FAKTOR PROGNOSIS TEMUAN HISTOPATOLOGI HATI DAN RASIO BILIRUBIN TOTAL 30/0 HARI TERHADAP KESINTASAN PASIEN ATRESIA BILIER PASCA OPERASI KASAI DI RSUP DR SARDJITO

Intisari

Latar Belakang

Tanpa pengenalan dini dan prosedur Kasai, atresia bilier (AB) menyebabkan sirosis hati dan menyebabkan transplantasi atau kematian pada usia muda.

Tujuan

Kami bertujuan untuk mengkarakterisasi temuan histopatologi hati untuk prediksi sirosis dan kelangsungan hidup pada pasien AB setelah operasi Kasai.

Metode

Kami meninjau secara retrospektif semua hasil histopatologi untuk pasien AB yang menjalani biopsi hati selama operasi Kasai dari Agustus 2012 hingga Desember 2018 di Rumah Sakit Dr. Sardjito, Yogyakarta, Indonesia.

Hasil

Lima puluh bayi dengan AB dipastikan dalam penelitian kami, 27 di antaranya laki-laki dan 23 perempuan. Usia rata-rata prosedur Kasai adalah 102,5 hari (kisaran interkuartil (IQR), 75,75-142,25 hari). Ada 33 (66%) dan 17 (34%) pasien AB dengan dan tanpa sirosis hati, sedangkan kelangsungan hidup secara keseluruhan adalah 52%. Pasien dengan proliferasi duktus biliaris berat, kolestasis berat, dan inflamasi portal berat memiliki risiko masing-masing 27, 22, dan 19,3 kali lipat untuk berkembang menjadi sirosis hati dibandingkan dengan pasien dengan proliferasi duktus biliaris sedang/ringan. sedang/ringan/tanpa kolestasis, dan inflamasi portal sedang/ringan ($p = 3{,}6 \times 10^{-6}$, $5{,}6 \times 10^{-4}$, dan $1{,}6 \times 10^{-3}$, masing-masing), sedangkan transformasi sel raksasa tidak terkait dengan

perkembangan sirosis hati (p = 0,77). Proliferasi saluran empedu sangat berkorelasi dengan kolestasis dan peradangan portal (p = 7,3 × 10− 5 dan 2 × 10− 4, masing-masing), dan kolestasis juga berkorelasi signifikan dengan peradangan portal (p = 0,016). Menariknya, usia pada prosedur Kasai sangat terkait dengan perkembangan sirosis hati (p = 0,02), tetapi tidak dengan kelangsungan hidup pasien (p = 0,33), sedangkan derajat fibrosis dan kolestasis secara signifikan berkorelasi dengan kelangsungan hidup pasien. , dengan HR masing-masing 3,9 (95% CI = 1,7–9,0; p = 0,017) dan 3,1 (95% CI = 1,4–7,0; p = 0,016).

Kesimpulan

Temuan histopatologi proliferasi saluran empedu, kolestasis, dan peradangan portal dapat memprediksi perkembangan sirosis hati pada pasien dengan AB. Selanjutnya, derajat fibrosis dan kolestasis mempengaruhi kelangsungan hidup pasien setelah operasi Kasai

Kata kunci: Atresia billier, temuan histopatologik, sirosis hepar, prosedur Kasai, Prognosis, kesintasan

Prognosis factors of liver histopathological findings and 30/0 day total bilirubin ratio on survival of billiary atresia patients after Kasai procedure at Sardjito Hospital

Abstract

Background

Without early recognition and Kasai procedure, biliary atresia (BA) results in liver cirrhosis and leads to either transplantation or death at a young age.

Aim

We aimed to characterize the liver histopathological findings for prediction of cirrhosis and survival in BA patients after Kasai surgery.

Methods

We retrospectively reviewed all histopathological results for BA patients who underwent liver biopsy during Kasai surgery from August 2012 to December 2018 in Dr. Sardjito Hospital, Yogyakarta, Indonesia.

Results

Fifty infants with BA were ascertained in our study, of whom 27 were males and 23 were females. The median age of Kasai procedure was 102.5 days (interquartile range (IQR), 75.75–142.25 days). There were 33 (66%) and 17 (34%) BA patients with and without liver cirrhosis, respectively, while the overall survival was 52%. The patients with a severe bile duct proliferation, severe cholestasis, and severe portal inflammation have a higher risk by 27-, 22-, and 19.3-fold, respectively, to develop liver cirrhosis compared with patients with a moderate/mild bile duct proliferation, moderate/mild/without cholestasis, and moderate/mild portal inflammation, respectively ($p = 3.6 \times 10^{-6}$, 5.6×10^{-4}, and 1.6×10^{-3}, respectively), while the giant cell transformation was not associate with the development of liver cirrhosis ($p = 0.77$). The bile duct proliferation was strongly correlated with cholestasis and portal inflammation ($p = 7.3 \times 10^{-5}$ and 2×10^{-4}, respectively), and cholestasis was

also significantly correlated with portal inflammation (p = 0.016). Interestingly, the age at Kasai procedure was strongly associated with the development of liver cirrhosis (p = 0.02), but not with the patients' survival (p = 0.33), while the degree of fibrosis and cholestasis were significantly correlated with the patients' survival, with HR of 3.9 (95% CI = 1.7–9.0; p = 0.017) and 3.1 (95% CI = 1.4–7.0; p = 0.016), respectively.

Conclusions

Histopathological findings of bile duct proliferation, cholestasis, and portal inflammation can predict the liver cirrhosis development in patients with BA. Furthermore, degree of fibrosis and cholestasis affect the patients' survival following the Kasai operation.

Keywords: Biliary atresia, Histopathological findings, Liver cirrhosis, Kasai procedure, Prognosis, Patient survival