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REFERENCES

Anilkumar, M. (2013). Patent ductus arteriosus. *Cardiology Clinics*, [online] 31(3), pp.417–430. doi:https://doi.org/10.1016/j.ccl.2013.05.006.

Ananth, C. V., Goldenberg, R. L., Friedman, A. M., & Vintzileos, A. M. (2018). Association of Temporal Changes in Gestational Age With Perinatal Mortality in the United States, 2007-2015. *JAMA Pediatrics*, *172*(7), 627. https://doi.org/10.1001/jamapediatrics.2018.0249

Ruan, Y., Xie, Z., Liu, X., & He, Y. (2023). Associated factors for prenatally diagnosed fetal congenital heart diseases. *BMC Cardiovascular Disorders*, *23*(1). https://doi.org/10.1186/s12872-022-02981-3

Backes, C.H. *et al.* (2022) 'Patent ductus arteriosus: A contemporary perspective for the pediatric and Adult Cardiac Care Provider', *Journal of the American Heart Association*, 11(17). doi:10.1161/jaha.122.025784.

Bush, D. S., & Ivy, D. D. (2022). Pulmonary Hypertension in the Population with Down Syndrome. *Cardiology and Therapy*, *11*(1), 33–47. https://doi.org/10.1007/s40119-021-00251-5

Bien, J. and Kim, P.Y. (2022). *Epidemiology Morbidity And Mortality*. [online] National Institutes of Health. Available at: https://www.ncbi.nlm.nih.gov/books/NBK547668/.

Borges-Luján, M., González-Luis, G., Roosen, T., Huizing, M. J., & Villamor, E. (2022). *Sex Differences in Patent Ductus Arteriosus Incidence and Response to Pharmacological Treatment in Preterm Infants: A Systematic Review, Meta-Analysis and Meta-Regression.* Journal of Personalized Medicine. DOI:10.3390/jpm12071143.

Crimmins, E. M. (2019). Differences between Men and Women in Mortality and the Health Dimensions of the Morbidity Process. *Clinical Chemistry*, *65*(1), 135–145. https://doi.org/10.1373/clinchem.2018.288332

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Chinawa, J.M. *et al.* (2021) *The effects of ductal size on the severity of pulmonary hypertension in children with patent ductus arteriosus (PDA): A multi-center Study - BMC Pulmonary Medicine*, *BioMed Central*. https://bmcpulmmed.biomedcentral.com/articles/10.1186/s12890-021-01449-y

Clyman, R. I. (2018). Patent ductus arteriosus, its treatments, and the risks of pulmonary morbidity. *Seminars in Perinatology*, *42*(4), 235–242. https://doi.org/10.1053/j.semperi.2018.05.006

Dice, J. E., & Bhatia, J. (2007). Patent ductus arteriosus: an overview. *The Journal of Pediatric Pharmacology and Therapeutics : JPPT : The Official Journal of PPAG*, *12*(3), 138–146. https://doi.org/10.5863/1551-6776-12.3.138

D'Alto, M. and Mahadevan, V.S. (2012) *Pulmonary arterial hypertension associated with congenital heart disease*, *European respiratory review : an official journal of the European Respiratory Society*. https://pmc.ncbi.nlm.nih.gov/articles/PMC9487226/

Gillam-Krakauer, M., & Mahajan, K. (2020). *Patent Ductus Arteriosus*. PubMed; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK430758/

Hartaty, D., Noormanto, N. and Haksari, E.L. (2016) 'Pertambahan berat Badan Pasca penutupan patent duktus arteriosus Secara Transkateter', *Sari Pediatri*, 17(3), p. 180. doi:10.14238/sp17.3.2015.180-4.

Hurisa, T., Megersa, H., & Tsegaye, T. (2022). Delay in Diagnosis of Congenital Heart Disease and Associated Factors Among Pediatric Patients in Cardiac Center Addis Ababa, Ethiopia, 2021 G.C. *Clinical Pediatrics: Open Access*, *7*(3), 1–9. https://doi.org/10.35248/2572-0775.22.7.207

Härkin, P., Marttila, R., Pokka, T., Saarela, T., & Hallman, M. (2017). Morbidities associated with patent ductus arteriosus in preterm infants. Nationwide cohort study. *The Journal of Maternal-Fetal & Neonatal Medicine*, *31*(19), 2576–2583. https://doi.org/10.1080/14767058.2017.1347921

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Jan Hau Lee, Greenberg, R. G., Bin Huey Quek, Clark, R. H., Laughon, M. M., Smith, P., & Hornik, C. P. (2017). Association between early echocardiography, therapy for patent ductus arteriosus, and outcomes in very low birth weight infants. 27(9), 1732–1739. https://doi.org/10.1017/s1047951117001081

Jang, M. J., Song, Y. H., Yoon, J. M., Cheon, E. J., Ko, K. O., & Lim, J. W. (2020). Mortality Rate and Major Causes of Death by Gestational Age in Korean Children under 5 Years of Age. *Journal of Korean Medical Science*, *35*(40). https://doi.org/10.3346/jkms.2020.35.e340

Khan, A.M., Ullah, Z., Ilyas, S., Wazir, H.D., Rehman, Y., Hussain, I. and Sadia, H. (2022). The Outcome of Trans-catheter Closure of Patent Ductus Arteriosus: A Single-Center Experience. *Cureus*. doi:https://doi.org/10.7759/cureus.21577.

Kort, E. (2016). *Patent Ductus Arteriosus in the Preterm Infant: An Update on Morbidity and Mortality.* Current Pediatric Reviews. DOI:10.2174/1573396312021605060016 21.

Michihata, N., Matsui, H., Fushimi, K., & Yasunaga, H. (2016). Hospital volume and mortality due to preterm patent ductus arteriosus. *Pediatrics International*, *58*(11), 1171–1175. https://doi.org/10.1111/ped.13008

Murni, I. K., Wirawan, M. T., Patmasari, L., Sativa, E. R., Arafuri, N., Nugroho, S., & Noormanto. (2021). Delayed diagnosis in children with congenital heart disease: a mixed-method study. *BMC Pediatrics*, *21*(1). https://doi.org/10.1186/s12887-021-02667-3

Muto, M., Sugita, K., Murakami, M., Shinichiro Ikoma, Kawano, M., Ryuta Masuya, Makoto Matsukubo, Kawano, T., Seiro Machigashira, Kazuhiko Nakame, Motofumi Torikai, Takamasa Ikee, Noguchi, H., Ibara, S., & Satoshi Ieiri. (2023). *Association between gastrointestinal perforation and patent ductus arteriosus in*

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extremely-low-birth-weight infants: a retrospective study of our decade-long experience. *39*(1). https://doi.org/10.1007/s00383-023-05420-2

Marelli, A., Gauvreau, K., Landzberg, M., & Jenkins, K. (2010). Sex Differences in Mortality in Children Undergoing Congenital Heart Disease Surgery: A United States Population-Based Study. *Circulation*, *122*(11_suppl_1), S234–S240. https://doi.org/10.1161/circulationaha.109.928325

Mohamed, M. A., El-Dib, M., Alqahtani, S., Alyami, K., Ibrahim, A. N., & Aly, H. (2017). Patent ductus arteriosus in premature infants: to treat or not to treat? *Journal of Perinatology*, *37*(6), 652–657. https://doi.org/10.1038/jp.2017.4

Murni, I.K. *et al.* (2023) *Outcome and factors associated with undernutrition among children with congenital heart disease*, *PloS one*.https://pmc.ncbi.nlm.nih.gov/articles/PMC9949631/

Mori, Y. (2013). Transcatheter closure of patent ductus arteriosus in adults. *Journal of Cardiology Cases*, 7(3), pp.e89–e90. doi:https://doi.org/10.1016/j.jccase.2013.01.004.

Melodie *et al*., 2022 *Lesion-Specific Congenital Heart Disease Mortality Trends in Children: 1999 to 2017* , *Pediatrics*. Available at: https://doi.org/10.1542/peds.2022-056294

Ndubueze Ezemba, Chinawa, J. M., Adiele, D. K., Arodiwe, I. O., Ujunwa, F. A., & Okorie, C. O. (2022). Outcomes of Surgical Management for Patent Ductus Arteriosus in Infants in Nigeria. *Texas Heart Institute Journal*, *49*(6). https://doi.org/10.14503/thij-21-7633

Narin, N., Pamukcu, O., Baykan, A., Sunkak, S., Ulgey, A., & Uzum, K. (2016). Percutaneous PDA Closure in Extremely Low Birth Weight Babies. *Journal of Interventional Cardiology*, *29*(6), 654–660. https://doi.org/10.1111/joic.12352

Noori, S., McCoy, M., Friedlich, P., Bright, B., Gottipati, V., Seri, I. and Sekar, K. (2009). Failure of Ductus Arteriosus Closure Is Associated With Increased Mortality in

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Preterm Infants. *Pediatrics*, [online] 123(1), pp.e138–e144. doi:https://doi.org/10.1542/peds.2008-2418.

Othman, H. F., Linfield, D. T., Mohamed, M. A., & Aly, H. (2020). Ligation of patent ductus arteriosus in very low birth weight premature infants. *Pediatrics & Neonatology*, *61*(4), 399–405. https://doi.org/10.1016/j.pedneo.2020.03.009

Park, J., Yoon, S. J., Han, J., Song, I. G., Lim, J., Shin, J. E., Eun, H. S., Park, K. I., Park, M. S., & Lee, S. M. (2021). Patent ductus arteriosus treatment trends and associated morbidities in neonates. *Scientific Reports*, *11*(1), 10689. https://doi.org/10.1038/s41598-021-89868-z

Panagopoulos *et al.* (1971) 'Pertambahan berat Badan Pasca penutupan patent duktus arteriosus Secara Transkateter', *Patent Ductus Arteriosus in Children and Infant* [Preprint]. doi:10.1136/thx.26.2.137.

Qian, A., Jiang, S., Gu, X., Li, S., Lei, X., Shi, W., Zhou, J., Hu, L., Xiao, T., Zhu, Y., Cao, Y., Du, L., Zhou, W., Lee, S. K., Cheng, R., & Yin, R. (2024). Treatment of patent ductus arteriosus and short-term outcomes among extremely preterm infants: a multicentre cohort study. *EClinicalMedicine*, *67*, 102356–102356. https://doi.org/10.1016/j.eclinm.2023.102356

Ruoss, J.L., Bazacliu, C., Giesinger, R.E. and McNamara, P.J. (2020). Patent ductus arteriosus and cerebral, cardiac, and gut hemodynamics in premature neonates. *Seminars in Fetal and Neonatal Medicine*, 25(5), p.101120. doi:https://doi.org/10.1016/j.siny.2020.101120.

Rizkika, A., Rahfiludin, M. Z., & Asna, A. F. (2023). Faktor-Faktor yang Berhubungan dengan Kejadian Berat Badan Lahir Rendah di Puskesmas Kertek 2 Kabupaten Wonosobo. *Amerta Nutrition*, *7*(1), 37–44. https://doi.org/10.20473/amnt.v7i1.2023.37-44

Rehman, Y., Wazir, H. D., Akbar, A., Khan, A. M., Hussain, I., Afridi, A., Gul, H., & Sadia, H. (2022). Congenital Heart Disease and Its Association in Children With Down Syndrome. *Cureus*. https://doi.org/10.7759/cureus.29176

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Shin, J. *et al.* (2021) *Conservative treatment without any intervention compared with other therapeutic strategies for symptomatic patent ductus arteriosus in extremely preterm infants: A nationwide cohort study in Korea*, *Frontiers in pediatrics*. Available at: https://pmc.ncbi.nlm.nih.gov/articles/PMC8526922/

Su, B.-H., Lin, H.-Y., Chiu, H.-Y., Tsai, M.-L., Chen, Y.-T. and Lu, I-Chun. (2020). Therapeutic strategy of patent ductus arteriosus in extremely preterm infants. *Pediatrics & Neonatology*, 61(2), pp.133–141. doi:https://doi.org/10.1016/j.pedneo.2019.10.002.

Steurer, M. A., Baer, R. J., Keller, R. L., Oltman, S., Chambers, C. D., Norton, M. E., Peyvandi, S., Rand, L., Rajagopal, S., Ryckman, K. K., Moon-Grady, A. J., & Jelliffe-Pawlowski, L. L. (2017). Gestational Age and Outcomes in Critical Congenital Heart Disease. *Pediatrics*, *140*(4), e20170999. https://doi.org/10.1542/peds.2017-0999

Terrin, G., Di Chiara, M., Boscarino, G., Metrangolo, V., Faccioli, F., Onestà, E., Giancotti, A., Di Donato, V., Cardilli, V., & De Curtis, M. (2021). Morbidity associated with patent ductus arteriosus in preterm newborns: a retrospective case-control study. *Italian Journal of Pediatrics*, *47*(1). https://doi.org/10.1186/s13052-021-00956-2

Toizumi, M., Motomura, H., Vo, H.M., Takahashi, K., Pham, E., Nguyen, H.A.T., Le, T.H., Hashizume, M., Ariyoshi, K., Dang, D.A., Moriuchi, H. and Yoshida, L.-M. . (2014). Mortality Associated With Pulmonary Hypertension in Congenital Rubella Syndrome. *PEDIATRICS*, 134(2), pp.e519–e526. doi:https://doi.org/10.1542/peds.2013-4184.

Toizumi, M., Do, C.G.T., Motomura, H., Do, T.N., Fukunaga, H., Iijima, M., Le, N.N., Nguyen, H.T., Moriuchi, H. and Yoshida, L.-M. (2019). Characteristics of Patent Ductus Arteriosus in Congenital Rubella Syndrome. *Scientific Reports*, [online] 9(1), p.17105. doi:https://doi.org/10.1038/s41598-019-52936-6.

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Vaidyanathan, B. *et al.* (2009) 'What determines nutritional recovery in malnourished children after correction of congenital heart defects?', *Pediatrics*, 124(2). doi:10.1542/peds.2009-0141.

Wilson, W.M. *et al.* (2020) 'Clinical outcomes after percutaneous patent ductus arteriosus closure in adults', *Canadian Journal of Cardiology*, 36(6), pp. 837–843. doi:10.1016/j.cjca.2019.11.025.

Woo Sun Song, Chae Young Kim, Byong Sop Lee, Ellen Ai-Rhan Kim, Kim, K.-S., & Jung, E. (2020). Morbidity and Mortality of Very Low Birth Weight Infants with Congenital Heart Disease. *Korean Circulation Journal*, *50*(12), 1113–1113. https://doi.org/10.4070/kcj.2020.0135

Zahn, E.M. *et al.* (2014) 'A novel technique for transcatheter patent ductus arteriosus closure in extremely preterm infants using commercially available technology', *Catheterization and Cardiovascular Interventions*, 85(2), pp. 240–248. doi:10.1002/ccd.25534.