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References for the Acute Care Cardiac Self Assessment Module

A note on resources:

- Elsevier texts are available to you at a 10% discount with no shipping fees. Visit www.pncb.org and log in to access the Elsevier discount portal.
- Check your hospital library for availability of the resources listed. Most will offer interlibrary loan service if a text or journal is unavailable in their collection.
- If you are a member of the American Association of Critical-Care Nurses (AACN), you have access to CINAHL, a literature database, available at their website: www.aacn.org.

Cardiac Acute Care SAE: Reference List

Textbooks:

Park, MK. (2006) Pediatric Cardiology for Practitioners, 5th ed. Mosby, St. Louis.

Vetter, VL. (2006) Pediatric Cardiology: The Requisites in Pediatrics. Mosby/Elsevier, Philadelphia.

McMillan J, Feigin R, DeAngelis J & Jones M.(Ed), (2006) Oski's Pediatric Principle and Practice . Lippincott Williams & Wilkins, Philadelphia

Mavroudis, C., Backer, C. (2003). Pediatric Cardiac Surgery. Mosby, Philadelphia. PA

Kliegman RM, Behrman RE, Jenson HB, and Stanton BF. Eds. (2007) Nelson Textbook of Pediatrics, 18th ed. Saunders Elsevier, Philadelphia.

Perkin RM, Anas NG, and Swift JD. (2007) Pediatric Hospital Medicine: Textbook of Inpatient Management, Lippincott, Williams and Wilkins, Philadelphia.

Wheeler D, Wong H and Shanley T. (2007) Pediatric Critical Care Medicine: Basic Science and Clinical Evidence Springer, Cambridge.

Nichols DG, Cameron DE, Greeley WJ, Ungerleider MD and Spevak MD. (2006) Critical Heart Disease In Infants and Children. Mosby, Chicago.

Fuhrman, B & Zimmerman, JJ. (2005) Pediatric Critical Care. Mosby, Chicago.

Slonim AD & Murray, MP. (2006) Pediatric Critical Care Medicine. Lippincott, Williams and Wilkins, Philadelphia.

Taketomo CK, Hodding JH & Kraus DM., eds. (2007) Pediatric Dosage Handbook, 14th ed. Lexicomp, Hudson, Ohio.

Osborn, L., DeWitt, T., First, L., & Zenel, J. Eds.,(2005) Pediatrics. Philadelphia: Elsevier Mosby.

Content Areas

Cardiac Assessment

Objective:

1. Through the use of physical exam techniques, radiological studies and hemodynamic monitoring, identify findings of cardiovascular compromise or congenital heart disease.

Weber M. Pulsus Alternans: A Case Study. *Critical Care Nurse*, 2003;23(3): 51-54.
assessment

Shaw, E.G. & Gold, M. (2005, July 7). Electrical Alternans, Sec. 1-11. Retrieved November 20, 2006, from <http://www.emedicine.com/med/topic645.html>

Bush, DM. Evaluating Cardiovascular presentations: What does an Electrocardiogram have to offer? *Pediatric Annals*. 34(11); 2005: 858 – 869.

Lidegran MK., Mosskin M., Ringertz HG. Cranial CT for diagnosis of intracranial complications in adult and pediatric patients during ECMO: clinical benefits in diagnosis and treatment. *Acad Radiol* 14(1): 2007;62-71.

Congenital Defects

Objectives

1. Identify clinical signs and symptoms of several congenital heart defects, such as ALCAPA, tetralogy of fallot and transposition of the great vessels.
2. List diagnostic features and supportive management techniques of specific congenital defects.
3. Associate potential cardiac disease/defects with genetic diagnoses such as Crouzon and Marfan syndromes.

Silberbach, M & Hannon, D. Presentation of congenital heart disease in the neonate and young infant. *Pediatrics in Review*. 28(4); 2007: 123 – 129.

McMahon CJ, Penny DJ, Nelson DP, et al. Preterm infants with congenital heart disease and bronchopulmonary dysplasia: postoperative course and outcome after cardiac surgery. *Pediatrics*. 2005;116:423-430.

Colan SD; Lipshultz SE; Lowe AM; Sleeper LA; Messere J; Cox GF, et al. Epidemiology and cause specific outcome of hypertrophic cardiomyopathy in children: findings from the pediatric cardiomyopathy registry. *Circulation*. 115(6); 2007: 773-781.

Yetman AT & McCrindle BW. Management of pediatric hypertrophic cardiomyopathy. *Current Opinion in Cardiology* 20(2):2005: 80-83.

Ford, J.W. (2006). Neonatal ECMO: Current controversies and trends. *Neonatal Network* 25(4), 229-238.

Maron, BJ. Hypertrophic cardiomyopathy in childhood. *Pediatric Clinics of North America*. 51(5); 2004 1305 – 1341.

Cardiovascular Surgery

Objectives:

1. Compare surgical correction to catheterization procedures for congenital cardiac defect repair.
2. Identify potential post-operative complications from varying cardiac surgical procedures.
3. List possible rationale for acute rejection following heart transplantation.

Bar Ziv SM, MCCrindle BW, & West LJ. Outcomes of pediatric patients bridge to heart transplantation from extracorporeal membrane oxygenation support. *ASAIO J* 53(1): 2007;97-102.

Bauer J., Thul J., Valeske K. et al. (2005). Perioperative management in pediatric heart transplantation. *Thorac Cardiovasc Surg*, 53, Supple2:S155-S158.

Bruce Martin, C., Shaw, A., Gal, J. et al. (2005). The Comparison and Validity of Troponin I Assay System in Diagnosing Myocardial Infarction Injury after Surgical Coronary Revascularization. *Journal of Cardiothoracic and Vascular Anesthesia*, (19)3, 288-293.

Ratnasamy, C., Kinnamon, DD, Lipshultz, SE and Rusconi, P. Neurohormonal and inflammatory activation and heart failure in children. *American Heart Journal*. 155(3); 2008: 527-533. available online at Medscape, <http://www.medscape.com/viewarticle/571012> , accessed October 7, 2008

Heart Transplantation, Medscape on-line: <http://www.emedicine.com/ped/TOPIC2797.HTM>, accessed October 7, 2008

Hunt, SA & Haddad, F. Changing face of heart transplantation. *J Am Coll Cardiology*. 52(8); 2008; 587-598. available online: <http://www.medscape.com/viewarticle/577657>, accessed October 7, 2008.

Delaney JW, Moltedo JM, Dziura JD, et al. Early post operative arrhythmias after pediatric cardiac surgery. *Journal of Thoracic and Cardiovascular Surgery*. 131(6); 2006: 1296-1300.

Gabrys CA. (2005). Pediatric cardiac transplants: A clinical update. *Journal of Pediatric Nursing*, 20(2), 139-143.

Kirklin JK. (2005). Is biopsy proven cellular rejection an important clinical consideration in heart transplantation? *Current Opinion in Cardiology*, 20, 127-131.

LeRoy S, Elixson EM, O'Brien P, Tong E, Turpin S, Uzark K. Recommendations for preparing children and adolescents for invasive cardiac procedures: a statement from the American Heart Association pediatric nursing subcommittee of the council on cardiovascular nursing in collaboration with the council on cardiovascular diseases of the young. *Circulation*. Nov. 2003; 2550 – 2564.

Dixon V; Macauley C; Burch M; Sebire NJ, Unsuspected rejection episodes on routine surveillance endomyocardial biopsy post heart transplantation in pediatric patients. *Pediatric Transplant*; 11(3): 2007; 286-290

Mahle WT., Vincent RN., Berg AM., & Kanter KR. (2005). Provastin therapy is associated with reduction in coronary allograft vasculopathy in pediatric heart transplantation. *J of Heart and Lung Transplantation*, 24, 63-66.

McKiernan CA, Lieberman SA. Circulatory Shock in Children: An Overview. *Pediatr Rev.* 2005;26(12):445-453.

McMahon CJ, Penny DJ, Nelson DP, et al. Preterm infants with congenital heart disease and bronchopulmonary dysplasia: postoperative course and outcome after cardiac surgery. *Pediatrics.* 2005;116:423-430.

Congestive Heart Failure/Cardiac Tamponade

Objective:

1. Recognize signs and symptoms and discuss treatment modalities for congestive heart failure and cardiac tamponade.

Cohen S, Springer C, Avital A, et al. Amino-Terminal pro-brain-type natriuretic peptide: heart or lung disease in pediatric respiratory distress. *Pediatrics.* 2005;115:1347-50.

Colan SD; Lipshultz SE; Lowe AM; Sleeper LA; Messere J; Cox GF, et al. Epidemiology and cause specific outcome of hypertrophic cardiomyopathy in children: findings from the pediatric cardiomyopathy registry. *Circulation.* 115(6); 2007: 773-781.

Ratnasamy, C., Kinnamon, DD, Lipshultz, SE and Rusconi, P. Neurohormonal and inflammatory activation and heart failure in children. *American Heart Journal.* 155(3); 2008: 527-533.
available online at Medscape, <http://www.medscape.com/viewarticle/571012> , accessed October 7, 2008

Gessler P; Knirsch W; Schmitt B; Rousson V; von Eckardstein A. Prognostic values of plasma N-terminal pro-brain natriuretic peptide in children with congenital heart defects and open heart surgery. *J Pediatrics.* 148(3): 2006: 372-376.

Valley VT. & Fly CA. (2006). Pericarditis and cardiac tamponade. *Emedicine.com* (5/12/2008)

YarlagaddaC, Hout WM, Habib SN Cardiac tamponade *emedicine.com* (5/24/2006)

Hypertension

Objectives:

1. Identify the physiological rationale for primary and secondary hypertension.
2. List appropriate oral pharmacotherapy for pediatric hypertension.
3. Identify clinical findings and management of pediatric hypertensive crisis.

Chiolero A, Bovet P, Paradis G, Paccaud F. Has blood pressure increased in children in response to the obesity epidemic? *Pediatrics.* 2007;119(3):545-553

Feld LG & Corey H. Hypertension in childhood. *Pediatrics in Review.* 28(8); 2007: 283-319.

Patel HP & Mitsnefes M. (2005). Advances in the pathogenesis and management of hypertensive crisis. *Current Opinions in Pediatrics,* 17, 210-214.

Suresh, S, Mahajan, P, Kamat, D. Emergency management of pediatric hypertension. *Clinical Pediatrics.* 44; 2005: 739-745.

Eddinger, LM & Spitzer, A. Hypertension *Emedicine* 1/29/2007

Sudden Cardiac Death

Objectives:

1. List potential predisposing factors for sudden cardiac death in children.
2. Discuss cardiac complications from the use of cocaine.
3. Compare dilated versus obstructive cardiomyopathy.
4. Identify fatal cardiac arrhythmias in children.

Cohen S, Springer C, Avital A, et al. Amino-Terminal pro-brain-type natriuretic peptide: heart or lung disease in pediatric respiratory distress. *Pediatrics*. 2005;115:1347-50.

Cox GF, Sleeper LA, Lowe AM, Towbin JA, Colan SD, Orav EJ, et al. Factors associated with establishing a causal diagnosis for children with cardiomyopathy. *Pediatrics*. 118(4); 2006: 1519-1531.

Substance Use: Cocaine. Emedicine, <http://www.emedicine.com/ped/TOPIC2666.HTM>, accessed: October 7, 2008.

Colan SD; Lipshultz SE; Lowe AM; Sleeper LA; Messere J; Cox GF, et al. Epidemiology and cause specific outcome of hypertrophic cardiomyopathy in children: findings from the pediatric cardiomyopathy registry. *Circulation*. 115(6); 2007: 773-781.

McKiernan CA, Lieberman SA. Circulatory Shock in Children: An Overview. *Pediatr Rev*. 2005;26(12):445-453.

Ratnasamy, C., Kinnamon, DD, Lipshultz, SE and Rusconi, P. Neurohormonal and inflammatory activation and heart failure in children. *American Heart Journal*. 155(3); 2008: 527-533. available online at Medscape, <http://www.medscape.com/viewarticle/571012> , accessed October 7, 2008

Ventricular fibrillation. Online emedicine: <http://www.emedicine.com/ped/TOPIC2398.HTM>, accessed October 7, 2008

Chest Pain

Objective:

1. Assess the pediatric patient and list differential diagnoses in a child with chest pain.

Cohen S, Springer C, Avital A, et al. Amino-Terminal pro-brain-type natriuretic peptide: heart or lung disease in pediatric respiratory distress. *Pediatrics*. 2005;115:1347-50.

Lane JR & Ben-Shacker G. Myocardial infarction in healthy adolescents. *Pediatrics*. 2007;120(4):e938-e943.

McKiernan CA, Lieberman SA. Circulatory Shock in Children: An Overview. *Pediatr Rev*. 2005;26(12):445-453.

Roddy, MG, Lange, PA, Klein, BL. Cardiac Trauma in Children. *Clinical Pediatric Emergency Medicine*, 2005; 6: 234-243.

EKG

Objectives:

1. Review EKG findings of children with long QT syndrome. Calculate the QTc from an EKG strip.
2. Identify supraventricular tachycardia on EKG and associated pediatric abnormalities.

Atkins DL & Kenney MA. Automated external defibrillators: safety and efficacy in children and adolescents. *Pediatric Clinics of North America*. 51(5); 2004 1443 - 1462.

Bush, DM. Evaluating Cardiovascular presentations: What does an Electrocardiogram have to offer? *Pediatric Annals*. 34(11); 2005: 858 – 869.

Colan SD; Lipshultz SE; Lowe AM; Sleeper LA; Messere J; Cox GF; et al. Epidemiology and cause-specific outcome of hypertrophic cardiomyopathy in children: findings from the Pediatric Cardiomyopathy Registry. *Circulation*. 115(6): 2007; 773-781.

Pulmonary Hypertension

Objective:

1. Identify the use and administration of prostacyclin in a child with pulmonary hypertension.

Lamoners AE., Hislop AA, Flynn Y, Haworth SG. (2007). Epoprostenol treatment in children with severe pulmonary hypertension, *Heart*, 93(6), 739-43.

Shah P & Ohlsson A. (2007). Sildenafil for pulmonary hypertension in neonates. Cochrane Database System Review

Cardiac Infectious Disease

Objectives:

1. List potential areas of cardiac infectious disease in pediatric patients, including viral and bacterial origins.
2. Discuss diagnosis, treatment and potential cardiac effects resulting from Kawasaki disease.

Branco RG, Russell RR. Should steroids be used in children with meningococcal shock? *Arch Dis Child*. 2005;90(11):1195-1196.

Checchia, PA & Kulik, TJ. Acute viral myocarditis: diagnosis. *Pediatric Critical Care Medicine, supp*. 7(6); 2006: S8 – S11.

Feltes, TF & Adatia, I. Immunotherapies for acute viral myocarditis in the pediatric patient. *Pediatric Critical Care Medicine, supp*. 7(6); 2006: S17 – S20.

Rodriguez-Cruz, E. Viral Myocarditis. *Emedicine*. (3/24/2006)

Melvin, A, Tobin, N, Zerr, D. Life-threatening viral disease and its treatment. In Furhman, Bradley P. and Jeffrey Zimmerman eds. Pediatric Critical Care 3rd ed. Mosby, Philadelphia; 2006:1361-69.

Milana, C. & Chandran, L. (2006). What's new in Kawasaki disease. *Contemporary Pediatrics*, 23(7), available on-line
<http://www.contemporarypediatrics.com/contpeds/article/articleDetail.jsp?id=356254&searchString=kawasaki%20disease>

Purdy, K. (2005). Infectious disorders of the heart. In Osborn, L., DeWitt, T., First, L., & Zenel, J. (Eds.) *Pediatrics*. Philadelphia: Elsevier Mosby, pp. 425-433.

Shekerdeman, L, et al. Acute viral myocarditis: Epidemiology and pathophysiology. *Pediatric Critical Care Medicine, supp.* 7(6); 2006: S2 – S7.

Valley VT. & Fly CA. (2006). Pericarditis and cardiac tamponade. *Emedicine.com* (6/15/06) reviewed 8/31/06

Miscellaneous

Objectives:

1. Identify treatment for a child with a calcium channel ingestion.
2. Describe the mechanism of injury to the heart when a child sustains a blow to the chest.
3. Discuss candidacy for Extracorporeal membrane oxygenation process and when to terminate the treatment.
4. Determine a class I indication for placement of a permanent pacemaker.
5. List indications, side effects and contraindications of commonly used cardiac medications.

Atkins DL & Kenney MA. Automated external defibrillators: safety and efficacy in children and adolescents. *Pediatric Clinics of North America*. 51(5); 2004 1443 - 1462.

Bar Ziv SM, MCCrindle BW, & West LJ. Outcomes of pediatric patients bridge to heart transplantation from extracorporeal membrane oxygenation support. *ASAIO J* 53(1): 2007;97-102.

Beardsmore CS, Westaway J, Killer H, et al. How does the changing profile of infants who are referred for Extracorporeal membrane oxygenation affect overall respiratory outcome. *Pediatrics*. 2007;120(4):e762-e768.

Branco RG, Russell RR. Should steroids be used in children with meningococcal shock? *Arch Dis Child*. 2005;90(11):1195-1196.

Hardart GE., Hardart KM., & Arnold JH. Intracranial hemorrhage in premature infants treated with extracorporeal membrane oxygenation correlates with gestational age. *Journal of Ped* 145: 2004;184-9.

Yabek, SM. Commotio cordis. *Emedicine*. 7/17/2007