

Bibliography

1. Waugh, S.L., *et al.* Electromagnetic measurement of cardiac output during exercise in the horse. *Am J Vet Res* 1980; 41(5): p. 812-15.
2. Gratz, I., J. Kraidin, and M. Afshar. Continuous cardiac output by pulse waveform analysis. *Int Anesth Clinics* 1993; 31(3): p. 87-98.
3. Warner, H.R., *et al.* Quantitation of beat-to-beat changes in stroke volume from the aortic pulse contour in man. 1953; 5: p. 495-507.
4. Wesseling, K.H., B. deWit, and J.E.W. Beneken. Aterial haemodynamic parameters derived from noninvasively recorded pulsewaves, using parameter estimation. *Med Biol Engin* 1973; 11(Nov.): p. 724-731.
5. Wesseling, K.H., *et al.* A simple device for the continuous measurement of cardiac output. *Adv Cardiovasc Phys* 1983; 5 (Part II): p. 16-52.
6. Gratz, I., *et al.* Continuous noninvasive cardiac output as estimated from the pulse contour curve. *J Clin Monit* 1992; 8: p. 20-27.
7. Mantin, R., and Ramsay, J.G. Cardiac output technologies. *Int Anesthesiol Clin* 1996; 34(3): p. 79-107.
8. Dodge, H.T. and W.A. Baxley. Left ventricular volume and mass and their significance in heart disease. *Am J Cardiol* 1969; 23: p. 528-537.
9. Dodge, H.T., *et al.* The use of biplane angiocardiology for the measurement of left ventricular volume in man. *Am Heart J* 1960; 60(5): p. 762-776.
10. Dodge, H.T., R.E. Hay, and H. Sandler. An angiocardiological method for directly determining left ventricular stroke volume in man. *Circ Res* 1962; 11: p. 739-745.
11. Greene, D.G., *et al.* Estimation of left ventricular volume by one-plane cineangiography. *Circ* 1967; 35: p. 61-69.

12. Dodge, H.T., *et al.* Usefulness and limitations of radiographic methods for determining left ventricular volume. *Am J Cardiol* 1966; 18: p. 10-24.
13. Sandler, H. and H.T. Dodge. The use of single plane angiocardigrams for the calculation of left ventricular volume in man. *Am Heart J* 1968; 75(3): p. 325-334.
14. Davidson, C.J., R.F. Fishman, and R.O. Bonow. Cardiac Catheterization. In: E. Braunwald, ed. *Heart Disease*. Philadelphia: W.B. Saunders Co., 1997; p. 1996.
15. Popp, R.L., *et al.* Estimation of right and left ventricular size by ultrasound. *Am J Cardiol* 1969; 24(Oct.): p. 523-30.
16. Feigenbaum, H., *et al.* Ultrasound measurements of the left ventricle: a correlative study with angiocardiology. *Arch Intern Med* 1972; 129: p. 461-67.
17. Koblik, P.D. and W.J. Hornof. Diagnostic Radiology and Nuclear Cardiology. *Vet Clin North Amer: Equine Pract* 1985; 1(2): p. 289-309.
18. Wilson, M.A., *Textbook of Nuclear Medicine*. 1998, Philadelphia: Lippincott-Raven. 631.
19. Wackers, F.J., R. Soufer, and B.L. Zaret. Nuclear Cardiology. In: E. Braunwald, ed. *Heart Disease*. Philadelphia: W.B. Saunders, 1997; p. 1996.
20. Port, S. First Pass Radionuclide angiography. In: D.J. Skorton, ed. *Cardiac Imaging*. Philadelphia: WB Saunders, 1996; p. 1218.
21. Harbert, J.C., W.C. Eckelman, and R.D. Neumann, eds. *Nuclear Medicine: Diagnosis and Therapy*. . 1996, Thieme Medical Publishers, Inc.: New York. 1256.
22. Gerson, M.C., *Cardiac Nuclear Medicine*. 1997, New York: McGraw-Hill. 830.
23. Handelsman, H. *Measuring Cardiac Output by Electrical Bioimpedance*, . 1991, Agency for Health Care Policy and Research. p. 13.
24. Moore, F.A., J.B. Haenel, and E.E. Moore. Alternatives to Swan-Ganz cardiac output monitoring. *Surg Clin North Amer* 1991; 71(4): p. 699-721.

25. Ovsyshcher, I. and S. Furman. Impedance cardiography for cardiac output estimation in pacemaker patients: review of the literature. *PACE* 1993; 16(7, Part I): p. 1412-1422.
26. Fick, A. Uber die messung des blutquantums in den herzventrikeln. *Sitz der Physik-Medges Wurtzberg* 1870; 16.
27. Gardner, P.E. Cardiac Output: Theory, technique, and troubleshooting. *Crit Care Nurs Clin NA* 1989; 1(3): p. 577-587.
28. Taylor, B.C. and D.B. Sheffer. Understanding techniques for measuring cardiac output. *Biomed Instr & Tech* 1990(May/June): p. 188-197.
29. Warburton, D.E.R., *et al.* Reliability and validity of measures of cardiac output during incremental to maximal aerobic exercise. *Sports Med* 1999; 27(1): p. 23-41.
30. Baim, D.S. and W. Grossman, *Cardiac Catheterization, Angiography, and Intervention*. 1996, Baltimore: Williams & Wilkins. 879.
31. Orr, J.A., *et al.* Cardiopulmonary measurements in nonanesthetized, resting normal ponies. *Am J Vet Res* 1975; 36(11): p. 1667-70.
32. Amend, J.F., *et al.* Hemodynamic studies in conscious domestic ponies. *J Surg Res* 1975; 19(2): p. 107-13.
33. Hillidge, C.J. and P. Lees. Cardiac output in the conscious and anaesthetised horse. *Equine Vet J* 1975; 7(1): p. 16-21.
34. Kubo, K., T. Senta, and O. Sugimoto. Cardiac output in the Thoroughbred horse. *Exp Rep Equine Health Lab* 1973; 10: p. 84-89.
35. Bergsten, G. Blood pressure, cardiac output, and blood-gas tension in the horse at rest and during exercise. *Acta Vet Scand [Suppl]* 1974; 48(1): p. 1-88.
36. Guyton, A.C. and J.E. Hall, *Textbook of Medical Physiology*. 1996, Philadelphia: W.B. Saunders Co. 1148.
37. Linton, R.A.F., D.M. Band, and K.M. Haire. A new method of measuring cardiac output in man using lithium dilution. *Br J Anesth* 1993(71): p. 262-266.

38. Linton, R.A., Young, L. E., Marlin, D. J., Blissitt, K. J., Brearley, J. C., Jonas, M. M., O'Brien, T. K., Linton, N. W., and D.M. Band, Hollingworth, C., and Jones, R. S. Cardiac output measured by lithium dilution, thermodilution, and transesophageal Doppler echocardiography in anesthetized horses. *Am J Vet Res* 2000; 61(7): p. 731-7. [Record as supplied by publisher].
39. Corley, K.T.T. *Validation of a new method of determining cardiac output in neonatal foals.*, in *Veterinary Medical Sciences*. 2001, Virginia Polytechnic Institute and State University: Leesburg. p. 75.
40. Young, L.E., Blissitt, K. J., Bartram, D. H., Clutton, R. E., Molony, V., and Jones, R. S. Measurement of cardiac output by transoesophageal Doppler echocardiography in anaesthetized horses: comparison with thermodilution. *Br J Anaesth* 1996; 77(6): p. 773-80.
41. Marr, C.M. Equine echocardiography--sound advice at the heart of the matter. *Br vet j* 1994; 150(6): p. 527-545.
42. Feigenbaum, H., *Echocardiography*. 5 ed. 1994, Baltimore: Lea & Febiger. 695.
43. Schuster, A.H. and N.C. Nanda. Doppler echocardiographic measurement of cardiac output: comparison with a non-golden standard. *Am J Cardiol* 1984; 53(1): p. 257-259.
44. Northridge, D.B., *et al.* Non-invasive determination of cardiac output by Doppler echocardiography and electrical bioimpedance. *Br Heart J* 1990; 63: p. 93-97.
45. Blissitt, K.J., Young, L. E., Jones, R. S., Darke, P. G., and Utting, J. Measurement of cardiac output in standing horses by Doppler echocardiography and thermodilution. *Equine Vet J* 1997; 29(1): p. 18-25.
46. Fenger, C.K., J.J. Bertone, and J.D. Bonagura. Cardiac output in foals: comparison of Doppler echocardiography and thermodilution measurement techniques., in *9th Annual Forum, American College of Veterinary Internal Medicine*. 1991;
47. Long, K.J., *et al.* Determination of cardiac output in the standing horse by Doppler echocardiography and

- thermodilution., in *30th Congress, British Equine Veterinary Association*. 1991;
48. Young, L.E., *et al.* Effects of dopamine, dobutamine, and detomidine on selected Doppler echocardiographic variables in the horse., in *30th Congress, British Equine Veterinary Association*. 1991;
49. Reef, V.B., *et al.* Pulsed-wave Doppler evaluation of intracardiac blood flow in 30 clinically normal Standardbred horses. *Am J Vet Res* 1989; 50(1): p. 75-83.
50. Young, L.E., *et al.* Feasibility of transoesophageal echocardiography for evaluation of left ventricular performance in anaesthetised horses. *Eq Vet J Suppl* 1995; 19: p. 63-70.
51. Rasis, A.L., *et al.* A comparison of the haemodynamic effects of isoflurane and halothane anaesthesia in horses. *Equine Vet J* 2000; 32(4): p. 318-26.
52. Young, L.E., Blissitt, K. J., Clutton, R. E., and Molony, V. Temporal effects of an infusion of dobutamine hydrochloride in horses anesthetized with halothane. *Am J Vet Res* 1998; 59(8): p. 1027-32.
53. Young, L.E., Blissitt, K. J., Clutton, R. E., and Molony, V. Haemodynamic effects of a sixty minute infusion of dopamine hydrochloride in horses anaesthetised with halothane. *Equine Vet J* 1998; 30(4): p. 310-6.
54. Young, L.E., *et al.* Temporal effects of an infusion of dopexamine hydrochloride in horses anesthetized with halothane. *Am J Vet Res* 1997; 58(5): p. 516-523.
55. Young, L.E., and Scott, G. R. Measurement of cardiac function by transthoracic echocardiography: day to day variability and repeatability in normal Thoroughbred horses. *Equine Vet J* 1998; 30(2): p. 117-22.
56. Weisel, R.D., R.L. Berger, and H.B. Hechtman. Measurement of cardiac output by thermodilution. *New Eng J Med* 1975; 292(13): p. 682-684.
57. Nadeau, S. and W.H. Noble. Limitations of cardiac output measurements by thermodilution. *Can Anaesth Soc J* 1986; 33(6): p. 780-784.

58. Pavek, K., *et al.* Measurement of cardiac output by thermodilution with constant rate injection of indicator. *Circ Res* 1964; 15: p. 311-319.
59. Fegler, G. Measurement of cardiac output in anaesthetized animals by a thermo-dilution method. *Q J Exp Physiol* 1954; 39: p. 153-164.
60. Ganz, W., *et al.* A new technique for measurement of cardiac output by thermodilution in man. *Am J Cardiol* 1971(27): p. 392-396.
61. Forrester, J.S., *et al.* Thermodilution cardiac output determination with a single flow-directed catheter. *Am Heart J* 1972; 83(3): p. 306-311.
62. Sanmarco, M.E., *et al.* Measurement of cardiac output by thermal dilution. *Am J Cardiol* 1971; 28: p. 54-58.
63. Hoel, B.L. Some aspects of the clinical use of thermodilution in measuring cardiac output. *Scand J Clin Lab Invest* 1978; 38: p. 383-388.
64. Nishikawa, T. and S. Dohi. Errors in the measurement of cardiac output by thermodilution. *Can J Anaesth* 1993; 40(2): p. 142-153.
65. Jansen, R.C. The thermodilution method for the clinical assessment of cardiac output. *Intensive Care Med* 1995; 21: p. 691-697.
66. Stetz, C.W., Miller, R.G., Kelly, G.E., and Raffin, T.A. Reliability of the thermodilution method in the determination of cardiac output in clinical practice. *Am Rev Respir Dis* 1982; 126: p. 1001-1004.
67. Mackenzie, J.D., N.E. Haites, and J.M. Rawles. Method of assessing the reproducibility of blood flow measurement factors influencing the performance of thermodilution cardiac output computers. *Br Heart J* 1986; 55(1): p. 14-24.
68. Russell, A.E., *et al.* Automated non-invasive measurement of cardiac output by the carbon dioxide rebreathing method: comparisons with dye dilution and thermodilution. *Br Heart J* 1990; 63(3): p. 195-199.
69. Esperson, K., *et al.* Comparison of cardiac output measurement techniques: thermodilution, Doppler, CO₂

- rebreathing and the direct Fick method. *Acta Anaesthesiol Scand* 1995; 39(2): p. 245-251.
70. Hsia, C.C.W. Respiratory function of hemoglobin. *N Engl J Med* 1998; 338(4): p. 239-247.
71. van Grondelle, A., *et al.* Thermodilution method overestimates low cardiac output in humans. *Am J Physiol* 1983; 245(4): p. H690-692.
72. Levett, J.M. and R.L. Replogle. Thermodilution cardiac output: a critical analysis and review of the literature. *J Surg Res* 1979; 27: p. 392-404.
73. Medley, R.S., T.D. DeLapp, and D.G. Fisher. Comparability of the thermodilution cardiac output method: proximal injectate versus proximal infusion lumens. *Heart Lung* 1992; 21: p. 12-17.
74. Pesola, G.R. and G. Carlon. Thermodilution cardiac output: proximal lumen versus right ventricular port. *Crit Care Med* 1991; 19: p. 563-565.
75. Cockcroft, S. and P.S. Withington. The measurement of right ventricular ejection fraction by thermodilution. A comparison of values obtained using different injectate ports. *Anaesthesia* 1993; 48: p. 312-314.
76. Pesola, H.R. and G.R. Pesola. Room-temperature thermodilution cardiac output. Central venous vs side port. *Chest* 1993; 103: p. 339-341.
77. Fronek, A. and V. Ganz. Measurement of flow in single blood vessels including cardiac output by local thermodilution. *Circ Res* 1960; 8: p. 175-182.
78. Dunlop, C.I., *et al.* Thermodilution estimation of cardiac output at high flows in anesthetized horses. *Am J Vet Res* 1991; 52(11): p. 1893-7.
79. Woods, M., R.N. Scott, and A.H. Harken. Practical considerations for the use of a pulmonary artery thermistor catheter. *Surgery* 1976; 79(4): p. 469-475.
80. Bilfinger, T.V., C. Lin, and C.E. Anagnostopoulos. In vitro determination of accuracy of cardiac output measurements by thermal dilution. *J Surg Res* 1982; 33(5): p. 409-414.

81. Runciman, W.B., A.H. Ilsley, and J.G. Roberts. An evaluation of thermodilution cardiac output measurement using the Swan-Ganz catheter. *Anaesth Intensive Care* 1981; 9(5): p. 202-220.
82. Singh, R., *et al.* Simultaneous determinations of cardiac output by thermal dilution, fiberoptic, and dye-dilution methods. *Amer J Cardiol* 1970; 25: p. 579-587.
83. Wessel, H.U., *et al.* Limitations of thermal dilution curves for cardiac output determinations. *J Appl Physiol* 1971; 30(5): p. 643-652.
84. Hosie, K.H. Thermal-dilution technics. *Circ Res* 1962; 10: p. 491-504.
85. Wetmore, L.A., *et al.* Mixed venous oxygen tension as an estimate of cardiac output in anesthetized horses. *Am J Vet Res* 1987; 48(6): p. 971-6.
86. Muir, W.W., R.T. Skarda, and D.W. Milne. Estimation of cardiac output in the horse by thermodilution techniques. *Am J Vet Res* 1976; 37(6): p. 697-700.
87. Elkayam, U., *et al.* Cardiac output by thermodilution technique: effects of injectate's volume and temperature on accuracy and reproducibility in the critically ill patient. *Chest* 1983; 84: p. 418-422.
88. Evonuk, E., *et al.* Cardiac output measured by thermal dilution of room temperature injectate. *J Appl Physiol* 1961; 16: p. 271-275.
89. Pelletier, C. Cardiac output measurement by thermodilution. *Can J surg* 1979; 22(4): p. 347-350.
90. Nelson, L. and H. Anderson. Patient selection for iced vs room temperature injectate for thermodilution cardiac output determination. *Crit Care Med* 1985; 13(3): p. 182-184.
91. Daily, P., T. Kinney, and T. Steinke. Thermodilution cardiac output using room and ice-temperature injectate: comparison with the Fick method. *Heart Lung* 1987; 16(3): p. 713-714.
92. Powner, D. and J. Snyder. In vitro comparison of six commercially available thermodilution cardiac output systems. *Med Instrum* 1978; 12(2): p. 122-127.

93. Nishikawa, T. and S. Dohi. Slowing of heart rate during cardiac output measurement by thermodilution. *Anesthesiology* 1982; 57: p. 538-539.
94. Nishikawa, T. and S. Dohi. Hemodynamic status susceptible to slowing of heart rate during thermodilution cardiac output determination in anesthetized patients. *Crit Care Med* 1990; 18: p. 841-844.
95. Nishikawa, T. and A. Namiki. Mechanism for slowing of heart rate and associated changes in pulmonary circulation elicited by cold injectate during thermodilution cardiac output determination in dogs. *Anesthesiology* 1988; 68: p. 221-225.
96. Nishikawa, T. and S. Dohi. Haemodynamic changes associated with thermodilution cardiac output determination during myocardial ischaemia or pulmonary oedema in dogs. *Acta Anaesthesio Scand* 1992; 36: p. 679-683.
97. Todd, M.M. Atrial fibrillation induced by the right atrial injection of cold fluids during thermodilution cardiac output determination: a case report. *Anesthesiology* 1983; 59: p. 253-255.
98. Harris, A.P., *et al.* The slowing of sinus rhythm during thermodilution cardiac output determination and the effect of altering injectate temperature. *Anesthesiology* 1985; 63: p. 540-541.
99. Shellock, F.G. and M.S. Riedinger. Reproducibility and accuracy of using room-temperature vs ice-temperature injectate for thermodilution cardiac output determination. *Heart Lung* 1983; 12(2): p. 175-176.
100. Woog, R.H. and D.B. McWilliam. A comparison of methods of cardiac output measurement. *Anaesth Intensive Care* 1983; 11: p. 141-146.
101. Pearl, R.G., *et al.* Effect of injectate volume and temperature on thermodilution cardiac output determination. *Anesthesiology* 1986; 64: p. 798-801.
102. Bilfinger, T.V., C.Y. Lin, and C.E. Anagnostopoulos. In vitro determination of accuracy of cardiac output

- measurements by thermal dilution. *J Surg Res* 1982; 33: p. 409-414.
103. Sommers, M.S., S.L. Woods, and M.A. Courtade. Issues in methods and measurement of thermodilution cardiac output. *Nurs Res* 1993; 42(4): p. 228-233.
104. Ganz, W. and H.J.C. Swan. Measurement of blood flow by thermodilution. *Am J Cardiol* 1972; 29: p. 241-246.
105. Riedinger, M.S. and F.G. Shellock. Technical aspects of the thermodilution method for measuring cardiac output. *Heart & Lung* 1984; 13(3): p. 215-221.
106. Jansen, J.R.C. and A. Versprille. Improvement of cardiac output estimation by the thermodilution method during mechanical ventilation. *Intensive Care Med* 1986; 12: p. 71-79.
107. Snyder, J.V. and D.J. Powner. Effects of mechanical ventilation on the measurement of cardiac output by thermodilution. *Crit Care Med* 1982; 10(10): p. 677-682.
108. Jansen, J.R.C., *et al.* An adequate strategy for the thermodilution technique in patients during mechanical ventilation. *Intensive Care Med* 1990; 16: p. 422-425.
109. Jansen, J.R.C., J.m. Bogaard, and A. Versprille. Extrapolation of thermodilution curves obtained during a pause in artificial ventilation. *J Appl Physiol* 1987; 63(4): p. 1551-1557.
110. Jansen, J.R.C. and A. Versprille. Improvement of cardiac output estimation by the thermodilution method during mechanical ventilation. *Intensive Care Med* 1986; 12: p. 71-79.
111. Runciman, W.B., Ilsley, A.H., and Roberts, J.G. An evaluation of thermodilution cardiac output measurement using the Swan-Ganz catheter. *Anaesth Intens Care* 1981; 9: p. 208-220.
112. Stevens, J.H., *et al.* Thermodilution cardiac output measurement. Effects of the respiratory cycle on its reproducibility. *J Am Med Assoc* 1985; 253(15): p. 2240-2242.

113. Okamoto, K., *et al.* Effects of intermittent positive-pressure ventilation on cardiac output measurements by thermodilution. *Crit Care Med* 1986; 14(11): p. 977-980.
114. Mizuno, Y., Aida, H., Hara, H., Fujinaga, T., and Hagio, M. Comparison of methods of cardiac output measurements determined by dye dilution, pulsed Doppler echocardiography and thermodilution in horses. *J Vet Med Sci* 1994; 56(1): p. 1-5.
115. Vliers, A.C.A.P., K.R. Visser, and W.G. Zijlstra. Analysis of indicator distribution in the determination of cardiac output by thermal dilution. *Cardiovasc Res* 1973; 7: p. 125-132.
116. Moodie, D.S., *et al.* Measurement of cardiac output by thermodilution: development of accurate measurements at flows applicable to the pediatric patient. *J Surg Res* 1978; 25(4): p. 305-311.
117. Norris, S.L., *et al.* Thermodilution cardiac output - an in vitro model of low flow states. *Crit Care Med* 1986; 14(1): p. 57-59.
118. White, S.W., R.J. McRitchie, and W.L. Porges. A comparison between thermodilution, electromagnetic and Doppler methods for cardiac output measurement in the rabbit. *Clin Exper Pharmacol Physiol* 1974; 1: p. 175-182.
119. Branthwaite, M.A. and R.D. Bradley. Measurement of cardiac output by thermal dilution in man. *J Appl Physiol* 1968; 24(3): p. 434-438.
120. Balcon, R. and S. Oram. Measurement of right ventricular end-systolic and end-diastolic volumes by the thermodilution technique. *Br Heart J* 1968; 30: p. 690-695.
121. Morady, F., B.H. Brundage, and H.J. Gelberg. Rapid method for determination of shunt ratio using a thermodilution technique. *Am Heart J* 1983; 106(2): p. 369-373.
122. Hedvall, G. The applicability of the thermodilution method for determination of pulmonary blood flow and pulmonary vascular resistance in infants and children with

- ventricular septal defects. *Scand J Clin Lab Invest* 1978; 38: p. 581-585.
123. Freed, M.D. and J.f. Keane. Cardiac output measured by thermodilution in infants and children. *J Pediatr* 1978; 92(1): p. 39-42.
124. Swan, H.J.C., J. Zapata-Diaz, and E.H. Wood. Dye dilution curves in cyanotic congenital heart disease. *Circ* 1953; 8: p. 70-81.
125. Hedvall, G., I. Kjellmer, and T. Olsson. An experimental evaluation of the thermodilution method for determination of cardiac output and of intracardiac right-to-left shunts. *Scan J Clin Lab Invest* 1973; 31: p. 61-68.
126. Wetzel, R.C. and T.W. Latson. Major errors in thermodilution cardiac output measurement during rapid volume infusion. *Anesthesiology* 1985; 62: p. 684-687.
127. Yelderman, M.L., *et al.* Continuous thermodilution cardiac output measurement in intensive care unit patients. *J Cardiothorac Vasc Anesth* 1992; 6(3): p. 270-274.
128. Yelderman, M. Continuous cardiac output by thermodilution. *Int Anesth Clinics* 1993; 31(3): p. 127-140.
129. Yelderman, M. Continuous measurement of cardiac output with the use of stochastic system identification techniques. *J Clin Monit* 1990; 6(4): p. 322-332.
130. Boldt, J., *et al.* Is continuous cardiac output measurement using thermodilution reliable in the critically ill patient? *Crit Care Med* 1994; 22(12): p. 1913-1918.
131. Lichtenthal, P.R. and L.D. Wade. Accuracy of the Vigilance/Intellicath Continuous Cardiac Output System during and after cardiac surgery. *Anesthesiology* 1993; 79(3A): p. A474.
132. Noto, T.J., *et al.* Cardiac catheterization 1990: A report of the registry of the society for cardiac angiography and interventions. *Cathet Cardiovasc Diag* 1991; 24: p. 75-83.

133. Baim, D.S. and W. Grossman, *Cardiac Catheterization, Angiography, and Intervention*. 2000, Baltimore: Williams & Wilkins. 943.
134. Wyman, R.M., *et al.* Current complications of diagnostic and therapeutic cardiac catheterization. *J Amer Coll Cardiol* 1988; 12(6): p. 1400-1406.
135. Gasthuys, F., de Moor, A., and Parmentier, D. Influence of dopamine and dobutamine on the cardiovascular depression during a standard halothane anaesthesia in dorsally recumbent, ventilated ponies. *Zentralbl Veterinarmed A* 1991; 38(7): p. 494-500.
136. Weber, J.M., *et al.* Cardiac output and oxygen consumption in exercising Thoroughbred horses. *Am J Physiol* 1987; 253(6 Pt 2): p. R890-5.
137. Hinchcliff, K.W., K.H. McKeever, and W.W.I. Muir. Hemodynamic effects of atropine, dobutamine, nitroprusside, phenylephrine, and propranolol in conscious horses. *J Vet Int Med* 1991; 5: p. 80-86.
138. Bueno, A.C., Moore, R. M., Seahorn, T. L., Cornick-Seahorn, J., and Koch, C. E. Transient weakness, ataxia, and recumbency associated with catheterization of the right side of the heart in three horses. *J Equine Vet Sci* 1999; 19(11): p. 719-722.
139. Reeves, J.T. and J.E. Leathers. Circulatory changes following birth of the calf and the effect of hypoxia. *Circ Res* 1964; 15: p. 343-354.
140. Brown, C.M. and J.R. Holmes. Phonocardiography in the horse: 1. the intracardiac phonocardiogram. *Equine Vet J* 1979; 11(1): p. 11-18.
141. Hall, L.W. Oxygenation of pulmonary vein blood in conscious and anaesthetised ponies. *Equine Vet J* 1979; 11(2): p. 71-75.
142. Brown, C.M. and J.R. Holmes. Haemodynamics in the horse: 1. pressure pulse contours. *Equine Vet J* 1978; 10(3): p. 188-194.
143. Littlejohn, A. and F. Bowles. Studies on the physiopathology of chronic obstructive pulmonary disease

- in the horse: II. right heart haemodynamics. *Onderstepoort J Vet Res* 1980; 47: p. 187-192.**
- 144. Brown, C.M. and J.R. Holmes. Assessment of myocardial function in the horse: 2. experimental findings in resting horses. *Equine Vet J* 1979; 11(4): p. 248-255.**
- 145. Amory, H., *et al.* Technical and methodological requirements for reliable haemodynamic measurements in the unsedated calf. *Vet Res Commun* 1992; 6: p. 391-401.**
- 146. Hedenstierna, G., *et al.* Ventilation-perfusion relationships in the standing horse: an inert gas elimination study. *Equine Vet J* 1987; 19(6): p. 514-519.**
- 147. Drummond, W.H., *et al.* Pulmonary vascular reactivity of the newborn pony foal. *Equine Vet J* 1989; 21(3): p. 181-185.**
- 148. Hubbell, J.A.E., W.W. Muir, and J.S. Gaynor. Cardiovascular effects of thoracic compression in horses subjected to euthanasia. *Equine Vet J* 1993; 25(4): p. 282-284.**
- 149. Still, J. and C.A. van der Merwe. Cardiovascular and respiratory effects of detomidine in isoflurane-anaesthetised horses. *J S Afr Vet Assoc* 1996; 67(4): p. 199-203.**
- 150. Gasthuys, F., A. DeMoor, and D. Parmentier. Time-related responses to a constant-dose halothane anaesthesia in dorsally recumbent ventilated ponies. *Zentralbl Veterinarmed A* 1990; 37(7): p. 492-498.**
- 151. Schlipf, J.W., *et al.* Lesions associated with cardiac catheterization and thermodilution cardiac output determination in horses., in *5th International Congress of Veterinary Anesthesia*. 1994;**
- 152. Bhatt, D.R., *et al.* Accuracy of echocardiography in assessing left ventricular dimensions and volume. *Circ* 1978; 57(4): p. 699-707.**
- 153. Voros, K., J.R. Holmes, and C. Gibbs. Anatomical validation of two-dimensional echocardiography in the horse. *Equine Vet J* 1990; 22(6): p. 392-397.**

154. O'Callaghan, M.W., *et al.* Comparison of echocardiographic and autopsy measurements of cardiac dimensions in the horse. *Equine Vet J* 1985; 17(5): p. 361-368.
155. Sahn, D.J., DeMaria, A., Kisslo, J., and Weyman, A. Recommendations regarding quantitation in M-mode echocardiography: results of a survey of echocardiographic measurements. *Circ* 1978; 58(6): p. 1072-83.
156. Burggraf, G.W. and J.O. Barker. Left ventricular volume changes after amyle nitrite and nitroglycerine in man as measured by ultrasound. *Circ* 1974; 49: p. 136-143.
157. Popp, R.L. and D.C. Harrison. Ultrasonic cardiac echography for determining stroke volume and valvular regurgitation. *Circ* 1970; 41(3): p. 493-502.
158. Uehara, Y., M. Koga, and M. Takahashi. Determination of cardiac output by echocardiography. *J Vet Med Sci* 1995; 57(3): p. 401-407.
159. Tucker, R.L., *et al.* Selected echocardiographic parameters and right sided pressures of the mule, in *Fourth International Conference on Equine Exercise Physiology*. 1994;
160. Kronik, G., J. Slany, and H. Mosslacher. Comparative value of eight M-mode echocardiographic formulas for determining left ventricular stroke volume. A correlative study with thermodilution and left ventricular single-plane cineangiography. *Circ* 1979; 60(6): p. 1308-1316.
161. Marr, C.M., ed. *Cardiology of the Horse*. . 1999, W.B. Saunders: London. 342.
162. Felner, J.M., *et al.* Sources of variability in echocardiographic measurements. *Am J Cardiol* 1980; 45(May): p. 995-1004.
163. Lord, P.F. and M.A. Croft. Accuracy of formulae for calculating left ventricular volumes of the equine heart. *Eq Vet J Suppl* 1990; 9: p. 53-56.
164. Voros, K., J.R. Holmes, and C. Gibbs. Left ventricular volume determination in the horse by two-dimensional

- echocardiography: an in vitro study. *Equine Vet J* 1990; 22(6): p. 398-402.
165. Helak, J.W. and N. Reichek. Quantitation of human left ventricular mass and volume by two-dimensional echocardiography: in vitro anatomic validation. *Circ* 1981; 63(6): p. 1398-1407.
166. Schnittger, I., *et al.* Standardized intracardiac measurements of two-dimensional echocardiography. *J Am Coll Cardiol* 1983; 2(5): p. 934-938.
167. Woythaler, J.N., *et al.* Accuracy of echocardiography versus electrocardiography in detecting left ventricular hypertrophy: comparison with postmortem mass measurements. *J Am Coll Cardiol* 1983; 2(2): p. 305-311.
168. Fortuin, N.J., *et al.* Determination of left ventricular volumes by ultrasound. *Circ* 1971; 44: p. 575-584.
169. Pombo, J.F., B.L. Troy, and R.O. Russell. Left ventricular volumes and ejection fraction by echocardiography. *Circ* 1971; 43: p. 480-490.
170. Murray, J.A., W. Johnston, and J.M. Reid. Echocardiographic determination of left ventricular dimension, volumes, and performance. *Am J Cardiol* 1972; 30: p. 252-257.
171. Popp, R.L., *et al.* Sources of error in calculation of left ventricular volumes by echocardiography. *Amer J Cardiol* 1973; 31: p. 152.
172. Ghoshal, N.G., *Equine Heart and Arteries*. Sisson & Grossman's Anatomy of the Domestic Animals, ed. R. Getty. Vol. 1. 1975, Philadelphia: W.B. Saunders Co. 554-618.
173. Kriz, N.G., D.R. Hodgson, and R.J. Rose. Changes in cardiac dimensions and indices of cardiac function during deconditioning in horses. *Am J Vet Res* 2000; 61(12): p. 1553-60.
174. Sampson, S.N., Jacobson, R. L., Sande, R. D., Susumi, C. J., Larntz, K. J., Tucker, R. L., and Bayly, W. M. Reproducibility and repeatability of M-mode echocardiographic measurements collected from 25 normal horses. *J Equine Vet Sci* 1999; 19(1): p. 51-57.

175. Sampson, S.N., Tucker, R.L., and Bayly, W.M. Relationship between VO₂max, heart score, and echocardiographic measurements obtained at rest and immediately following maximal exercise in Thoroughbred horses, in *Fifth International Conference on Equine Exercise Physiology*. 1998;
176. Paull, K.S., *et al.* Echocardiographic changes with endurance training, in *Second International Conference on Equine Exercise Physiology*. 1986;
177. Kriz, N.G. and R.J. Rose. Repeatability of standard transthoracic echocardiographic measurements in horses. *Aust Vet J* 2002; 80(6): p. 362-370.
178. Teichholz, L.E., *et al.* Problems in echocardiographic volume determinations: echocardiographic-angiographic correlations in the presence or absence of asynergy. *Am J Cardiol* 1976; 37(January): p. 7-11.
179. Yeh, H.-C., F. Winsberg, and E.N. Mercer. Echographic aortic valve orifice dimension: its use in evaluating aortic stenosis and cardiac output. *J Clin Ultrasound* 1973; 1(3): p. 182-189.
180. Lee, F.C.S., L. Talbot, and J.A. Abbott. Echocardiographic determination of cardiac output from mitral or aortic valve motion. *Circ Suppl II* 1976; 54: p. II-84.
181. Lalani, A.V. and S.J.K. Lee. Echocardiographic measurement of cardiac output using the mitral valve and aortic root echo. *Circ* 1976; 54: p. 738-743.
182. Kingsley, B. Stroke volume and cardiac output by echocardiography. *J Audio Engin Soc* 1970; 18: p. 692.
183. Feigenbaum, H., *et al.* Left ventricular stroke volume by ultrasound. *Circ* 1969; 40(Suppl III):p. 111-79.
184. Lee, Y.H., Clarke, K. W., Alibhai, H. I., and Song, D. Effects of dopamine, dobutamine, dopexamine, phenylephrine, and saline solution on intramuscular blood flow and other cardiopulmonary variables in halothane-anesthetized ponies. *Am J Vet Res* 1998; 59(11): p. 1463-72.

- 185. Raisis, A.L., et al. Measurements of hindlimb blood flow recorded using Doppler ultrasound during administration of vasoactive agents in halothane-anesthetized horses. *Vet radiol ultrasound* 2000; 41(1): p. 64-72.**
- 186. Pellikka, P.A., et al. Normal stroke volume and cardiac output response during dobutamine stress echocardiography in subjects without left ventricular wall motion abnormalities. *Amer J Cardiol* 1995; 76: p. 881-886.**
- 187. Schwinn, D.A. Cardiac Pharmacology. In: F.G. Estafanous, P.G. Barash, and J.G. Reeves, eds. *Cardiac Anesthesia: Principles and Clinical Practice*. Philadelphia: Lippincott Williams & Wilkins, 2002; p. 1035.**
- 188. Swanson, C.R., et al. Hemodynamic responses in halothane-anesthetized horses given infusions of dopamine or dobutamine. *Amer J Vet Res* 1985; 46(2): p. 365-370.**
- 189. Sonnenblick, E.H., T.H. LeJemtel, and W.H. Frishman. Inotropic Agents. In: W.H. Frishman, E.H. Sonnenblick, and D.A. Sica, eds. *Cardiovascular Pharmacotherapeutics*. New York: McGraw-Hill, 2003; p. 1072.**
- 190. Robertson, S.A., et al. Metabolic, hormonal, and hemodynamic changes during dopamine infusions in halothane anesthetized horses. *Vet Surg* 1996; 25(1): p. 88-97.**
- 191. Plumb, D.C., *Veterinary Drug Handbook*. 4 ed. 2002, Ames: Iowa State University Press. 960.**
- 192. Comparisons, F.a., *Drug Facts and Comparisons*. 2002, St. Louis: Facts and Comparisons. 2205.**
- 193. Sarazan, R.D., et al. Cardiovascular effects of detomidine, a new alpha 2-adrenoceptor agonist, in the conscious pony. *J Vet Pharmacol Ther* 1989; 12(4): p. 378-88.**
- 194. MacDonald, E., and Virtanen, R. Review of the pharmacology of medetomidine and detomidine: two chemically similar alpha-2 adrenoreceptor agonists used as veterinary sedatives. In: C.E. Short, ed. *Animal Pain*. New**

- York: Churchill Livingstone 181-200, 1992; p. 181-191, 198-199.
195. Muir, W.W., Wagner, A.E., and Hinchcliff, K. W. Cardiorespiratory and MAC-reducing effects of alpha-2 adrenoreceptor agonists in horses. In: C.E. Short, ed. *Animal Pain*. New York: Churchill Livingstone, 1992; p. 201-212.
196. Wagner, A.E., Muir, W. W., and Hinchcliff, K. W. Cardiovascular effects of xylazine and detomidine in horses. *Am J Vet Res* 1991; 52(5): p. 651-7.
197. Nollett, H., *et al.* Use of right ventricular pressure increase rate to evaluate cardiac contractility in horses. *Amer J Vet Res* 1999; 60(12): p. 1508-1512.
198. Wagner, A.E.D., C.I., Heath, R.B., Turner, A.S., and Trotter, G.W. Hemodynamic function during neurectomy in halothane-anesthetized horses with or without constant dose detomidine infusion. *Vet Surg* 1992; 21(3): p. 248-255.
199. Taylor, P.M., and Luna, S.P.L. Total intravenous anesthesia in ponies using detomidine, ketamine, and guaifenesin: pharmacokinetics, cardiopulmonary and endocrine effects. *Res Vet Sci* 1995; 59(1): p. 17-23.
200. Salonen, S., Vaha-Vahe, T., Vainio, O., and Vakkuri, O. Single-dose pharmacokinetics of detomidine in the horse and cow. *J Vet Pharmacol Therap* 1989; 12: p. 65-72.
201. Robertson, J.T., and Muir, W. W. A new analgesic drug combination in the horse. *Am J Vet Res* 1983; 44(9): p. 1667-9.
202. Robertson, J.T., W.W. Muir, and R. Sams. Cardiopulmonary effects of butorphanol tartrate in horses. *Am J Vet Res* 1981; 42(1): p. 41-4.
203. Rutkowski, J.A., Eades, S. C., and Moore, J. N. Effects of xylazine butorphanol on cecal arterial blood flow, cecal mechanical activity, and systemic hemodynamics in horses. *Am J Vet Res* 1991; 52(7): p. 1153-8.
204. Steffey, E.P. and D. Howland. Cardiovascular effects of halothane in the horse. *Am J Vet Res* 1978; 39(4): p. 611-5.

- 205. Steffey, E.P., et al. Circulatory and respiratory responses of spontaneously breathing, laterally recumbent horses to 12 hours of halothane anesthesia. *Am J Vet Res* 1993; 54(6): p. 929-36.**
- 206. Steffey, E.P., et al. Effect of body posture on cardiopulmonary function in horses during five hours of constant-dose halothane anesthesia. *Am J Vet Res* 1990; 51(1): p. 11-6.**
- 207. Grosenbaugh, D.A. and W.W. Muir. Cardiorespiratory effects of sevoflurane, isoflurane, and halothane anesthesia in horses. *Am J Vet Res* 1998; 59(1): p. 101-6.**
- 208. Stegmann, G.F. and A. Littlejohn. The effect of lateral and dorsal recumbency on cardiopulmonary function in the anaesthetised horse. *J S Afr Vet Assoc* 1987; 58(1): p. 21-7.**