

INTISARI

FAKTOR PROGNOISIS KESINTASAN 2 TAHUN PASIEN ATRESIA BILIER PASCA PROSEDUR KASAI DI RSUP DR. SARDJITO

Agnes Treyssia Sandewa¹, Gunadi², Akhmad Makhmudi²

¹Program Sarjana, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan,
Universitas Gadjah Mada, Yogyakarta, Indonesia

²Divisi Bedah Anak, Departemen Ilmu Bedah, Fakultas Kedokteran, Kesehatan
Masyarakat, dan Keperawatan, Universitas Gadjah Mada, RSUP Dr. Sardjito,
Yogyakarta, Indonesia

Latar Belakang: Atresia bilier (AB) adalah penyakit bawaan idiopatik ditandai dengan adanya obliterasi atau hambatan sistem bilier ekstrahepatik yang menyebabkan obstruksi saluran empedu. Tatalaksana utama atresia bilier adalah operasi Kasai yang bertujuan mengembalikan aliran empedu dengan melakukan eksisi seluruh sisa duktus biliaris ekstrahepatik dan melakukan rekonstruksi dengan mengalirkan cairan empedu ke usus halus melalui hubungan artifisial (portoenterostomi). Terdapat beberapa faktor yang digunakan untuk menilai keberhasilan operasi Kasai antara lain usia saat dilakukan operasi Kasai, pengalaman operator, bilirubin total 7 hari (TB7), alkaline phosphatase pre operasi (ALP0), alkaline phosphatase pasca operasi (ALP7) dan rasio ALP/ALP0, yang mana parameter ini akan menentukan kesintasan 2 tahun pasien AB. Penelitian tentang beberapa faktor prognosis ini masih sangat terbatas di Indonesia.

Tujuan: Mengetahui pengaruh faktor prognosis usia saat dilakukan operasi Kasai, pengalaman operator, bilirubin total 7 hari (TB7), alkaline phosphatase pre operasi (ALP0), alkaline phosphatase pasca operasi (ALP7) dan rasio ALP/ALP0 terhadap kesintasan 2 tahun pasien AB pasca prosedur Kasai di RSUP Dr. Sardjito.

Metode: Penelitian ini menggunakan data dari 24 rekam medis pasien atresia bilier yang telah dilakukan prosedur Kasai di RSUP Dr. Sardjito dalam kurun waktu Januari 2012 hingga Desember 2018. Dilakukan analisis antara variabel usia saat operasi, pengalaman operator, bilirubin total 7 hari (TB7), alkaline phosphatase pre operasi (ALP0), alkaline phosphatase pasca operasi (ALP7) dan rasio ALP/ALP0 terhadap kesintasan 2 tahun pasien pasca operasi Kasai. *Odds Ratio* diukur dengan menggunakan *chi-square* atau *Fisher's Exact Test* untuk analisis univariat dan Kaplan Meier untuk menganalisis ketahanan hidup pasien.

Hasil: Pada analisis univariat, usia ($P = 0,098$) hampir signifikan secara statistik, namun pengalaman operator ($P = 0,640$), TB7 ($P = 0,682$), ALP0 ($P = 0,414$), ALP7 ($P = 0,102$), rasio ALP7/ALP0 ($P = 1$) tidak signifikan secara statistik dalam

mempengaruhi kesintasan pasien. Pada analisis Kaplan meier, usia ($P = 0,162$), operator ($P = 0,479$), TB7 ($P = 0,774$), ALP0 ($P = 0,391$), ALP7 ($P = 0,097$), dan rasio ALP7/ALP0 ($P = 0,696$) dalam menentukan kesintasan 2 tahun pasien.

Kesimpulan: Pada analisis univariat hanya faktor usia yang hampir signifikan secara statistik namun tidak ada hubungan. Pada analisis Kaplan Meier, hanya kadar ALP7 yang hampir signifikan dalam menentukan lamanya kesintasan 2 tahun pasien.

Kata Kunci : atresia bilier; kesintasan 2 tahun; prosedur Kasai; faktor prognosis

ABSTRACT

PROGNOSTIC FACTORS FOR 2-YEARS SURVIVAL OF PATIENTS WITH BILIARY ATRESIA AFTER THE KASAI PROCEDURE IN RSUP Dr. SARDJITO

Agnes Treyssia Sandewa¹, Gunadi², Akhmad Makhmudi²

¹Undergraduate Program, Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

²Division of Pediatric Surgery, Depanement of Surgery, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, RSUP Dr. Sardjito, Yogyakarta, Indonesia

Background: Biliary atresia (AB) is an idiopathic congenital disease characterized by obliteration or obstruction of the extrahepatic biliary system which causes obstruction of the bile ducts. The main treatment of biliary atresia is Kasai surgery which aims to restore the flow of bile by excision of all remaining extrahepatic bile ducts and reconstructing the flow of bile into the small intestine through artificial connections (portoenterostomy). There are several prognostic factors used to assess the success of Kasai surgery including age at Kasai surgery, operator experience, total 7-day bilirubin (TB7), pre-operative alkaline phosphatase (ALP0), post-operative alkaline phosphatase (ALP7) and ALP / ALP0 ratio, which these parameters will determine the survival of 2 years AB patients. Research on these several prognostic factors is still very limited in Indonesia.

Objective: The aim of this study was to determine the effect of the prognostic factors of age at Kasai surgery, operator experience, total 7-day bilirubin (TB7), pre-operative alkaline phosphatase (ALP0), post-operative alkaline phosphatase (ALP7) and ALP / ALP0 ratio on the 2-years survival of AB patients after the Kasai procedure at RSUP Dr. Sardjito.

Method: This study uses data from 24 medical records of biliary atresia patients who have performed the Kasai procedure at RSUP Dr. Sardjito from January 2012 to December 2018. An analysis was carried out between variables of age variables at surgery, operator experience, total 7-day bilirubin (TB7), pre-operative alkaline phosphatase (ALP0), post-operative alkaline phosphatase (ALP7) and ALP / ALP0 ratio to 2-years survival of patients after surgery Kasai. Odds Ratio was measured using chi-square or Fisher's Exact Test for univariate analysis and Kaplan Meier to analyze patient survival.

Results: In univariate analysis, age ($P = 0.098$) was almost statistically significant, but operator experience ($P = 0.640$), TB7 ($P = 0.682$), ALP0 ($P = 0.414$), ALP7 ($P = 0.102$), ALP7 / ALP0 ratio ($P = 0.102$) $P = 1$) not statistically significant in

influencing patient survival. In Kaplan meier analysis, age ($P = 0.162$), operator ($P = 0.479$), TB7 ($P = 0.774$), ALP0 ($P = 0.391$), ALP7 ($P = 0.097$), and ALP7 / ALP0 ratio ($P = 0.696$) in determining survival of 2 years AB patients.

Conclusion: In the univariate analysis only age factors were almost statistically significant but there was no relationship between age and 2-years survival. In Kaplan Meier's analysis, only ALP7 levels were almost significant in determining the length of a patient's 2-years survival.

Keywords: biliary atresia; 2-years survival; Kasai procedure; prognostic factors