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CONTROLLED DCD DONATION IS PART OF THE SOLUTION TO LIVER GRAFT SHORTAGE, REGARDLESS OF DONOR AGE. O. Detry (1), N. Meurisse (1), J. Delwaide (1), A. Lamproye (1), B. Bastens (2), C. Brixko (3), V. Putzeys (3), B. Servais (4), M. Meurisse (1), A. Deroover (1), P. Honore (1). (1) CHU Liege, Liège, Belgium ; (2) CHC, Liège, Belgium ; (3) CHR Citadelle, Liège, Belgium ; (4) CHBA, Seraing, Belgium.

Aim : Results of donation after circulatory death (DCD) liver transplantation (LT) are impaired by ischemic bile duct lesions caused by procurement warm ischemia. Donor age is a risk factor in deceased donor LT, and particularly in DCD-LT. At the authors institute, age is not an absolute exclusion criterion to discard DCD liver grafts, controlled DCD donors receive comfort therapy before withdrawal, and cold ischemia is minimized. The aim of the present study was to report on the results of the first 10 years of this experience, and particularly on graft survival and the rate of post-transplant biliary complications, according to DCD donor age.
Methods : The authors retrospectively studied a consecutive series of 70 DCD-LT performed from 2003 to 2012, with at least one year of follow-up. This series was divided according to donor's age, including 32 liver grafts from donors < 55years, 20 between 56 and 69 years, and 18 from older donors > 69 years. The three groups were compared in terms of donor and recipient demographics, procurement and transplantation conditions, peak laboratory values during the first post-transplant 72 hours, and results at one and four years. Median follow-up was 43 months.
Results : Overall graft survival was 98.5%, 91.4% and 69.5% at 1 month, 1 year and 4 years, respectively, without graft loss secondary to ischemic bile duct lesions. Cancer was the primary cause of graft loss and patient death. No difference other than age was noted between the three groups in donor and recipient characteristics, and in procurement conditions. There was no primary non-function but one patient needed re-transplantation for artery thrombosis. Biliary complications occurred similarly in the three groups. Graft and patient survival rates were not different at one and four years between the three groups. During the study period, there was an increasing liver procurement and transplantation activity, and in 2012, 30% of performed LT were DCD-LT, allowing a mean LT waiting time of 66 days.
Conclusions : This study shows comparable results between controlled DCD-LT from younger and older donors. Donor age > 50 years should not be a contraindication to DCD-LT if other donor risk factors (such as warm and cold ischemia time) are minimized. DCD-LT with short cold ischemia may provide a significant source of liver grafts, decreasing waiting time.

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PROGRESSION OF LIVER DISEASE IN PIZZ ALPHA-I- ANTITRYPSIN DEFICIENCY PREDOMINATES IN MALE CHILDREN. X. Stephenne (1), S.L. Eta (2), F. Smets (1), E. Sokal (1). (1) Université Catholique de Louvain, City of Brussels, Belgium ; (2) Université Catholique de Louvain, Brussels, Belgium.

Introduction : About 10% of PIZZ infants with Alpha-I-Antitrypsin Deficiency (AATD) develop neonatal cholestasis and of these about 25%-30% develop end-stage liver disease requiring liver transplantation in the first decade of life. AATD present also with incidental finding of elevated liver function tests while few patients may present with cirrhosis at diagnosis. Sex prevalence of liver disease associated to AATD has so far not been reported in paediatric cohort.
Methods : We reviewed retrospectively data on 37 PI ZZ AATD (24 males & 13 PIZZ females) referred in our paediatric liver unit. To compare categorical variables, data were analyzed using the Fischer exact.
Results : At the time of AATD diagnosis, 23 of 37 (62%) PI ZZ patients had clinical liver disease such as neonatal cholestasis and/or cirrhosis. Neonatal cholestasis was diagnosed at presentation in 18 PiZZ patients (11 males and 7 females) while cirrhosis was diagnosed in 5 male patients and not in females. Thirteen (56%) of 23 liver affected patients developed end-stage liver disease requiring liver transplantation (LT), among which 11 were males, accounting for 46% of male patients (11/24) and 2 were PI ZZ females (2/13, 15% of female patients) ($p = 0.0006$ and $p = 0.06$ respectively). Six of the 11 male transplanted patients (55%) had presented initially with neonatal cholestasis, and 5 with compensated cirrhosis. The 2 transplanted girls had presented initially with neonatal cholestasis. Of 24 patients who did not require LT, 10 (42%) presented with neonatal cholestasis (5 males & 5 females) and 14 had no history of liver disease.
Conclusions : In a tertiary pediatric liver unit, cirrhosis at presentation in PiZZ AATD is associated with male gender, and males account for 85% of the transplanted cases. Despite a recruitment bias, our finding suggests a more severe disease evolution in male children.