

REFERENCES

- Acharya G, Sitras V, Maltau JM, Dahl LB, Kaaresen PI, Hanssen TA, Lunde P (2009):** Role of Pulse Oximetry in Examining Newborns for Congenital Heart Disease *Pediatrics*; 124 (2): 823-836.
- Agarwal R, Deorari AK, Paul VK. (2008):** Patent ductus arteriosus in preterm neonates. *Indian J Pediatr*; 75(3):277-280.
- Allegaert K, Rayyan M, Anderson BJ (2006):** Impact of ibuprofen administration on renal drug clearance in the first weeks of life *Methods Find Exp Clin Pharmacol*; 28(8):519-22.
- Aly H, Lotfy W, Badrawi N, Ghawas M, Abdel-Meguid IE and Hammad TA (2007):** Oral Ibuprofen and ductus arteriosus in premature infants. *Am J Perinatol*; 5:267-270.
- Ami SB, Sinkin RA, Glantz JC (2007):** Metaanalysis of the effect of antenatal indomethacin on neonatal outcomes. *Am J Obstet Gynecol*; 197:486.e1–496.e10.
- Archer N (1993):** Patent ductus arteriosus in the newborn. *Arch Dis Child*; 69(5):529-32.
- Baquero H, Soliz A, Neira F, Venegas ME, Sola A (2006):** Oral sildenafil in infants with persistent pulmonary hypertension of the newborn: a pilot randomized blinded study. *Pediatrics*; 117(4): 1077-83.

- Barrington K, Brion LP (2002):** Dopamine versus no treatment to prevent renal dysfunction in indomethacin-treated preterm newborn infants. *Cochrane Database Syst Rev*; (3):CD003213.
- Bell EF, Acarregui MJ (2001):** Restricted versus liberal water intake for preventing morbidity and mortality in preterm infants. *Cochrane Database Syst Rev*; (3):CD000503.
- Bhandari V, Zhou G, Bizzarro MJ, Buhimschi C, Hussain N, Gruen JR et al. (2009):** Genetic contribution to patent ductus arteriosus in the premature newborn. *Pediatrics*; 123(2):669-73.
- Bhat R, Vidyasagar D, Vadapalli M, Whalley C, Fisher E, Hastreiter A and Evans M (1979):** Disposition of indomethacin in preterm infants. *J Pediatr*; 95:313-6.
- Bose CL, Laughon MM (2007):** Patent ductus arteriosus: lack of evidence for common treatments. *Arch Dis Child Fetal Neonatal Ed*; 92(6):F498-502.
- Brash AR, Hicker DE, Graham TP (1981):** Pharmacokinetics of indomethacin in the neonate. Relation of plasma indomethacin levels to response of the ductus arteriosus. *N Engl J Med*; 305:67-72.
- Brenner L, Capeto G, Mosbeek G et al (1992):** Left to right arterial shunts with velocity enclosed cine nuclear magnetic resonance imaging. *J Am Coll Cardiol*; 20:1246-1250.
- Brooks JM, Travadi JN, Ptole SK (2005):** Is surgical ligation of patent ductus arteriosus necessary. The Western Australian experience of conservative management. *Arch Dis Child Fetal Neonatal Ed*; 90 (3):F235-F239.

- Brunton L, Goodman LS, Blumenthal D, Buxton L, I-Parker K (2008):** Pharmacology of non steroidal, anti-inflammatory agents
In: Shanahan JF and Naglier C(eds). Goodman & Gilman's
Manual of pharmacology and therapeutics.6th ed. McGraw- Hill
companies, PP: 446-454
- Cabrol D, Landesman R, Muller J, Uzan M, Sureau C and Saxena BB (1987):** Treatment of polyhydramnios with prostaglandin
synthetase inhibitor (indomethacin). Am J Obstet; 157:422-6.
- Carey BE (2003):** Patent ductus arteriosus. Newborn and Infant
Nursing Reviews; 3(4):126-135.
- Cassels DE (1973):** The Ductus Arteriosus. Springfield, Ill: Charles C.
Thomas.
- Celermajer DS, Cullen S, Deanfield JE (1993):** Impairment of
endothelium-dependent pulmonary artery relaxation in children
with congenital heart disease and abnormal pulmonary
hemodynamics Circulation; 87: 440–446.
- Chandran S, Haqueb ME, Wickramasinghe HT, Wint Z (2004):**
Use of magnesium sulphate in severe persistent pulmonary
hypertension of the newborn. J Trop Pediatr; 50(4):219-23
- Cherif A, Jabnoun S, Khrouf N (2007):** Oral ibuprofen in early
curative closure of patent ductus arteriosus in very premature
infants.Am J Perinatol; 24(6):339-45.
- Chotigeat U, Jirapapa K, Layangkool T (2003):** A comparison of
oral ibuprofen and intravenous indomethacin for closure of
patent ductus arteriosus in preterm infants. J Med Assoc Thai;
86 (3):563-569.

- Christmann V, Liem KD, Semmekrot BA, Van de Bor M (2002):** Changes in cerebral, renal and mesenteric blood flow velocity during continuous and bolus infusion of indomethacin. *Acta Paediatr*; 91:440-446.
- Clyman RI, Ballard PL and Sniderman S (1981):** Postnatal administration of betamethasone for prevention of PDA. *J Pediatr* ; 98:123-126.
- Clyman RI (2005):** Patent ductus arteriosus in preterm neonates. In: Taeusch HW, Ballard RA, (eds). *Avery's diseases of the newborn*, 8th ed. WB Saunders; P:816-826.
- Clyman RI, Chan CY, Mauray F, Chen YQ, Cox W, Seidner SR, et al. (1999b):** Permanent anatomic closure of the ductus arteriosus in newborn baboons: the roles of postnatal constriction, hypoxia and gestation. *Pediatr Res*; 45:19-29.
- Coombs RC, Morgan ME, Durbin GM, Booth IW, McNeish AS (1990):** Gut blood flow velocities in the newborn: effects of patent ductus arteriosus and parenteral indomethacin. *Arch Dis Child*; 65:1067-71.
- Corazza MS, Davis RF, Merritt TA (1984):** Prolonged bleeding time in preterm infants receiving indomethacin for patent ductus arteriosus. *J Pediatr*; 105:292-296.
- Cunningham RJ, MacDonald PC, Gant NF, Leveno KJ, Gilstrap LC, Hankins GDV and Clark SL (1997):** Diseases and abnormalities of the fetal membranes. In: Cunningham FG and Williams JW (eds). *Williams Obstetrics*, 20th ed. Appleton & Lange, Stamford; pp:657-68.

- Dani C, Bertini G, Pezzati M (2005):** Prophylactic ibuprofen for the prevention of intraventricular hemorrhage among preterm infants: a multi randomized study. *Pediatrics*; 115:1529-1535.
- Davis P, Turner-Gomes S, Cunningham K, Way C, Roberts R, Schmidt B (1995):** Precision and accuracy of clinical and radiological signs in premature infants at risk of patent ductus arteriosus. *Arch Pediatr Adolesc Med*; 149(10): 1136-41.
- Douglas J. Schneider and John W. Moore (2006):** Patent ductus arteriosus. *Circulation*; 114:1873-1882
- Dyamenahalli U, Smallhorn JF, Geva T, Fourn JC, Cairns P, Jutras L, Hughes V, Rabinovich M, Mason CA, Hornberger LK (2000):** Isolated ductus arteriosus aneurysm in the fetus and infant: a multi-institutional experience. *J Am Coll Cardiol.*; 36: 262–269
- Eronen M (1993):** The hemodynamics effects of antenatal indomethacin and a β -sympathomimetic agent on the fetus and the newborn: a randomized study. *Pediatr Res*; 33:615-9.
- Evans NJ and Archer LN (1990):** Postnatal circulatory adaptation in healthy term and preterm neonates. *Arch Dis Child*; 65:24-26.
- Evans NJ and Archer LN (1991):** Doppler assessment of pulmonary artery pressure and extrapulmonary shunting in the acute phase of hyaline membrane disease. *Arch Dis Child*; 66:6-11.

- Evans NJ and Iyer P (1994):** Assessment of ductus arteriosus shunt in preterm infants supported by mechanical ventilation: effect of interatrial shunting. *J Pediatr*; 125:778-85.
- Evans NJ and Iyer P (1995):** Longitudinal changes in the diameter of the ductus arteriosus in ventilated preterm infants: correlation with respiratory outcomes. *Arch Dis Child Fetal Neonatal Ed*; 72(3):F156-61.
- Ewert P (2005):** Challenges encountered during closure of patent ductus arteriosus. *Pediatr Cardiol*; 26(3): 224 -9.
- Feigenbaum H, Armstrong WF and Ryan T (2005):** Abnormal vascular connections and structure. In: Feigenbaum's Echocardiography, 6th edition. Lippincott William & Wilkins; pp: 607-608.
- Fowlie PW, Davis PG.(2003):** Prophylactic indomethacin for preterm infants: a systematic review and meta-analysis. *Arch Dis Child Fetal Neonatal Ed*; 88:F464-F466.
- Friedman WF, Hirschklau MJ, Printz MP (1976):** Pharmacologic closure of patent ductus arteriosus in the premature infant. *N Engl J Med*; 295:526-529.
- Friedman ZUI, Whitman V, Maisels MJ, Berman W Jr, Marks KH and Vesell ES (1978):** Indomethacin disposition and indomethacin induced platelet dysfunction in premature infants. *J Clin Pharmacol*; 18:272-9.

- Gal P, Ransom JL, Shaffer CL (1996):** Reopening of the ductus arteriosus after closure with indomethacin: importance of sustained effective indomethacin serum concentrations. *J Pediatr*; 128(5 pt 1):719.
- Gomella T, Cunningham M and Eyal F (2009):** Patent ductus arteriosus. In: *Neonatology (Management, procedures, on call problems, diseases and drugs)* 6thed., McGraw-Hill companies, PP:619-623.
- Hammerman C (1995):** Patent ductus arteriosus. Clinical relevance of prostaglandins and prostaglandin inhibitors in PDA pathophysiology and treatment. *Clin Perinatol*; 22:457-479.
- Hazama S, Sakamoto I, Yamackika S (2005):** Endvascular surgery using an original occluder for patent ductus arteriosus in an adult patient. *Jpn J Thorac Cardiovasc Surg*; 53(1):58-61
- Herrera C, Holberton J, Davis P (2004):** Prolonged versus short course of indomethacin for the treatment of patent ductus arteriosus in preterm infants. *Cochrane Database Syst Rev*; (1):CD003480.
- Herson VC, Krause PJ, Eisenfeld LI, Pontius L and Maderazo EG (1988):** Indomethacin associated sepsis in very low birth weight infants. *AJDC*; 142:555-8.
- Heyman E, Morag I, Batash D, Keidar R, Baram S, Berkovitch M (2003):** Closure of patent ductus arteriosus with oral ibuprofen suspension in premature newborns: a pilot study. *Pediatrics*; 112(5):e354.

- Heymann MA and Rudolph AM (1975):** Control of ductus arteriosus. *Physiological reviews*; 55(1): 62-78.
- Heymann M, Rudolph A, Silverman R (1976):** Closure of ductus arteriosus in premature infants by inhibition of prostaglandin synthesis. *N Engl J Med*; 295:530-533
- Hirschklau MJ, Disessa TG, Higgus CB, Friedman WF (1978):** Echocardiographic diagnosis in the preterm infants with a large patent ductus arteriosus. *J Pediatr* 92:474-7.
- Hoekstra RE, Jackson JC, Myers TF, Frantz ID 3rd, Stern ME, Powers WF et al (1991):** Improved neonatal survival following multiple doses of bovine surfactant in very premature neonates at risk for respiratory distress syndrome. *Pediatrics*; 88(1):10-8.
- Hoffman JIE, Buckberg GD (1974):** Regional myocardial ischemia: causes, prediction, and prevention. *Vasc Surg.*; 8: 115–131
- Hoffman JIE, Kaplan S (2002):** The incidence of congenital heart disease. *J Am Coll Cardiol*; 39:1890–1900.
- Insel PA (1996):** Analgesic – antipyretic and antiinflammatory agents and drugs employed in the treatment of gout. In: Hardman JG and Limbird LE (eds). *Goodman and Gilman's. The pharmacological basis of therapeutics*. 9th ed. The McGraw-Hill companies Inc, New york, pp:617-657.
- Ivery KN and Srivastava D(2006):** Paradoxiacal PDA. *J Clin Invest*; 116(11):3026-3034

- Iyre P and Evans N (1994):** Re-evaluation of the left atrial to Aortic root ratio as a marker of PDA. Arch Dis Child; 70:112-117
- John Sutton M St and Weigers SE (2001):** Patent ductus arteriosus in a newborn. In: Weigers SE, Plappert T, John Sutton M St(eds). Echocardiography in practice: A case-oriented approach 1st edition. Taylor & Francis; PP:493-500.
- Johnson DH, Rosenthal A, Nadas AS (2000):** A forty year review of bacterial endocarditis in infancy and childhood. Circulation; 51: 581–588.
- Kang NS, Yoo GM (1999):** Indomethacin treatment decreases renal blood flow velocity in human neonates. Biol Neonate; 76 (5) : 261-265.
- Khau Van Kien P, Mathieu F, Zhu L (2005):** Mapping of familial thoracic aortic aneurism/dissection with patent ductus arteriosus to 16p12.2-p13.13. Circulation; 112:200 -206
- Kim EK, Kim DH, Choi CW, Kim HS, Kim BI, Choi JH, Kim JE, Kim WH (2008):** Insufficient intimal thickening and scarcity of cell deaths may play a significant role in the pathogenesis of the persistently patent ductus arteriosus in the preterm infant. Early Hum Dev; 85(3):181-6.
- Kirshorn B, Moise KJ Jr, Wassertrum N, Ou N and Huhta JC (1988):** Influence of short-term indomethacin therapy on fetal urine output. Obstet Gyneol; 72:51-3.

- Kirstan T (1996):** Patent ductus arteriosus in preterm infants. Neonatal Netw; 15:5-26 .
- Kitterman JA, Edmunds LH Jr, Gregory GA, Heyman MA, Tooley WH, Rudolph AM (1972):** Patent ductus arteriosus in premature infants: incidence, Relation to pulmonary disease and management. N Engl J Med.;287:473–477.
- Koppel R and Rabinovitch M (1993):** Regulation of fetal lamb ductus arteriosus smooth muscle cell migration by indomethacin and dexamethasone. Pediatr Res; 33:352-358
- Krichenko A, Benson LN, Burrows P, Moes CA, McLaughlin P, Freedom RM (1989):** Angiographic classification of the isolated, persistently patent ductus arteriosus and implications for percutaneous catheter occlusion. Am J Cardiol.; 63: 877–879
- Lago P, Bettiol T, Salvadori S, Pitassi I, Vianello A, Chiandetti L et al. (2002):** Safety and efficacy of ibuprofen versus indomethacin in preterm infants treated for patent ductus arteriosus. J Pediatr; 161(4):202-207.
- Lee G Y, Sohn Y B, Kim M J, Jeon G W, Shim J W, Chang Y S et al (2008):** Outcome Following Surgical Closure of Patent Ductus Arteriosus in Very Low Birth Weight Infants in Neonatal Intensive Care Unit. Yonsei Med J; 49(2):265 – 271
- Leonard S L (2007):** Fetal and transitional circulation. In: Nancy AD, Cortney B(eds). Pathophysiology of heart disease: a collaborative project of medical students and faculty, 4th edition. Lippincott William & Wilkins pp: 378-380.

- Lesko SM, Mitchell AA (1999):** The safety of acetaminophen and ibuprofen among children younger than two years old. *Pediatrics*; 104(4):e39-e40.
- Little DC, Pratt TC, Blalock SE, Krauss DR, Cooney DR, Custer MD (2003):** Patent ductus arteriosus in micropremies and full-term infants. The relative merits of surgical ligation versus indomethacin treatment. *J Pediatr surg*; 38:492-496
- Lloyd TR, Beekman RH III (1994):** Clinically silent patent ductus arteriosus. *Am Heart J*; 127:1664–1665. Letter.
- Malcolm DD, Segar JL, Robillard JE, Chemtob S (1993):** Indomethacin compromises hemodynamics during positive-pressure ventilation, independently of prostanooids. *J Appl Physiol*; 74(4): 1672-8.
- Mani A, Merahi SM, Houshyar R (2002):** Finding genetic contributions to sporadic disease: a recessive locus at 12q24 commonly contributes to patent ductus arteriosus. *Proc Nat Acad USA*; 99:1505-15059.
- Marasini M, Rimini A, Zannini L, Pongiglione G (2000):** Giant aneurysm following coil occlusion of patent ductus arteriosus. *Cathet Cardiovasc Intervent.*; 50: 186–189.
- Mardoum R, Bejar R, Merritt A, Berry C (1991):** Controlled study of the effects of indomethacin on cerebral blood flow velocities in newborn infants. *J Pediatr*; 118:112-115.

- Marquis RM, Miller HDC, McCormack RJM, et al (2003):**
Persistence of ductus arteriosus with left to right shunt in the older patient. *Br Heart J*; 48: 469–484.
- Masura J, Tittel P, Gavora P (2006) :** Long-term outcome of transcatheter patent ductus arteriosus closing using amplatzer duct occluders. *Am Heart J*; 151:755.
- McGrath RL, McGuinness GA, Way GL (1987):**The silent ductus arteriosus. *J Pediatr*; 93:110-113.
- Mehta SK, Younoszai A, Pietz J, Achanti BP (2003):**
Pharmacological closure of the patent ductus arteriosus. *Images Pediatr Cardiol*; 14:1-15.
- Ment L, Oh W, and Phillip A (1994):**Low dose indomethacin and extension of intraventricular hemorrhage. *J Pediatr*; 124(6):951-5.
- Mitchell JA, Akarasereenont P, Thiemermann, Flower RJ and Vane JR (1994):** selectivity of nonsteroidal anti inflammatory drugs as inhibitors of constitutive and inducible cyclooxygenase. *Proc Natl Acad Sci*; 90 :11693-7.
- Mitchell SC, Korones SB, Berendes HW (1971):** Congenital heart disease in 56,109 births: incidence and natural history. *Circulation*.; 43:323–332
- Moore M, Brook M, Heymann M (2008):** Patent Ductus arteriosus. In: Hugh DA, David JB, Robert ES, Timothy FF (eds). *Moss and adams' Heart disease in infants, children, and adolescent: including the fetus and young adult*, 7th edition. Lippincott Williams and Wilkins; PP: 1-22.

- Morley CJ (1990):** Surfactant treatment of premature babies. Arch Dis Child; 79:698-700
- Mouzinho A, Rosenfeld C and Riser R (1991):** Symptomatic PDA in very low birth weight infants. Early Hum Dev; 27:65-72
- Narayanan M, Cooper B, Weiss H, Clyman RI (2000):** Prophylactic indomethacin: factors determining permanent ductus closure. J Pediatr; 136:330-337.
- Nagaraj HS, Sandhu AS, Cook LN (1981):** Gastrointestinal perforation following indomethacin therapy in very low birth weight infants. J Pediatr Surg; 16:1003-1007.
- Neish SR (2006):** Patent ductus arteriosus. Available at : <http://www.emedicine.com /PED/topic1747.ht>, accessed at July, 2009
- Nora JJ (1998):** Multifactorial inheritance hypothesis for the etiology of congenital heart diseases: the genetic-environmental interaction. Circulation.; 38: 604–617
- O'Donovan DJ, Baetiong A, Adams K (2003):** Necrotizing enterocolitis and gastrointestinal complications after indomethacin therapy and surgical ligation in premature infants with patent ductus arteriosus. J Perinatol; 23:286-290
- Panter KR, Hannah ME, Amankwah KS, Ohlsson A, Jefferies AL and Farine D (1999):** The effect of indomethacin tocolysis in preterm labour on perinatal outcome: a randomized placebo-controlled trial. Br J Obstet Gynaecol; 106:467-73.

- Papile LA, Burstein J, Burstein R and Koffler H (1978):** Incidence and evolution of subependymal and intraventricular hemorrhage: a study of infants with birth weights less than 1500 grams. *J Pediatr*; 92:529-534.
- Park MK (2008):** Left to right shunt lesion. In: *Pediatric cardiology for practitioners*. 5th edition. ElSevier science, St Louis, pp: 175-180.
- Patel HT, Cao QL, Rhodes J (1999):** Long term out come of transcatheter closure of small to large patent ductus arteriosus. *Catheter cardiovasc Interv*; 47:457-461
- Patel J, Roberts I, Azzopardi D (2000):** Randomized double-blind controlled trial comparing the effects of ibuprofen with indomethacin on cerebral hemodynamics in preterm infants with patent ductus arteriosus. *Pediatr Res*; 47:36-42.
- Peckham GJ, Miettinen OS, Ellison RC, Kraybill EN, Gersony WM, Zierler Sand et al. (1984):** Clinical course to 1 year of age in premature infants with PDA results of a multicenter randomized trial of indomethacin. *J Pediatr*; 105: 285 - 91.
- Peled N., Dogon O., Babyn D. et al (1992):** Prostaglandin therapy in neonates. *N Engl J Med*; 20:327-328.
- Perkett EA, Lyons RM, Moses HL, Brigham KL, Meyrick B (1990):** Transforming growth factor-beta activity in sheep lung lymph during the development of pulmonary hypertension. *J Clin Invest.*; 86: 1459–1464.

- Pezzati M, Vangi V, Biagiotti R, Bertini G, Cianciulli D, Rubaltelli FF(1999):** Effects of indomethacin and ibuprofen on mesenteric and renal blood flow in preterm infants with patent ductus arteriosus. *J Pediatr*; 135 (6):733-8.
- Poon G (2007):** Ibuprofen lysine (NeoProfen) for the treatment of patent ductus arteriosus. *Proc(Bayl Univ Med Cent)*;20(1):83-85.
- Rang HP, Dale MM and Ritter JM (1995):** Anti-inflammatory and immunosuppressant drugs. In: Range HP (ed) *Pharmacology*, 3rd edition. Churchill Livingstone, Philadelphia; pp:246-66.
- Rennie JM, Doyle J and Cooke RWI (1986):** Early administration of indomethacin to preterm infants. *Arch Dis child*; 61: 233-8 .
- Rickard DH (1993):** Nursing care of the neonates receiving PGE1 therapy. *Neonatal Network*; 12(4):17-22
- Riggs T, Sharp SE, Batton D, Hussey ME, Weinhouse E (2000):** Spontaneous closure of atrial septal defects in premature vs. full-term neonates. *Pediatr Cardiol*; 21(2):129-34.
- Sadiq, Latif F,ur-Rehman A(2004):** Analysis of infective endarteritis in patent ductus arteriosus. *Am J Cardiol.*; 93: 513–515.
- Sadovsky Y, Nelson DM, Muglia LJ, Gross GA, Harris KC, Koki A et al. (2000):** Effective diminution of amniotic prostaglandin production by selective inhibitors of cyclooxygenase type 2. *Am J Obstet Gynecol*; 182:370-6.
- Satoda M, Zhao F, Diaz GA, Burn J, Goodship J, Davidson HR, Pierpont ME, Gelb BD (2000):** Mutations in TFAP2B cause Char syndrome, a familial form of patent ductus arteriosus. *Nat Genet.*; 25: 42–46.

- Schenck M, Rokey R, Mullins C (1993) :** Trans-catheter occlusion of PDA in adults. *Am J Cardiol*; 72:591-595
- Schmidt B, Davis P, Moddemann D.(2001):** Long-term effects of indomethacin prophylaxis in extremely-low-birth-weight infants. *N Engl J Med*; 344:1966-1972.
- Seyberth HW, Rascher W, Hackenthal R, Wille L (1983):** Effect of prolonged indomethacin therapy on renal function and selected vasoactive hormones in very-low-birth-weight infants with symptomatic patent ductus arteriosus. *J Pediatr*; 103:979-984.
- Shaffer CL, Gal P, Ransom JL.(2002):** Effect of age and birth weight on indomethacin pharmaco-dynamics in neonates treated for patent ductus arteriosus. *Crit Care Med*; 30:343-348.
- Shah SS, Ohlsson A (2006):** Ibuprofen for the prevention of patent ductus arteriosus in preterm and/or low birth weight infants. *Cochrane Database Syst Rev*; (1):CD004213
- Shenoi A, Narag A, Bhakoo ON, Bidavai PS (1991):** Clinical profile and management of symptomatic patent ductus arteriosus in preterm infants. *Indian Pediatr*; 28:125-130.
- Sidi D, Heymann M and Rudolph A (1983):** Effect of ambient temperature on oxygen consumption and circulation in newborn lambs. *Pediatr Res*; 17:254-258.
- Silverman NH (1993):** Patent ductus arteriosus. In: Silverman NH(ed). *Pediatric Echocardiography* 1st edition. Williams & Wilkins PP:167-77.

- Silverman NH, Levis AB, Heymann MA, Rudolph AM (1974):** Echocardiographic assessment of ductus arteriosus shunt in preterm infants. *Circulation*; 50:821-825
- Singh GK, Fong LV and Solman A (1994):** Study of low dose prostaglandin, use and complications. *Eur Heart J*; 15(3):377-81.
- Skelton R, Evans NJ, Smythe J (1994):** A blinded comparison of clinical and echocardiographic evaluation of the preterm infant for patent ductus arteriosus. *J Pediatr Child Health*; 30(5):406-11.
- Skinner J, (2000):** Suggested grading of ductal shunt into mild, moderate and severe. In: Skinner J, Alverson D, Hunters (eds). *Echocardiography for the neonatologist* 7th ed. Churchill Livingstone London; PP: 469–474.
- Skinner J (2001):** Diagnosis of patent ductus arteriosus. *Semin Neonatol*; 6(1):49-61.
- Smith WL and Dewitt DL (1996):** Prostaglandin endoperoxide H synthases-1 and -2. in: Dixon FJ (ed). *Advances in immunology*. Academic press Inc, California; 62:167-215.
- Su PH, Chen JY, Su CM, Huang TC and Lee HS (2003):** Comparison of ibuprofen and indomethacin therapy for patent ductus arteriosus in preterm infants. *Pediatr Int*; 45(6):665-70, 2003.
- Sugimoto Y, Yamasaki A, Segi E, Tsuboi K, Aze Y, Nishimura T et al (1997):** Failure of parturition in mice lacking the prostaglandin F receptor. *Science*; 277:681-3.

- Supapannachart S, Limrungsikul A, Khowsathit P (2002):** Oral ibuprofen and indomethacin for treatment of patent ductus arteriosus in premature infants:a randomized trial at Ramathibodi Hospital. J Med Assoc Thai; 85(suppl 4): s1252-s1258.
- Takahashi Y, Roman C, Chemtob S, Tse MM, Lin E, Heymann MA and Clyman RI (2000):**Cyclooxygenase-2 inhibitors constrict the fetal lamb ductus arteriosus both in vitro and in vivo. Am J physiol Regul Integr Comp physiol;278:R1496-505
- Tatli MM, Kumral A, Duman N, Demir K, Gurcu O, Ozkan H. (2004):** Spontaneous intestinal perforation after oral ibuprofen treatment of patent ductus arteriosus in two very-low-birthweight infants. Acta Pediatr; 93(7):999-1001.
- Thalji AA, Carr I, Yeh TF (1980):** Pharmacokinetics of intravenously administered indomethacin in premature infants. J Pediatr; 97:995-1000.
- Tomita H, Fuse S, Hatakeyama K, Chiba S (1998):** Epinephrine-induced constriction of the persistent ductus arteriosus and its relation to distensibility. Jpn Circ J.; 62: 913–914
- Valdez-cruz and Dudell GG (1981):** Specificity and accuracy of echocardiographic and criteria for diagnosing patent ductus arteriosus in fluid restricted infants. J Pediatr; 98:298-305.
- Van Bel F, Guit GL, Schipper J, Van de Bor M, Baan J (1991):** Indomethacin-induced changes in renal blood flow velocity Waveform in premature infants investigated with color Doppler imaging. J Pediatr; 118:621-626

- Van den Anker JN, De Groot R, Hopwc (1994):** Effect of prenatal exposure to betamethasone and indomethacin on the glomerular filtration rate in the preterm infants. *Pediatr Res*; 36:578-581
- Van Overmeire B, Follens I, Hartmanns, Creten WL, Van Acker KJ (1997):** Treatment of patent ductus arteriosus with ibuprofen *Arch Dis Child*; 76:179-184
- Van Overmeire B, Smets K, Lecoutere D, Van de Broek H, Weyler J, Degroote K, Langhendries JP (2000):** A comparison of ibuprofen and indomethacin for closure of patent ductus arteriosus. *N Engl J Med*; 343(10):674-81.
- Vanhaesebrouck P, Thiery M, Leroy JG, Govaert P, De Praeter, Coppens M, Cuvelier C et al (1988):** Oligohydramnios, renal insufficiency, and leal perforation in preterm infants after intrauterine exposure to indomethacin. *J Pediatr*; 113: 738-43.
- Vanhaesebrouck S, Zonnenberg I, Vandervoort P, Bruneel E, Van Hoestenbergh MR, Theyskens C (2007):** Conservative treatment for patent ductus arteriosus in the preterm. *Arch Dis Child Fetal Neonatal Ed*; 92(4):F244-7.
- Varvarigou A, Bardin CL, Beharry K, Chemtob S, Papageorgiou A, Aranda JV (1996):** Early ibuprofen administration to prevent patent ductus arteriosus in premature newborn infants. *JAMA*; 275(7):539-44.

- Venamo K, Berg E, Kokk H (2006)** :Video assisted thoracoscopic versus open surgery for persistent ductus arteriosus. J Pediatr Surg; 41:1226-1228.
- Vert P, Bianchetti G, Marchal F, Monin P and morselli PL (1992)**: Effectiveness and pharmacokinetics of indomethacin in premature newborns with patent ductus arteriosus . Eur J Clin pharmacol; 18:83-8
- Wallace JL (1999)**: Distribution and expression of cyclooxygenase (COX) isoenzymes, their physiological roles and the categorization of nonsteroidal anti-inflammatory drugs (NSAIDs). Am J Med; 107:11s-17s.
- Wiess H, Cooper B, Brood M, et al. (1995)**: Factors determining reopening of the ductus arteriosus after successful clinical closure with indomethacin. J Pediatr; 127:446-471.
- William WH, Myron JL, Robin RD, Judith MS (2009)**: Heart murmurs. In: Sydor AM and Lebowitz H (eds). Current diagnosis & treatment Pediatric 18th editions. Mc Graw-Hill Company; pp:21-22.
- Yamaki S, Ishidoya T, Osuga T, Arai S (2000)**: Progressive pulmonary vascular disease after surgery in a case of patent ductus arteriosus with pulmonary hypertension. Tohoku J Exp Med.; 140: 279–288.
- Yanowitz TD, Yao AC, Werner JC, Pettigrew KD, Oh W and Stonestreet BS (1998)**: Effects of prophylactic low-dose indomethacin on hemodynamics in very low birth weight infants. J Pediatr; 132:28-34.

- Young TE and Mangum B (2008):** Cardiovascular drugs. In: Thomson Renters (ed) Amanual of drugs used in neonatal care. 21th edition. Acorn publishing; pp:150-151.
- Zanardo V, Vedovato S, Lago P, Piva D, Faggian D, Chiozza L (2005):** Effects of ibuprofen and indomethacin on urinary antidiuretic hormone excretion in preterm infants treated for patent ductus arteriosus. Fetal Diagn Ther; 20(6):534-9.
- Zipes DP, Libby P, Bonow RO, Braunwald E, eds (2007):** Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, 8th ed. St. Louis, Mo; WB Saunders.
- Zuckerman H, Reiss U and Rubinstein I (1974):** Inhibition of human premature labor by indomethacin. Obstet Gyneol; 44:787-92.