otto CM (ed): *The Practice of Clinical Echocardiography*. Philadelphia. WB Saunders, 1997: 179-194.
3. Kishon Y, Iqbal A, Oh JK, et al. Evolution of echocardiographic modalities in detection of post-myocardial infarction ventricular septal defect and papillary muscle rupture: study of 62 patients. *Am Heart J* 1993;126:667-675.

4. Raitt MH, Kraft CD, Gardner CJ, et al. Subacute ventricular free wall rupture complicating myocardial infarction. *Am Heart J* 1993;126:946-955.
5. Visser CA, Kan G, Meltzer RS, et al. Incidence, timing, and prognostic value of left ventricular aneurysm formation after myocardial infarction: a prospective, serial echocardiographic study in 158 patients. *Am J Cardiol* 1986;57:729-732.
6. Asinger RW, Mikell FL, Elspeger J, Hodges M. Incidence of left ventricular thrombosis after acute transmural myocardial infarction. *N Engl J Med* 1981;305:297-302.
7. Kinch JW, Ryan TJ. Right ventricular infarction. *N Engl J Med* 1994;330:1211-1217.
8. Oury JH, Cleveland JC, Duran CG, Angell WW. Ischemic mitral valve disease: classification and systemic approach to management. *J Cardiac Surg* 1994; 9 (suppl 1): 262-273.
9. Carpentier A. Cardiac valve surgery - the „French correction.“ *J Thorac Cardiovasc Surg* 1983;86:323-337.
10. Armstrong VF, Pellika PA, Ryan T, et al. Stress echocardiography: Recommendations for performance and interpretation of stress echocardiography. *J Am Soc Echocardiogr* 1998;11:97-104.
11. Gottdiener JS. Overview of stress echocardiography: uses, advantages, and limitations. *Prog Cardiovasc Dis* 2001;43:315-334.
12. Geleijnse ML, Fioretti PM, Roelandt JR. Methodology, feasibility, safety and diagnostic accuracy of dobutamine stress echocardiography. *J Am Coll Cardiol* 1997;30:595-606.
13. Lualdi JC, Douglas PS. Echocardiography for the assessment of myocardial viability. *J Am Soc Echocardiogr* 1997;10:772-781.
14. Cigarroa CG, deFillipi CR, Brickner E, et al. Dobutamine stress echocardiography identifies hibernating myocardium and predicts recovery of left ventricular function after coronary revascularization. *Circulation* 1993;88:430-436.
15. Smart SC, Sawada S, Ryan T, et al. Low-dose dobutamine echocardiography detects reversible dysfunction after thrombolytic therapy of acute myocardial infarction. *Circulation* 1993;88:405-415.
16. Shan K, Nagueh SF, Zoghbi WA. Assessment of myocardial viability with stress echocardiography. *Cardiol Clin* 1999;17:539-553.
17. Senior R, Lahiri A. Role of dobutamine echocardiography in detection of myocardial viability for predicting outcome after revascularization in ischemic cardiomyopathy. *J Am Soc Echocardiogr* 2001;14:240-248.

Kapitola 5: Echokardiografie kardiomyopatií a myokarditid

Dilatační kardiomyopatie

1. Vanoverschelde J-LJ, 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.
2. Douglas PS, Morrow R, Ioli A, Reichek N. Left ventricular shape, afterload and survival in idiopathic dilated cardiomyopathy. *J Am Coll Cardiol* 1989;13:311-315.
3. Juilliere Y, Barbier G, Feldmann L, et al. Additional predictive value of both left and right ventricular ejection fraction on long-term survival in idiopathic dilated cardiomyopathy. *Eur Heart J* 1997;18:276-280.
4. Shah PM. Echocardiography in congestive or dilated cardiomyopathy. *J Am Soc Echocardiogr* 1988;1:20-30.
5. Pak PH, Kass DA. Assessment of ventricular function in dilated cardiomyopathies. *Curr Opin Cardiol* 1995;10:339-344.

Hypertrofická kardiomyopatie

6. Wei KS, Wigle ED, Rakowski H. Echocardiography in the evaluation and management of patients with hypertrophic cardiomyopathy. Otto CM (ed): *The Practice of Clinical Echocardiography*. Philadelphia, WB Saunders, 1997: 449-472.
7. Wiegle ED, Rakowski H, Kimball BP, Williams WG. Hypertrophic cardiomyopathy: Clinical spectrum and treatment. *Circulation* 1995;92:1680-1692.
8. Klues HG, Maron BJ, Dollar AL, Roberts WC. Diversity of structural mitral valve alterations in hypertrophic cardiomyopathy. *Circulation* 1992;85:1651-1660.
9. Nagueh SF, Lakkis NM, He ZX, et al. Role of myocardial contrast echocardiography during nonsurgical septal reduction therapy for hypertrophic obstructive cardiomyopathy. *J Am Coll Cardiol* 1998;32:225-229.

Restriktivní kardiomyopatie

10. Leung DY, Klein AL. Restrictive cardiomyopathy: Diagnosis and prognostic implications. Otto CM (ed): *The Practice of Clinical Echocardiography*. Philadelphia, WB Saunders, 1997:473-494.

Arytmogenní dysplázie pravé komory

11. Kisslo J. Two-dimensional echocardiography in arrhythmogenic right ventricular dysplasia. *Eur Heart J* 1989;10 (Suppl D):22-26.
12. Robertson JH, Bardy GH, German LD, Gallagher JJ, Kisslo J. Comparison of two-dimensional echocardiographic and angiographic findings in arrhythmogenic right ventricular dysplasia. *Am J Cardiol* 1985;55:1506-1508.

Myokarditidy

13. Pinamonti B, Alberti E, Cigalotto A, et al. Echocardiographic findings in myocarditis. *Am J Cardiol* 1988;62:285-291.
14. Felker GM, Boehmer JP, Hruban RH, et al. Echocardiographic findings in fulminant and acute myocarditis. *J Am Coll Cardiol* 2000;36:227-32.

Kapitola 6: Echokardiografie u nemocných s arteriální hypertenzí

1. Devereux RB, Pickering TG, Alderman MH, Chien S, Borer JS, Laragh JH. Left ventricular hypertrophy in hypertension. Prevalence and relationship to pathophysiologic variables. *Hypertension* 1987;9 [suppl II]: II-53 - II-60.
2. De Simone G, Devereux RB, Roman MJ, Alderman MH. Relation of obesity and gender to left ventricular hypertrophy in normotensive and hypertensive adults. *Hypertension* 1994;23:600-606.
3. Levy D, Savage DD, Garrison RJ, Anderson KM, Kannel WB, Castelli WP. Echocardiographic criteria for left ventricular hypertrophy: The Framingham Heart Study. *Am J Cardiol* 1987;59:956-960.
4. Schiller NB. Two-dimensional echocardiographic determination of left ventricular volume, systolic function and mass. Summary and discussion of the 1989 recommendations of the American Society of Echocardiography. *Circulation* 1991;84 [suppl I]: I-280 - I-287.
5. Reichek N, Helak J, Plappert T, St.John Sutton M, Weber KT. Anatomic validation of left ventricular mass estimates from clinical two-dimensional echocardiography: initial results. *Circulation* 1983;67:348-352.
6. Rakowski H, Appleton, Chan KL, et al. Canadian consensus recommendations for the measurement and reporting of diastolic dysfunction by echocardiography: from the investigators of

Consensus on Diastolic Dysfunction by Echocardiography. *J Am Soc Echocardiogr* 1996;9:736-60.

Kapitola 7: Hodnocení srdečních chlopní

1. Bonow RO, Carabello B, de Leon AC Jr, et al. ACC/AHA guidelines for the management of patients with valvular heart disease: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines (Committee on management of patients with valvular heart disease). *J Am Coll Cardiol* 1998;32:1486-1588.

Mitrální stenóza

2. Nichol PM, Gilbert BW, Kisslo JA. Two-dimensional echocardiographic assessment of mitral stenosis. *Circulation* 1977;55:120-128.
3. Wann LS, Weyman AE, Feigenbaum H, Dillon JC, Johnston KW, Eggleton RC. Determination of mitral valve area by cross-sectional echocardiography. *Ann Intern Med* 1978;88:337-341.
4. Martin RP, Rakowski H, Kleinman JH, Beaver W, London E, Popp RL. Reliability and reproducibility of two dimensional echocardiographic measurement of the stenotic mitral valve orifice area. *Am J Cardiol* 1979;42:560-568.
5. Hatle L, Angelsen B, Tromsdal A. Noninvasive assessment of atrioventricular pressure half-time by Doppler ultrasound. *Circulation* 1979;60:1096-1104.
6. Bryg RJ, Williams GA, Labovitz AJ, Aker U, Kennedy HL. Effect of atrial fibrillation and mitral regurgitation on calculated mitral valve area in mitral stenosis. *Am J Cardiol* 1986;57:634-638.
7. Karp K, Teien D, Bjerle P, Eriksson P. Reassessment of valve area determinations in mitral stenosis by pressure half-time method: impact of left ventricular stiffness and peak diastolic pressure difference. *J Am Coll Cardiol* 1989;13:594-599.
8. Cannan CR, Nishimura RA, Reeder GS, et al. Echocardiographic assessment of commissural calcium: a simple predictor of outcome after percutaneous mitral balloon valvotomy. *J Am Coll Cardiol* 1997;29:175-180.
9. Padiá LR, Abascal VM, Moreno PR, Weyman AE, Levine RA, Palacios IF. Echocardiography can predict the development of severe mitral regurgitation after percutaneous mitral valvuloplasty by the Inoue technique. *Am J Cardiol* 1999;83:1210-1213.
10. Wilkins GT, Weyman AE, Abascal VM, Block PC, Palacios IF. Percutaneous balloon dilatation of the mitral valve: an analysis of echocardiographic variables related to outcome and the mechanism of dilatation. *Br Heart J* 1988;60:299-308.
11. Cohen DJ, Kuntz RE, Gordon SPF, et al. Predictors of long-term outcome after percutaneous balloon mitral valvuloplasty. *N Engl J Med* 1992;327:1329-1335.
12. Carabello BA. Timing of surgery for mitral and aortic stenosis. *Cardiol Clin* 1991;9:229-238.
13. Reyes VP, Raju BS, Wynne J, et al. Percutaneous balloon valvuloplasty compared with open surgical commissurotomy for mitral stenosis. *N Engl J Med* 1994;331:961-967.
14. Carabello BA, Crawford FA Jr. Valvular heart disease. *N Engl J Med* 1997;337:32-41.
15. Henry WL, Griffith JM, Michaelis LL, et al. Measurement of mitral orifice in patients with mitral valve disease by real-time, two-dimensional echocardiography. *Circulation* 1975;51:827-831.
16. Abascal VM, Wilkins GT, O'Shea JP et al.

Mitrální regurgitace

17. Miyatake IK, Izumi S, Okamoto M, et al. Semiquantitative grading of severity of mitral regurgitation by real-time two-dimensional Doppler flow imaging technique. *J Am Coll Cardiol* 1986;7:82-8.

14 • Reference

18. Spain MG, Smith MD, Grayburn PA, Harlamert EA, DeMaria AN. Quantitative assessment of mitral regurgitation by Doppler color flow mapping: angiographic and hemodynamic correlations. *J Am Coll Cardiol* 1989;13:585-590.
19. Enriquez-Sarano M, Bailey KR, Seward JB, Tajik AJ, Krohn MJ, Mays JM. Quantitative Doppler assessment of valvular regurgitation. *Circulation* 1993;87:841-848.
20. Bargiggia G, Tronconi L, Sahn D, et al. A new method for quantitation of mitral regurgitation based on color flow Doppler imaging of flow convergence proximal to regurgitant orifice. *Circulation* 1991;84:1481-1489.
21. Vandervoort PM, Rivera JM, Dele D, et al. Application of color Doppler flow mapping to calculate effective regurgitant orifice area. An in vitro study and initial clinical observations. *Circulation* 1993;88:1150-1156.
22. Enriquez-Sarano M, Miller F, Hayes S, Bailey K, Tajik AJ, Seward JB. Effective mitral regurgitant orifice area: clinical use and pitfalls of the proximal isovelocity surface area method. *J Am Coll Cardiol* 1995;25:703-709.
23. Hall SA, Brickner E, Willet DL, Irani WN, Afridi I, Grayburn PA. Assessment of mitral regurgitation severity by Doppler color flow mapping of the vena contracta. *Circulation* 1997;95:636-642.
24. Schiller NB, Foster E, Redberg RF. Transesophageal echo in the evaluation of mitral regurgitation: The twenty-four signs of severe mitral regurgitation. *Cardiology Clinics* 1993;3:399-405.
25. Klein AL, Obarski TP, Stewart WJ, et al. Transesophageal Doppler echocardiography of pulmonary venous flow: A new marker of mitral regurgitation severity. *J Am Coll Cardiol* 1991;18:518-526.
26. Thomas L, Foster E, Schiller NB. Peak mitral inflow velocity predicts mitral regurgitation severity. *J Am Coll Cardiol* 1998;31:174-179.
27. Rokey R, Sterling LI, Zoghbi WA, et al. Determination of regurgitant fraction in isolated mitral or aortic regurgitation by pulsed Doppler two-dimensional echocardiography. *J Am Coll Cardiol* 1986;7:1273-1278.
28. Carpentier A. Cardiac valve surgery – The “French Correction“. *J Thorac Cardiovasc Surg* 1983;86:323-327.
29. Kumar A, Kumar M, Duran CMG. A revised terminology for recording surgical findings of the mitral valve. *J Heart Valve Dis* 1995;4:70-75.
30. Chitwood WR Jr. Mitral valve repair: An odyssey to save the valves. *J Heart Valve Dis* 1998;7:255-261.
31. Shah PM, Raney AA, Duran CMG, Oury JH. Multiplane transesophageal echocardiography: a roadmap for mitral valve repair. *J Heart Valve Dis* 1999;8:625-629.

Aortální stenóza

32. Hatle L, Angelsen BA, Tromsdal A. Non-invasive assessment of aortic stenosis by Doppler ultrasound. *Br Heart J* 1980;43:284-292.
33. Galan A, Zoghbi WA, Quinones MA. Determination of severity of valvular aortic stenosis by Doppler echocardiography and relation of findings to clinical outcome and agreement with hemodynamic measurements determined at cardiac catheterization. *Am J Cardiol* 1991;67:1007-1012.
34. Currie PJ, Seward JB, Reeder GS, et al. Continuous-wave Doppler echocardiographic assessment of severity of calcific aortic stenosis: a simultaneous Doppler-catheter correlative study in 100 adult patients. *Circulation* 1985;71:1162-1169.
35. Pellikka PA, Nishimura RA, Bailey KR, Tajik AJ. The natural history of adults with asymptomatic, hemodynamically significant aortic stenosis. *J Am Coll Cardiol* 1990;15:1012-1017.

36. deFillipi CR, Willett DL, Brickner ME, et al. Usefulness of dobutamine echocardiography in distinguishing severe from nonsevere valvular aortic stenosis in patients with depressed left ventricular function and low transvalvular gradients. *Am J Cardiol* 1995;75:191-194.

Aortální regurgitace

37. Perry GJ, Helmcke F, Nanda C, Byard C, Soto B. Evaluation of aortic insufficiency by Doppler color flow mapping. *J Am Coll Cardiol* 1987;9:952-959.
38. Tribouilloy C, Avinée P, Feng Shen W, Rey JL, Slama M, Lesbre J. End diastolic flow velocity just beneath the aortic isthmus assessed by pulsed Doppler echocardiography: a new predictor of the aortic regurgitant fraction. *Br Heart J* 1991;65:37-40.
39. Dolan MS, Castello R, Vrain JAS, Aguirre F, Labovitz AJ. Quantification of aortic regurgitation by Doppler echocardiography: a practical approach. *Am Heart J* 1995;129:1014-1020.
40. Labovitz AJ, Ferrara RP, Kern MJ, et al. Quantitative evaluation of aortic insufficiency by continuous wave Doppler echocardiography. *J Am Coll Cardiol* 1986;8:1341-1347.
41. Teague SM, Heinsimer JA, Anderson JL, et al. Quantification of aortic regurgitation utilizing continuous wave Doppler ultrasound. *J Am Coll Cardiol* 1986;8:592-599.
42. Nagueh SF. Assessment of valvular regurgitation with Doppler echocardiography. *Cardiology Clinics* 1998;16, 405-419.
43. Smith MD, Xie GY. Current Echocardiography-Doppler approaches to the quantification of valvular regurgitation. *Cardiology in Review* 1998;6:168-181.
44. Baumgartner H, Kratzer H, Helmreich G, et al. Quantitation of aortic regurgitation by color coded cross-sectional Doppler echocardiography. *Eur Heart J* 1988;9:380-387.
45. Grayburn PA, Handshoe R, Smith MD, et al. Quantitative assessment of the hemodynamic consequences of aortic regurgitation by means of continuous wave Doppler recordings. *J Am Coll Cardiol* 1987;10:135-141.
46. Rokey R, Sterling LI, Zoghbi WA, et al. Determination of regurgitant fraction in isolated mitral or aortic regurgitation by pulsed Doppler two-dimensional echocardiography. *J Am Coll Cardiol* 1986;7:1273-1278.
49. Touche T, Pasquier R, Nitenberg A, et al. Assessment and follow-up of patients with aortic regurgitation by an updated Doppler echocardiographic measurement of the regurgitant fraction in the aortic arch. *Circulation* 1985;72:819-824.

Trikuspidální chlopeň a Chlopeň plicnice

48. Mügge A, Daniel WG, Hermann G, et al. Quantification of tricuspid regurgitation by Doppler color flow mapping after cardiac transplant. *Am J Cardiol* 1990;66:884-887.
49. Yock PG, Popp RL. Noninvasive estimation of right ventricular systolic pressure by Doppler ultrasound in patients with tricuspid regurgitation. *Circulation* 1984;70:657-662.
50. Maciel BC, Simpson IA, Valdes-Cruz LM, et al. Color flow Doppler mapping studies of „physiologic“ pulmonary and tricuspid regurgitation: evidence for true regurgitation as opposed to a valve closing volume. *J Am Soc Echocardiogr* 1991;4:589-597.
51. Simpson IA, de Belder MA, Kenny A, Martin M, Nihoyannopoulos P. How to quantitate valve regurgitation by echo Doppler techniques. *Br Heart J* 1995;73(Suppl.2):1-9.
52. Pearlman AS. Role of echocardiography in the diagnosis and evaluation of severity of mitral and tricuspid stenosis. *Circulation* 1991;84(Suppl.1):193-197.
53. Richards KL. Assessment of aortic and pulmonic stenosis by echocardiography. *Circulation* 1991;84(Suppl.1):182-187.
54. Rivera JM, Vandervoort PM, Mele D, et al. Value of proximal regurgitant jet size in tricuspid regurgitation. *Am Heart J* 1996;131:742-747.

55. Pellikka PA, Tajik AJ, Khandheria BK, et al. Carcinoid heart disease. Clinical and echocardiographic spectrum in 74 patients. *Circulation* 1993;87:1188-1196.
56. Hammarstrom E, Wranne B, Pinto FJ, Puryear J, Popp RL. Tricuspid annular motion. *J Am Soc Echocardiogr* 1991;4:131-9.

Chlopenní náhrady

57. Barbetseas J, Zoghbi WA. Evaluation of prosthetic valve function and associated complications. *Cardiology Clinics* 1998;16:505-530.
58. Khandheria BK, Seward JB, Oh JK, et al. Value and limitations of transesophageal echocardiography in assessment of mitral valve prostheses. *Circulation* 1991;83:1956-1968.
59. Daniel WG, Mugge A, Grote J, et al. Comparison of transthoracic and transesophageal echocardiography for detection of abnormalities of prosthetic and bioprosthetic valves in the mitral and aortic positions. *Am J Cardiol* 1993;71:210-215.
60. Mohr-Kahaly S, Kupferwasser I, Erbel R, et al. Value and limitations of transesophageal echocardiography in the evaluation of aortic prostheses. *J Am Soc Echocardiogr* 1993;6:12-20.
61. Kapur KK, Fan P, Nanda NC, Yoganathan AP, Goyal RG. Doppler color flow mapping in the evaluation of prosthetic mitral and aortic valve function. *J Am Coll Cardiol* 1989;13:1561-1571.
62. Lange HW, Olson JD, Pederson WR, et al. Transesophageal color Doppler echocardiography of the normal St.Jude Medical mitral valve prosthesis. *Am Heart J* 1991;122:489-494.
63. Pedersen WR, Walker M, Olson JD, et al. Value of transesophageal echocardiography as an adjunct to transthoracic echocardiography in evaluation of native and prosthetic valve endocarditis. *Chest* 1991;100:351-356.
64. Lowry RW, Zoghbi WA, Baker WB, Wray RA, Quinones MA. Clinical impact of transesophageal echocardiography in the diagnosis and management of infective endocarditis. *Am J Cardiol* 1994;73:1089-1091.
65. Jindani A, Neville EM, Venn G, Williams BT. Paraprosthetic leak: a complication of cardiac valve replacement. *J Cardiovasc Surg* 1991;32:503-508.
66. Rallidis LS, Moyssakis IE, Ikonomidis I, Nihoyannopoulos P. Natural history of early aortic paraprosthetic regurgitation: a five-year follow-up. *Am Heart J* 1999;138:351-357.
67. Olmos L, Salazar G, Barbetseas J, Quinones MA, Zoghbi WA. Usefulness of transthoracic echocardiography in detecting prosthetic mitral valve regurgitation. *Am J Cardiol* 1999;83:199-205.
68. Dzavik V, Cohen G, Chan KL. Role of transesophageal echocardiography in the diagnosis and management of prosthetic valve thrombosis. *J Am Coll Cardiol* 1991;18:1829-1833.
69. Barbetseas J, Nagueh SF, Pitsavos C, Toutozas PK, Quinones MA, Zoghbi WA. Differentiating thrombus from pannus formation in obstructed mechanical prosthetic valves: an evaluation of clinical, transthoracic and transesophageal echocardiographic parameters. *J Am Coll Cardiol* 1998;32:1410-1417.
70. Vandervoort PM, Greenberg NL, Pu M, Powell KA, Cosgrove DM, Thomas JD. Pressure recovery in bileaflet heart valve prostheses. *Circulation* 1995;92:3464-3472.
71. Chambers J, Fraser A, Lawford P, Nihoyannopoulos P, Simpson I. Echocardiographic assessment of artificial heart valves: British Society of Echocardiography position paper. *Br Heart J* 1994;71(Suppl.):6-14.

Kapitola 8: Onemocnění perikardu

1. Oh JK, Hatle LK, Seward JB, et al. Diagnostic role of Doppler echocardiography in constrictive pericarditis. *J Am Coll Cardiol* 1994;23:154-162.

2. Hatle LK, Appleton CP, Popp RL. Differentiation of constrictive pericarditis and restrictive cardiomyopathy by Doppler echocardiography. *Circulation* 1989;79:357-370.
3. Klein AL, Cohen GL, Pietrolungo JF, et al. Differentiation of constrictive pericarditis from restrictive cardiomyopathy by Doppler transesophageal echocardiographic measurements of respiratory variations in pulmonary venous flow. *J Am Coll Cardiol* 1993;22:1935-1943.
4. Appleton CP, Hatle LK, Popp RL. Central venous flow velocity patterns can differentiate constrictive pericarditis from restrictive cardiomyopathy [abstract]. *J Am Coll Cardiol* 1987;9:119A.
5. Garcia MJ, Rodriguez L, Ares M, Griffin BP, Thomas JD, Klein AL. Differentiation of constrictive pericarditis from restrictive cardiomyopathy: assessment of left ventricular diastolic velocities in longitudinal axis by Doppler tissue imaging. *J Am Coll Cardiol* 1996;27:108-114.
6. Pandian NG, Skorton DJ, Kieso RA, Kerber RE. Diagnosis of constrictive pericarditis by two-dimensional echocardiography: studies in an experimental model and in patients. *J Am Coll Cardiol* 1984;4:1164-1173.
7. Engel PJ, Fowler NO, Tei C, et al. M-mode echocardiography in constrictive pericarditis. *J Am Coll Cardiol* 1985;6:471-474.
8. D'Cruz IA, Dick A, Gross CM, Hand CR, Lalmalani GG. Abnormal left ventricular-left atrial posterior wall contour: a new two-dimensional echocardiographic sign in constrictive pericarditis. *Am Heart J* 1989;118:128-132.
9. Gibson TC, Grossman W, McLaurin LP, Moos S, Craige E. An echocardiographic study of the interventricular septum in constrictive pericarditis. *Br Heart J* 1976;38:738-743.
10. Shabetai R, Fowler NO, Gunteroth WG. The hemodynamics of cardiac tamponade and constrictive pericarditis. *Am J Cardiol* 1970;26:480-489.

Tamponáda srdeční

11. Appleton CP, Hatle LK, Popp RL. Cardiac tamponade and pericardial effusion: respiratory variation in transvalvular flow velocities studied by Doppler echocardiography. *J Am Coll Cardiol* 1988;11:1020-1030.
12. Armstrong WF, Schilt BF, Helper DJ, Dillon JC, Feigenbaum H. Diastolic collapse of the right ventricle with cardiac tamponade: an echocardiographic study. *Circulation* 1982;65:1491-1496.
13. Gillam LD, Guyer DE, Gibson TC, King ME, Marshall JE, Weyman AE. Hemodynamic compression of the right atrium: a new echocardiographic sign of cardiac tamponade. *Circulation* 1983;68:294-301.
14. Himelman RB, Kircher B, Rockey DC, Schiller NB. Inferior vena cava plethora with blunted respiratory response: a sensitive echocardiographic sign of cardiac tamponade. *J Am Coll Cardiol* 1988;12:1470-1477.
15. Singh S, Wann LS, Schuchard GH, et al. Right ventricular and right atrial collapse in patients with cardiac tamponade - a combined echocardiographic and hemodynamic study. *Circulation* 1984;70:966-971.

Kapitola 9: Endokarditidy

1. Yvorchuk KJ, Chan KL. Application of transthoracic and transesophageal echocardiography in the diagnosis and management of infective endocarditis. *J Am Soc Echocardiogr* 1994;14:294-308.
2. Lowry RW, Zoghbi WA, Baker WB, et al. Clinical impact of transesophageal echocardiography in the diagnosis and management of infective endocarditis. *Am J Cardiol* 1994;73:1089-1091.

3. Karalis DG, Bansal RC, Huack AJ, et al. Transesophageal echocardiographic recognition of subaortic complications in aortic valve endocarditis: clinical and surgical implications. *Circulation* 1992;86:353-362.
4. Mügge A, Daniel WG, Frank G, Lichten PR. Echocardiography in infective endocarditis: re-assessment of prognostic implications of vegetation size determined by the transthoracic and the transesophageal approach. *J Am Coll Cardiol* 1989;14:631-638.
5. Erbel R, Liu F, Ge J, et al. Identification of high-risk subgroups in infective endocarditis and the role of echocardiography. *Eur Heart J* 1995;16:588-602.
6. Lopez JA, Ross RS, Fishbein MC, Siegel RJ. Non-bacterial thrombotic endocarditis: A review. *Am Heart J* 1987;113:773-784.
7. Ryan EW, Bolger AF. Transesophageal echocardiography (TEE) in the evaluation of infective endocarditis. *Cardiol Clin* 2000;18:773-787.
8. Bach DS. Transesophageal echocardiographic (TEE) evaluation of prosthetic valves. *Cardiol Clin* 2000;18:751-771.

Kapitola 10: Intrakardiální útvary a jiné zdroje periferních embolizací

1. Reeder GS, Khandheria BK, Seward JB, Tajik AJ. Transesophageal echocardiography and cardiac masses. *Mayo Clin Proc* 1991;66:1101-1109.
2. Salcedo EE, Cohen GI, White RD, Davison MB. Cardiac tumors: diagnosis and management. *Curr Prob Cardiol* 1992;17:75-137.
3. Hancock EW. Neoplastic pericardial disease. *Clin Cardiol* 1990;8:673-682.
4. Klarich KW, Enriquez-Sarano M, Gura GM, et al. Papillary fibroelastoma: echocardiographic characteristics for diagnosis and pathologic correlation. *J Am Coll Cardiol* 1997;30:784-790.
5. Stratton JR, Lighty GW Jr, Pearlman AS, Ritchie JL. Detection of left ventricular thrombus by two-dimensional echocardiography: sensitivity, specificity, and causes of uncertainty. *Circulation* 1982;66:156-165.
6. Visser CA, Kan G, Meltzer RS, et al. Embolic potential of left ventricular thrombus after myocardial infarction: a two-dimensional echocardiographic study of 119 patients. *J Am Coll Cardiol* 1985;5:1276-1280.
7. Zabalgotia M, Halperin JL, Pearce LA, et al. Transesophageal echocardiographic correlates of clinical risk of thromboembolism in nonvalvular atrial fibrillation. *J Am Coll Cardiol* 1998;31:1622-1666.
8. Pearson AC, Labovitz AJ, Tatineni S, Gomez CR. Superiority of transesophageal echocardiography in detecting cardiac source of embolism in patients with cerebral ischemia of uncertain origin. *J Am Coll Cardiol* 1991;17:66-72.
9. DeRook FA, Comess KA, Albers GW, Popp RL. Transesophageal echocardiography in the evaluation of stroke. *Ann Intern Med* 1992;117:922-931.
10. Rodriguez C, Homma S, Di Tullio M. Transesophageal echocardiography in stroke. *Cardiol Rev* 2000;8:140-147.
11. Autore C, Cartoni D, Piccininno M. Multiplane transesophageal echocardiography and stroke. *Am J Cardiol* 1998;81(12A):79G-81G.

Kapitola 11: Onemocnění aorty

1. Tunick PA, Rosenzweig BP, Katz ES, et al. High risk for vascular events in patients with protruding aortic atheromas: a prospective study. *J Am Coll Cardiol* 1994;23:1085-1090.
2. Dressler FA, Craig WR, Castello R, et al. Mobile aortic atheroma and systemic emboli: effi-

- cacy of anticoagulation and influence of plaque morphology on recurrent stroke. *J Am Coll Cardiol* 1998;31:134-138.
3. The French Study of Aortic Plaques in Stroke Group. Atherosclerotic disease of the aortic arch as a risk factor for recurrent ischemic stroke. *N Engl J Med* 1996;334:1216-1221.
 4. Fazio GP, Redberg RF, Winslow T, Schiller NB. Transesophageal echocardiographically detected atherosclerotic aortic plaque is a marker for coronary artery disease. *J Am Coll Cardiol* 1993;21:144-150.
 5. Parthenakis F, Skolidis E, Simantirakis E, et al. Absence of atherosclerotic lesions in the thoracic aorta indicates absence of significant coronary artery disease. *Am J Cardiol* 1996;77:1118-1121.
 6. Mathew T, Nanda NC. Two-dimensional and Doppler echocardiographic evaluation of aortic aneurysm and dissection. *Am J Cardiol* 1984;54:379-385.
 7. Victor MF, Mintz GS, Kotler MN, et al. Two-dimensional echocardiographic diagnosis of aortic dissection. *Am J Cardiol* 1981;48:1155-1159.
 8. Ballal RS, Nanda NC, Gatewood R, et al. Usefulness of transesophageal echocardiography in assessment of aortic dissection. *Circulation* 1991;84:1903-1914.
 9. Harris KM, Braverman AC, Guitierrez FR, et al. Transesophageal echocardiographic and clinical features of aortic intramural hematoma. *J Thorac Cardiovasc Surg* 1997;114:619-626.
 10. Moscowitz HD, David M, Moscowitz C, et al. Penetrating atherosclerotic aortic ulcers: the role of transesophageal echocardiography in the diagnosis and clinical management. *Am Heart J* 1993;126:745-747.
 11. Tunick PA, Kronzon I. Atheromas of the thoracic aorta: clinical and therapeutic update. *J Am Coll Cardiol* 2000;35:545-554.
 12. Erbel R. Disease of the thoracic aorta. *Heart* 2001;86: 227-234.

Kapitola 12: Vrozené vývojové vady srdce v dospělosti

1. Sahn DJ, Anderson F. Two-dimensional anatomy of the heart. New York, John Wiley & Sons, 1982.
2. Perloff JK, Child JS. Congenital heart disease in adults (ed 2). Philadelphia, WB Saunders, 1998.
3. McNamara DG. The adult with congenital heart disease. *Curr Probl Cardiol* 1989;14:63-114.
4. Houston A, Hillis S, Lilley S, Richens T, Swan L. Echocardiography in adult congenital heart disease. *Heart* 1998;80 (Suppl 1):S12-26.
5. Marelli AJ, Child JS, Perloff JK. Transesophageal echocardiography in congenital heart disease in the adult. *Cardiol Clin* 1993;11:505-520.
6. Miller-Hance WC, Silverman NH. Transesophageal echocardiography (TEE) in congenital heart disease with focus on the adult. *Cardiol Clin* 2000;18:861-892.
7. Mahoney LT. Acyanotic congenital heart disease. Atrial and ventricular septal defects, atrio-ventricular canal, patent ductus arteriosus, pulmonic stenosis. *Cardiol Clin* 1993;11:603-616.
8. Child JS. Echo-Doppler and color-flow imaging in congenital heart disease. *Cardiol Clin* 1990;8:289-313.

Kapitola 13: Nové echokardiografické techniky

Color kinesis

1. Krahwinkel W, Haltern G, Gulker H. Echocardiographic quantification of regional left ventricular wall motion with color kinesis. *Am J Cardiol* 2000;85:245-250.
2. Bednarz J, Vignon P, Mor-Avi VV, et al. Color kinesis: principles of operation and technical guidelines. *Echocardiography* 1998 ;15:21-34.

Tkáňová dopplerovská echokardiografie

3. Waggoner AD, Bierig SM. Tissue Doppler imaging: a useful echocardiographic method for the cardiac sonographer to assess systolic and diastolic ventricular function. *J Am Soc Echocardiogr* 2001;14:1143-1152.
4. Garcia-Fernandez MA, Azevedo J, Moreno M, Arroja I, Zamorano J, Caso P. Doppler tissue imaging. *Rev Port Cardiol* 2001;20 (Suppl 1):I33-47.
5. Trambaiolo P, Tonti G, Salustri A, Fedele F, Sutherland G. New insights into regional systolic and diastolic left ventricular function with tissue Doppler echocardiography: from qualitative analysis to a quantitative approach. *J Am Soc Echocardiogr* 2001;14:85-96.
6. McDicken WN, Sutherland GR, Moran CM, Gordon LN. Colour Doppler velocity imaging of the myocardium. *Ultrasound Med Biol* 1992;18:651-654.
7. Hatle L, Sutherland GR. Regional myocardial function — a new approach. *Eur Heart J* 2000;21:1337-1357.

Automatické měření srdečního výdeje

13. Sun JP, Yang XS, Qin JX, Greenberg NL, et al. Quantification of mitral regurgitation by automated cardiac output measurement: experimental and clinical validation. *J Am Coll Cardiol* 1998;32:1074-1082.
14. Sun JP, Pu M, Fouad FM, Christian R, Stewart WJ, Thomas JD. Automated cardiac output measurement by spatiotemporal integration of color Doppler data: in vitro and clinical validation. *Circulation* 1997;95:932-939.

Kontrastní echokardiografie

15. Mulvagh SL, DeMaria AN, Feinstein SB, et al. Contrast echocardiography: current and future applications. *J Am Soc Echocardiogr* 2000;13:331-342.
16. Maurer G. Contrast echocardiography: clinical utility. *Echocardiography* 2000;17:S5-9.
17. Colonna P, Cadeddu C, Chen L, Iliceto S. Clinical applications of contrast echocardiography. *Am Heart J* 2001 Feb;141(Suppl. 2):S36-44.
18. Laskar R, Grayburn PA. Assessment of myocardial perfusion with contrast echocardiography at rest and with stress: an emerging technology. *Prog Cardiovasc Dis* 2000;43:245-258.
19. Gunda M, Mulvagh SL. Recent advances in myocardial contrast echocardiography. *Curr Opin Cardiol* 2001;16:231-239.
20. Kaul S. Myocardial contrast echocardiography: basic principles. *Prog Cardiovasc Dis* 2001;44:1-11.
21. Villanueva FS. The use of myocardial contrast echocardiography in clinical evaluation after myocardial infarction. *Coron Artery Dis* 2000;11:235-242.