



Title	Impact of Donor-Specific Antibodies on Graft Fibrosis after Pediatric Living Donor Liver Transplantation for Biliary Atresia
Author(s)	Ueno, T.; Zenitani, M.; Yamanaka, H. et al.
Citation	Transplantation Proceedings. 2016, 48(4), p. 1095-1099
Version Type	AM
URL	<a href="https://hdl.handle.net/11094/98564">https://hdl.handle.net/11094/98564</a>
rights	©2024. This manuscript version is made available under the CC-BY-NC-ND 4.0 license <a href="https://creativecommons.org/licenses/by-nc-nd/4.0/">https://creativecommons.org/licenses/by-nc-nd/4.0/</a>
Note	

*The University of Osaka Institutional Knowledge Archive : OUKA*

<https://ir.library.osaka-u.ac.jp/>

The University of Osaka

# **Impact of Donor-Specific Antibodies on Graft Fibrosis after Pediatric Living Donor Liver Transplantation for Biliary Atresia**

**Meeting Name: CAST 2015**

## **Abstract**

Pediatric living donor liver transplant (LDLT) patients sometimes develop graft fibrosis after non-recurrent diseases such as biliary atresia (BA). Donor-specific antibodies (DSA) have recently been shown to play a possible role in graft damage after liver transplantation. We report the impact of DSA on pediatric LDLT for BA patients.

## **Materials & Methods**

Patients under age 18 who received LDLT for BA at our institution and who had at least 5 years' follow-up were identified, and 23 were eventually enrolled in this study. Pathological findings were assessed using the last available biopsy. Patients were divided in two groups, DSA positive and negative. Graft fibrosis after LDLT were assessed according to DSA groups.

## **Results**

The mean patient age at transplant was 2.6 years. The mean time to the last available biopsy after LDLT was 8.2 years (4.8–15.6 years); 6 patients (26%) showed no fibrosis,

while fibrosis was graded as F1, F2, or F3 in 8 (35%) 8 (35%), and 1 patients, respectively. DSA were observed in 12 patients (52%). Moderate graft fibrosis (F2 and F3) was found in 7 (58%) of the DSA-positive group, but only 2 (18%) of the DSA-negative group, showing a stastically significant difference ( $P < 0.05$ ). Pre-transplant cross-matching was performed in 17 patients. The 2 patients with a positive cross-match were DSA positive. Six cross-match-negative patients developed *de novo* DSA after LDLT.

## Conclusions

Graft fibrosis was observed after LDLT for BA during long-term follow-up, more commonly in DSA-positive patients. DSA may play a role in fibrosis formation.