The Most Significant Prognostic Factor of Biliary Atresia after Kasai Portointerostomy

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**Backgrounds and purpose:** The prognostic factors of biliary atresia after Kasai portointerostomy has been known the patient’s age at the time of Kasai portointerostomy (age), the size of bile duct at the porta hepatitis (size), the clearing of jaundice after Kasai portointerostomy (clearing) and the surgeon’s personal experience. The aim of this study is to decide the most significant prognostic factor of biliary atresia after Kasai portointerostomy.

**Materials and Methods:** This study is retrospective statistical analysis about the above mentioned prognostic factors in 51 cases of biliary atresia that had Kasai portointerostomy by one pediatric surgeon. For the statistical analysis, Kaplan-Meier method, Log-rank test and Cox regression test were used. A $p$ value of less than 0.05 was considered to indicate statistical significance.

**Results:**

There is no significant difference of survival rate between groups of age.
- The age is also not significant risk factors for survival in this study (Cox Regression test; $p$ value = 0.63).
- There is no significant difference of survival rate between groups of bile duct size.
- However, the size is significant risk factors for survival (Cox Regression test; $p$ value = 0.002).
- There is significant difference of survival rate between groups of serum bilirubin clearing (Kaplan-Meier method; $p$ value = 0.02).
- The serum bilirubin clearing is also significant risk factors for survival (Cox Regression test; $p$ value = 0.001)

**Conclusion:** The serum bilirubin clearing is the most significant prognostic factor of biliary atresia after Kasai portointerostomy.