

[首页](#)[最新一期](#)[期刊动态](#)[过刊浏览](#)[医学视频](#)[在线投稿](#)[期刊检索](#)[期刊订阅](#)[合作科室](#)

期刊导读

8卷23期 2014年12月 [最新]



期刊存档

期刊存档

[查看目录](#)

期刊订阅



在线订阅



邮件订阅



RSS

作者中心



资质及晋升信息



作者查稿



写作技巧



投稿方式



作者指南

编委会

期刊服务



建议我们



会员服务



广告合作



继续教育

您的位置: [首页](#)>> [文章摘要](#)

[中文](#) [English](#)

早产儿动脉导管未闭诊疗进展

钟桂朝, 李运泉, 王慧深

510080 广州, 中山大学附属第一医院心脏儿科

李运泉, Email: gzyyh2004@aliyun.com

广东省科技计划项目(2012B031800298)

摘要: 动脉导管未闭(PDA)在早产儿有较高发病率。临床症状和体征在早产儿PDA的诊断上缺乏特异性。目前诊断PDA特别是血流动力学改变显著的PDA(hsPDA)的重要手段。近期研究认为血清脑钠肽(BN-proBNP)可作为诊断hsPDA的生物标记物并指导早产儿PDA治疗策略的选择。早产儿PDA的治疗包括吲哚美辛和布洛芬的药物疗法及外科结扎术。近期报道对乙酰氨基酚可作为对COX抑制剂不敏感或的替代药物。经导管封堵在早产儿PDA的治疗上值得临床进一步研究。本文对早产儿PDA的诊疗进

关键词: 婴儿, 早产; 动脉导管未闭; 诊断; 治疗

[评论](#) [收藏](#) [全](#)

文献标引: 钟桂朝, 李运泉, 王慧深. 早产儿动脉导管未闭诊疗进展[J/CD]. 中华临床医师杂志: 电子版, 2014, 8

参考文献:

- [1] Heymann MA, Rudolph AM. Control of the ductus arteriosus[J]. *Physiol Rev*, 1970, 50(2): 599-609.
- [2] Cocceani F, Olley PM. The response of the ductus arteriosus to prostaglandins. *Pharmacol*, 1973, 51(3): 220-225.
- [3] Heo MJ, Lee OS, Lim SC. Comparative evaluation for the use of oral ibuprofen and indomethacin in Korean infants with patent ductus[J]. *Arch Pharm Res*, 2012, 35(9): 1203-1207.
- [4] Kim EK, Kim DH, Choi CW, et al. Insufficient intimal thickening and scarcity play a significant role in the pathogenesis of the persistently patent ductus arteriosus in the premature infant[J]. *Early Hum Dev*, 2009, 85(3): 181-186.
- [5] Richards J, Johnson A, Fox G, et al. A second course of ibuprofen is effective in the treatment of a clinically significant PDA in ELBW infants[J]. *Pediatrics*, 2009, 124(2): e287-e293.
- [6] Koch J, Hensley G, Roy L, et al. Prevalence of spontaneous closure of the ductus arteriosus in neonates at a birth weight of 1000 grams or less[J]. *Pediatrics*, 2006, 117(4): 1113-1117.
- [7] The Vermont-Oxford Trials Network: very low birth weight outcomes for 1990.

[8] Mezu-Ndubuisi OJ, Agarwal G, Raghavan A, et al. Patent ductus arteriosus in [J]. *Drugs*, 2012, 72(7): 907-916.

[9] Saldeno YP, Favareto V, Mirpuri J. Prolonged persistent patent ductus arteri per durable anomalies in premature infants[J]. *J Perinatol*, 2012, 32(12): 953-958.

[10] Mine K, Ohashi A, Tsuji S, et al. B-type natriuretic peptide for assessment significant patent ductus arteriosus in premature infants[J]. *Acta Paediatr*, 2013, 1

[11] Shipton SE, van der Merwe PL, Nel ED. Diagnosis of haemodynamically signifi arteriosus in neonates-- is the ECG of diagnostic help?[J]. *Cardiovasc J S Afr*, 2001

[12] Kluckow M, Evans N. Early echocardiographic prediction of symptomatic paten in preterm infants undergoing mechanical ventilation[J]. *J Pediatr*, 1995, 127(5): 77

[13] Sehgal A, Menahem S. Interparametric correlation between echocardiographic infants with patent ductus arteriosus[J]. *Pediatr Cardiol*, 2013, 34(5): 1212-1217.

[14] Nir A, Lindinger A, Rauh M, et al. NT-pro-B-type natriuretic peptide in inf reference values based on combined data from four studies[J]. *Pediatr Cardiol*, 2009,

[15] Socrates T, Arenja N, Mueller C. B-type natriuretic peptide in children: st *Coll Cardiol*, 2009, 54(15): 1476-1477.

[16] Ramakrishnan S, Heung YM, Round J, et al. Early N-terminal pro-brain natriu measurements predict clinically significant ductus arteriosus in preterm infants[J]. 2009, 98(8): 1254-1259.

[17] Koch A, Singer H. Normal values of B type natriuretic peptide in infants, c adolescents[J]. *Heart*, 2003, 89(8): 875-878.

[18] Lee JH, Shin JH, Park KH, et al. Can early B-type natriuretic peptide assay symptomatic patent ductus arteriosus in extremely low birth weight infants?[J]. *Neon (2)*: 118-122.

[19] Buddhe S, Dhuper S, Kim R, et al. NT-proBNP Levels Improve the Ability of P Hemodynamically Significant Patent Ductus Arteriosus in Very Low-Birth-Weight Infant *Clinical Neonatology*, 2012, 1(2): 82-86.

[20] Hsu JH, Yang SN, Chen HL, et al. B-type natriuretic peptide predicts respon in premature neonates with patent ductus arteriosus[J]. *J Pediatr*, 2010, 157(1): 79-

[21] Joseph L, Nir A, Hammerman C, et al. N-terminal pro-B-type natriuretic pept bronchopulmonary dysplasia in premature infants[J]. *Am J Perinatol*, 2010, 27(5): 381

[22] Rudiger A, Gasser S, Fischler M, et al. Comparable increase of B-type natri amino-terminal pro-B-type natriuretic peptide levels in patients with severe sepsis, acute heart failure[J]. *Crit Care Med*, 2006, 34(8): 2140-2144.

[23] Reynolds EW, Ellington JG, Vranicar M, et al. Brain-type natriuretic peptid

and management of persistent pulmonary hypertension of the newborn[J]. *Pediatrics*, 2007, 119(5): 1304.

[24] Letzner J, Berger F, Schwabe S, et al. Plasma C-terminal pro-endothelin-1 and pro-peptides NT-proBNP and MR-proANP in very preterm infants with patent ductus arteriosus[J]. *Neonatology*, 2012, 101(2): 116-124.

[25] Lee BS, Byun SY, Chung ML, et al. Effect of furosemide on ductal closure and renal function in indomethacin-treated preterm infants during the early neonatal period[J]. *Neonatology*, 2009, 95(3): 199.

[26] Andriessen P, Struis NC, Niemarkt H, et al. Furosemide in preterm infants treated with indomethacin for patent ductus arteriosus[J]. *Acta Paediatr*, 2009, 98(5): 797-803.

[27] Vanhaesebrouck S, Zonnenberg I, Vandervoort P, et al. Conservative treatment of patent ductus arteriosus in the preterm[J]. *Arch Dis Child Fetal Neonatal Ed*, 2007, 92(4): F244-F247.

[28] Rosito G, Sum K, Chorne N. Comparison of two neonatal indomethacin protocols for patent ductus arteriosus closure[J]. *J Clin Pharm Ther*, 2010, 35(5): 589-594.

[29] Ohlsson A, Walia R, Shah SS. Ibuprofen for the treatment of patent ductus arteriosus in and/or low birth weight infants[J]. *Cochrane Database Syst Rev*, 2013, 4: D3481.

[30] Arora R, Ridha M, Lee DS, et al. Preservation of the metabolic rate of oxygen consumption in preterm infants during indomethacin therapy for closure of the ductus arteriosus[J]. *Pediatr Res*, 2008, 64(6): 713-718.

[31] Kent AL, Brown L, Broom M, et al. Increased urinary podocytes following indomethacin drug-induced glomerular injury[J]. *Pediatr Nephrol*, 2012, 27(7): 1111-1117.

[32] Sehgal A, Ramsden CA, Mcnamara PJ. Indomethacin impairs coronary perfusion in preterm infants: hemodynamically significant ductus arteriosus[J]. *Neonatology*, 2012, 101(1): 20-27.

[33] Katayama Y, Minami H, Enomoto M, et al. Antenatal magnesium sulfate and the need for surgical ligation of the ductus arteriosus to indomethacin in extremely preterm neonates[J]. *J Perinatol*, 2010, 31(1): 24.

[34] Soraisham AS, Dalgleish S, Singhal N. Antenatal indomethacin tocolysis is associated with an increased need for surgical ligation of patent ductus arteriosus in preterm infants[J]. *Gynaecol Can*, 2010, 32(5): 435-442.

[35] Olukman O, Calkavur S, Ercan G, et al. Comparison of oral and intravenous ibuprofen for closure of patent ductus arteriosus: which one is better?[J]. *Congenit Heart Dis*, 2010, 5(2): 20.

[36] Rao R, Bryowsky K, Mao J, et al. Gastrointestinal complications associated with indomethacin therapy for patent ductus arteriosus[J]. *J Perinatol*, 2011, 31(7): 465-470.

[37] Vieux R, Desandes R, Boubred F, et al. Ibuprofen in very preterm infants: renal function for the first month of life[J]. *Pediatr Nephrol*, 2010, 25(2): 267-274.

[38] Bagnoli F, Rossetti A, Messina G, et al. Treatment of patent ductus arteriosus with ibuprofen: renal side-effects in VLBW and ELBW newborns[J]. *J Matern Fetal Neonatal Med*, 2010, 23(12): 2600-2604.

[39] 张鹏, 孟靓靓, 程国强. 口服布洛芬治疗早产儿动脉导管未闭疗效和安全性的meta分析[J]. 中华围产医学杂志, 2013, 16(5): 266-273.

[40] Oncel MY, Yurttutan S, Uras N, et al. An alternative drug (paracetamol) in patent ductus arteriosus in ibuprofen-resistant or contraindicated preterm infants[J]. Fetal Neonatal Ed, 2013, 98(1): F94.

[41] Patel RM, Leong T, Carlton DP, et al. Early caffeine therapy and clinical outcome in preterm infants[J]. J Perinatol, 2013, 33(2): 134-140.

[42] Vida VL, Lago P, Salvatori S, et al. Is there an optimal timing for surgical closure of patent ductus arteriosus in preterm infants?[J]. Ann Thorac Surg, 2009, 87(5): 1509-1515, 1515-1516.

[43] Karaci AR, Sasmazel A, Turkey S, et al. Closure of a patent ductus arteriosus in neonates using a left anterior mini-thoracotomy[J]. J Card Surg, 2013, 28(4): 461-466.

[44] Smith ME, King JD, Elsherif A, et al. Should all newborns who undergo patent ductus arteriosus ligation be examined for vocal fold mobility?[J]. Laryngoscope, 2009, 119(8): 1606-1609.

[45] Harris LL, Krishnamurthy R, Browne LP, et al. Left main bronchus obstruction after patent ductus arteriosus ligation: an unusual complication[J]. Int J Pediatr Otorhinolaryngol, 2010, 44(12): 1855-1856.

[46] Willcoxson FE, Viswanathan S, Thomson JD, et al. Transcatheter closure of patent ductus arteriosus without arterial access[J]. Cardiol Young, 2010, 20(1): 39-43.

[47] Sivakumar K, Bhagyavathy A, Gnanapragasam F. Closure of large patent ductus arteriosus by transcatheter closure without use of radiographic contrast media[J]. Dis, 2009, 4(1): 59-62.

[48] 杨栋, 张伟华, 光雪峰, 等. 经胸超声指导下小儿动脉导管未闭封堵术的临床应用[J]. 中华围产医学杂志: 电子版, 2013, 7(6): 2461-2464.

[49] 朱玲, 李轩狄, 林约瑟, 等. 经胸超声心动图与造影指引动脉导管未闭封堵术的临床应用[J]. 中华围产医学杂志, 2013, 28(19): 1494-1497.

[50] Prsa M, Ewert P. Transcatheter closure of a patent ductus arteriosus in a preterm infant using an Amplatzer Vascular Plug IV device[J]. Catheter Cardiovasc Interv, 2011, 77(1): 100-103.

[51] Francis E, Singhi AK, Lakshmivenkateshaiah S, et al. Transcatheter occlusion of patent ductus arteriosus in pre-term infants[J]. JACC Cardiovasc Interv, 2010, 3(5): 550-555.

[52] Bentham J, Meur S, Hudsmith L, et al. Echocardiographically guided catheter closure of patent ductus arteriosus in small preterm infants on the neonatal intensive care unit[J]. Catheter Cardiovasc Interv, 2011, 77(3): 409-415.

[53] Baruteau AE, Hascoet S, Baruteau J, et al. Transcatheter closure of patent ductus arteriosus: Past, present and future[J]. Arch Cardiovasc Dis, 2014, 107(2): 122-132.

[54] 杨波, 高翔羽, 王秀利, 等. 口服布洛芬治疗新生儿动脉导管未闭的对照研究[J/CD].

志：电子版，2013(2)：178-184.

综 述

早产儿动脉导管未闭诊疗进展

钟桂朝, 李运泉, 王慧深. . 中华临床医师杂志: 电子版
2014;8(17):3175-3180.

[摘要](#) [FullText](#) [PDF](#) [评论](#) [收藏](#)

树突状细胞肿瘤疫苗的研究及实践进展

袁媛, 苏川, 束永前. . 中华临床医师杂志: 电子版
2014;8(17):3181-3185.

[摘要](#) [FullText](#) [PDF](#) [评论](#) [收藏](#)

| [编委会](#) | [联系我们](#) | [合作伙伴](#) | [友情链接](#) |

© 2014版权声明 中华临床医师杂志(电子版)编辑部
网站建设: 北京华夏世通信息技术有限公司 京ICP备0
北京市公安局西城分局备案编号: 110102000676