

HUBUNGAN PROLIFERASI DUKTUS BILIER, INFLAMASI PORTA, KOLESTASIS DAN TRANSFORMASI SEL RAKSASA DENGAN KOLANGITIS PADA PASIEN ATRESIA BILIER PASCA OPERASI KASAI

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INTISARI

Latar Belakang : Atresia bilier merupakan penyakit tersering dari sindrom kolestatis neonatal dan dapat mengarah ke sirosis hati, bahkan kematian. Manajemen utama dari atresia bilier adalah operasi Kasai, tetapi banyak komplikasi yang menyertai prosedur ini. Kolangitis adalah komplikasi pasca operasi Kasai yang paling sering terjadi, dapat mengancam jiwa dan mempengaruhi hasil jangka panjang maupun jangka pendek. Temuan histopatologis dari spesimen biopsi hati selama prosedur Kasai dibuktikan dapat digunakan untuk memprediksi prognosis dan kejadian sirosis hati pada pasien pasca Kasai, sehingga peneliti ingin membuktikan apakah temuan histopatologis juga dapat memprediksi kejadian kolangitis pasca Kasai.

Tujuan : Untuk mengetahui apakah terdapat hubungan antara temuan histopatologis berupa derajat proliferasi duktus bilier, derajat inflamasi porta, derajat kolestasis dan derajat transformasi sel raksasa dengan terjadinya kolangitis pada pasien atresia bilier pasca operasi Kasai.

Metode : Penelitian ini merupakan penelitian observasional dengan rancangan studi kohort retrospektif yang dilakukan pada 25 pasien atresia bilier yang telah menjalani prosedur Kasai pada periode November 2016 sampai dengan Agustus 2021 di RSUP Dr. Sardjito, Yogyakarta. Data diambil dari rekam medis serta hasil biopsi hati saat prosedur Kasai. Hasil dianalisis dengan uji bivariat *Pearson's chi-square* atau *Fisher's Exact Test*, sementara uji konkordansi dari variabel proliferasi duktus bilier dengan pewarnaan Hematoksin Eosin dan CK7 dilakukan dengan uji *Cohen's Kappa* dan uji McNemar.

Hasil : Temuan histopatologis diklasifikasikan sesuai dengan penelitian oleh Muthukanagarajan *et al.* (2016). Derajat proliferasi duktus bilier, derajat inflamasi porta, derajat kolestasis dan derajat transformasi sel raksasa ($p=0,802$; $0,341$; $0,487$; $0,105$) tidak menunjukkan hubungan yang signifikan dengan kejadian kolangitis pasca Kasai.

Kesimpulan : Tidak terdapat hubungan signifikan antara temuan histopatologis dengan kejadian kolangitis pasca Kasai.

Kata Kunci : Atresia Bilier, Temuan Histopatologis, Proliferasi Duktus Bilier, Inflamasi Porta, Kolestasis, Transformasi Sel Raksasa, Kolangitis, Kasai

CORRELATION BETWEEN BILE DUCT PROLIFERATION, PORTAL INFLAMMATION, CHOLESTASIS AND GIANT CELL TRANSFORMATION WITH CHOLANGITIS IN POST-KASAI BILIARY ATRESIA PATIENT

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ABSTRACT

Background : Biliary atresia is the most common form of neonatal cholestatic syndrome and can lead to liver cirrhosis and even death. The main management of biliary atresia is Kasai surgery, but many complications would follow this procedure. Cholangitis is the most common postoperative complication of Kasai, can be life-threatening and affect both long-term and short-term outcomes. Histopathological findings from liver biopsy specimens during the Kasai procedure were proven to be used to predict the prognosis and incidence of liver cirrhosis in post Kasai patients, so the researcher wanted to prove whether histopathological findings could also predict the incidence of post Kasai cholangitis.

Objective : To determine whether there is a relationship between the histopathological findings such as degree of bile duct proliferation, the degree of portal inflammation, the degree of cholestasis and the degree of giant cell transformation with the occurrence of cholangitis in postoperative biliary atresia patients.

Methods : This study is an observational study with a retrospective cohort study design conducted on 25 biliary atresia patients who underwent Kasai procedure in November 2016 to August 2021 at RSUP Dr. Sardjito, Yogyakarta. Data taken from medical records and liver biopsy results during the Kasai procedure. The results were analyzed using the bivariate Pearson's chi-square test or Fisher's Exact Test, while the concordance of the data of biliary duct proliferation with Hematoxylin Eosin and CK7 staining was performed using Cohen's Kappa test and McNemar's test.

Results : Histopathological findings were classified according to the study by Muthukanagarajan *et al.* (2016). The degree of biliary duct proliferation, the degree of portal inflammation, the degree of cholestasis and the degree of giant cell transformation ($p=0.802$; 0.341 ; 0.487 ; 0.105) did not show a significant correlation with the occurrence of post-Kasai cholangitis.

Conclusion : There was no significant correlation between histopathological findings and the occurrence of post-Kasai cholangitis.

Keywords : Biliary Atresia, Histopathological Findings, Biliary Duct Proliferation, Portal Inflammation, Cholestasis, Giant Cell Transformation, Cholangitis, Kasai