

## INTISARI

### **FAKTOR PROGNOSIS BILIRUBIN TOTAL DAN ALBUMIN 3 BULAN PASCA OPERASI KASAI TERHADAP KESINTASAN PASIEN ATRESIA BILIER DI RSUP. DR. SARDJITO**

**Latar Belakang:** Atresia bilier (AB) merupakan penyakit hati yang ditandai dengan adanya obstruksi dan fibro-obliterasi progresif saluran bilier ekstrahepatik. Kejadian atresia bilier di Yogyakarta dilaporkan terjadi dengan rasio 1:7.000 kelahiran hidup. Atresia bilier merupakan penyebab tersering terjadinya hiperbilirubinemia direk pada neonatus. Operasi Kasai merupakan tindakan operatif untuk menangani kasus atresia bilier dengan cara memperbaiki aliran empedu dari hati menuju intestinal dengan pembentukan sebuah saluran yang memiliki anastomosis dengan porta hepatica. Beberapa dari mereka yang bertahan hidup mengalami disfungsi hati disertai komplikasi jangka panjang, dan mungkin memerlukan transplantasi hati jika fungsi hati memburuk secara drastis. Bilirubin total dan albumin merupakan salah satu faktor prognosis yang dapat menentukan kesintasan pasien atresia bilier pasca operasi Kasai karena terkait dengan kondisi hati pasien AB.

**Tujuan:** Mengetahui bagaimana faktor prognosis bilirubin total 3 bulan dan albumin 3 bulan pasca operasi Kasai mempengaruhi kesintasan pasien atresia bilier di RSUP. Dr. Sardjito Yogyakarta.

**Metode:** Desain penelitian berupa kohort retrospektif. Sampel diambil dari rekam medis pasien atresia bilier 3 bulan pasca operasi Kasai di RSUP Dr. Sardjito Yogyakarta dalam kurun waktu Juni 2012 sampai April 2018. Sampel penelitian menggunakan data rekam medis pasien AB yang telah dilakukan prosedur kolangiografi intraoperative dan atau prosedur Kasai. Hasil penelitian akan dianalisis dengan menggunakan penilaian regresi linier. Hubungan antara variabel dependen dan variabel independen dinilai dengan metode *chi-square*.

**Hasil:** Hubungan albumin 3 bulan pasca operasi Kasai terhadap kesintasan pasien AB signifikan secara statistik ( $P=0,005$ ). Namun, hubungan bilirubin total 3 bulan pasca operasi Kasai tidak memiliki hubungan yang signifikan terhadap kesintasan pasien ( $P=0,163$ ). Hasil rerata albumin 3 bulan pasca operasi Kasai pada pasien yang hidup sebesar  $3,66 \pm 0,73$  mg/dL dan pada pasien yang meninggal sebesar  $2,69 \pm 0,43$  mg/dL ( $P=0,004$ ). Hasil rerata bilirubin total 3 bulan pada pasien hidup adalah  $4,95 \pm 4,79$  mg/dL dan  $8,26 \pm 4,32$  mg/dL pada pasien yang meninggal ( $P=0,134$ ).

**Kesimpulan:** Tidak terdapat hubungan yang signifikan antara usia dilakukannya Kasai, jenis kelamin, albumin dan bilirubin total yang abnormal 3 bulan pasca operasi Kasai terhadap kesintasan pasien AB. Namun, terdapat hubungan yang signifikan antara rerata kadar albumin 3 bulan pasca operasi Kasai terhadap kesintasan pasien AB di RSUP Dr. Sardjito Yogyakarta.

**Kata Kunci:** atresia bilier, faktor prognosis, albumin, bilirubin, kesintasan (survival), operasi Kasai.

## ABSTRACT

### PROGNOSIS FACTOR FOR THE TOTAL OF BILIRUBIN AND ALBUMIN 3 MONTHS POST- KASAI SURGERY TOWARDS THE SURVIVAL OF BILIARY ATRESIA PATIENT IN RSUP. DR. SARDJITO

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**Background:** Biliary Atresia is a liver disease with the sign of obstruction and progressive fibro-obliteration on extrahepatic biliary tract. The occurrence of biliary atresia in Yogyakarta is reported to be happened with the ratio of 1:7.000 birth rate. Biliary Atresia is the most frequent cause of direct hyperbilirubinemia in neonate. Kasai Surgery is an operative procedure to overcome biliary atresia by the means of improving the bile flow from liver to intestine with the creation of tracts which have anastomosis with porta hepatica. Several patients who survived this experience liver dysfunction with long term complication, and with the possibility of liver transplant if liver condition decline drastically. Total bilirubin and albumin is one prognosis factors which determines the survival of biliary atresia patient post- Kasai surgery in relation with patient AB's liver condition.

**Objective:** The objective of this research is to discover how bilirubin and albumin prognosis factor for 3 months in total post-Kasai surgery affects the survival of biliary atresia patient in RSUP. Dr. Sardjito Yogyakarta.

**Method:** This research uses cohort retrospective design. Sample is collected from biliary atresia patients' medical record 3 months after Kasai surgery in RSUP Dr. Sardjito Yogyakarta for the period of June 2012 to April 2018. The sample research use patient AB medical record in which intra operative cholangiography and / or Kasai procedure have been conducted before. The results will be analyzed by linear regression appraisal. The relationship between dependent and independent variables is judged with *chi-square* method.

**Results:** The relationship between albumin 3 months after Kasai surgery and AB patient's survival is statistically significant ( $P = 0,005$ ). But, the relationship between bilirubin 3 months after Kasai surgery is not significantly related to the patient's survival ( $P = 0,163$ ). The average of albumin 3 months after Kasai surgery in living patients is  $3,66 \pm 0,73$  mg/dL and in deceased patients is  $2,69 \pm 0,43$  mg/dL ( $P = 0,004$ ). The average of total 3 months bilirubin in living patients is  $4,95 \pm 4,79$  mg/dL and  $8,26 \pm 4,32$  mg/dL in deceased patients ( $P = 0,134$ ).

**Conclusion:** There is no significant relationship between the age in which Kasai surgery is performed, gender, the total of abnormal albumin and bilirubin 3 months post-Kasai surgery and the survival of AB patients. However, there is significant relationship between the average of albumin 3 months post-Kasai surgery and the survival of AB patients in RSUP Dr. Sardjito Yogyakarta.

**Key words:** Biliary atresia, prognosis factor, albumin, bilirubin, survival, Kasai surgery.