

**BAYI PREMATUR DENGAN BERAT LAHIR SANGAT RENDAH
DENGAN RIWAYAT *HEMODYNAMICALLY SIGNIFICANT*
*PATENT DUCTUS ARTERIOSUS (HS-PDA) PASCA LIGASI PDA***

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INTISARI

Latar belakang: Penyakit jantung bawaan merupakan salah satu kelainan kongenital yang paling sering ditemui dan merupakan penyebab utama kematian anak dari semua kelainan bawaan. PDA merupakan salah satu jenis kelainan jantung bawaan dimana duktus arteriosus yang menghubungkan aorta dan arteri pulmonalis pada masa prenatal tetap terbuka pascanatal. HS-PDA merupakan suatu kondisi PDA besar yang menimbulkan gangguan hemodinamik signifikan. HS-PDA secara nyata meningkatkan mortalitas dan morbiditas pada bayi prematur sehingga perlu segera dilakukan intervensi penutupan PDA.

Tujuan: Mengamati secara prospektif selama 12 bulan dan memberikan intervensi pada satu subjek anak laki-laki dengan usia koreksi 15 bulan dengan riwayat HS-PDA pasca ligasi PDA secara pembedahan pada usia neonatus, kelahiran prematur, BBLSR, riwayat displasia bronkopulmoner berat, *feeding difficulty*, *ankyloglossia*, labioskisis unilateral inkomplet, keterlambatan perkembangan umum, *underweight*, *stunting* dan gizi kurang.

Hasil: Setelah diberikan intervensi terhadap faktor prognostik, pada akhir pengamatan didapatkan *feeding difficulty*, *ankyloglossia* dan labioskisis teratasi, masih didapatkan keterlambatan perkembangan bahasa, serta belum dilakukan imunisasi influenza. Pada luaran yang diamati, tidak didapatkan rekanalisasi PDA, terdapat 4 episode gangguan respirasi yang menyebabkan kunjungan ke layanan kesehatan dengan 2 episode infeksi saluran pernafasan ringan dan 2 episode infeksi saluran pernafasan berat yang disertai hipereaktivitas bronkus, ada peningkatan berat dan tinggi badan dengan *growth velocity* sesuai usia meskipun status tinggi badan berdasarkan usia tetap berada pada kategori stunting, serta *catch-up* perkembangan dengan perbaikan evaluasi uji Denver II pada semua aspek.

Simpulan: Selama 12 bulan pengamatan, tidak didapatkan rekanalisasi PDA, didapatkan *catch-up* pertumbuhan dan perkembangan, terjadi infeksi saluran nafas berulang dengan gejala hipereaktivitas bronkus, dan didapatkan keterlambatan perkembangan bahasa. Tindakan *frenotomy* merupakan intervensi yang diberikan terhadap faktor prognostik *feeding difficulty* dan merupakan faktor prognostik paling berpengaruh yang secara nyata memperbaiki luaran status gizi.

Kata kunci: prematur, berat lahir sangat rendah, PDA, *feeding difficulty*, *ankyloglossia*, malnutrisi, keterlambatan perkembangan umum.

**PRETERM AND VERY LOW BIRTH WEIGHT INFANT
WITH HISTORY OF HEMODYNAMICALLY SIGNIFICANT
PATENT DUCTUS ARTERIOSUS (HS-PDA) POST PDA LIGATION**

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ABSTRACT

Background: Congenital heart disease is one of the most common congenital disorders and a leading cause of death in children with congenital anomalies. PDA is a type of congenital heart defect where the ductus arteriosus that connects the aorta and pulmonary artery during prenatal development remains open after birth. HS-PDA is a condition of a large PDA that causes significant hemodynamic disturbances. HS-PDA substantially increases mortality and morbidity in preterm infants, necessitating prompt intervention for PDA closure.

Objective: To prospectively observe for 12 months and provide intervention for a male child at corrected age 15 months with a history of HS-PDA post PDA surgical ligation in the neonatal period, preterm birth, very low birth weight, history of severe bronchopulmonary dysplasia, feeding difficulty, ankyloglossia, incomplete unilateral cleft lip, global developmental delay, underweight, stunting, and wasted.

Results: After intervention targeting prognostic factors, at the end of the monitoring, feeding difficulty, ankyloglossia, and cleft lip were resolved, speech delay persisted, and influenza immunization had not been administered. There was no PDA recanalization observed. The child experienced four episodes of respiratory problems, leading to healthcare visits with two period of severe respiratory infections with bronchial hyperreactivity. There was an increase in weight and height with growth velocity appropriate for age, although height-for-age status remained categorized as stunting. Catch-up development was observed with improvement in Denver II test evaluation in all aspects.

Conclusion: During the 12-month observation period, PDA recanalization was not observed, catch-up growth and development were achieved, recurrent respiratory infections with bronchial hyperreactivity occurred, and speech delay persisted. Frenotomy was the intervention provided for prognostic factors, specifically addressing feeding difficulty, and was the most influential prognostic factor that significantly improved nutritional status outcomes.

Keywords: preterm, very low birth weight, PDA, feeding difficulty, ankyloglossia, malnutrition, global developmental delay.