Minutes from Nordic Pediatric Liver Transplant Group Meeting (NPLTG)

Gothenburg, October 11, 2022 (on site meeting)

Center-wise update on pediatric liver transplant activity to date for 2022:

**Gothenburg**: 6 pediatric Ltx; (3 split and 3 full size)

**Stockholm**: 6 pediatric Ltx; (4 split and 2 LD).

**Tartu**: Have 3 pediatric recipients listed for Ltx (one is a re-Ltx)

**Helsinki**: 6 pediatric.

**Oslo**: 7 pediatric Ltx (1 using LD).

**Copenhagen**: 14 pediatric Ltx; (1 split, 1 reduced and 2 full size).

Update from Scandiatransplant

Ilse Duus Weinreich presented split Ltx statistics for 2021. Out of 552 donors 35 (6.3%) fulfilled the “split criteria”. Out of these 31 livers were procured for LTx of which 13 (41.9%) were transplanted to pediatric recipients. This is a great improvement in the utilization of split criteria graft used for pediatric recipients from 17.5% during 2020 (In 2018 it was 21% and 2019 22%).

Liver are also being sent between countries/centers more frequently 2021. The export/import between countries of split adult donor livers used for pediatric recipients was 11 of 22 = 50% (2020 it was 37.5%). On average, 43 pediatric recipients enters the waiting list each year (with only 1-2 patient withdrawals form the waiting list per year) and 37 pediatric recipients are transplanted each year within Scandiatransplant, a number that has remained relatively stable over the years. Only six pediatric patients have died on the liver waiting list from 2016 – 2021 (4 were waiting for re-transplantation). Since the last meeting, split organ offers are have been
offered simultaneously to all potential centers. Ilse highlighted that all centers receiving an offer need to reply/respond in YASWA and it was deiced that it should be obligatory to declare the reason for declining the offer.

**To Do:** It was decided to continue the evaluation of split-liver offers and present the data at the next meeting.

**Workshop : Expanded pediatric outcome parameters**

During the workshop the group discussed potential additional parameters to be added to the existing YASWA database for pediatric liver transplantations.

*It was decided to suggest adding the following parameters currently not available in the dataset:*

1. Portal vein thrombosis present at the transplantation? Y/N
2. Portal vein reconstruction performed? Y/N
3. Closed or open abdomen at transplantation? Closed / Open
4. Perioperative blood loss? Entered in ml
5. Red blood cell volume transfused during the transplantation? Entered in ml
6. The maximum Clavien-Dindo complication score during hospital stay following the transplantation? Grade I; Grade II; Grade IIIa; Grade IIIb; Grade IVa; Grade IVb; Grade V.
7. Biliary stricture? Y/N *(if Yes, then choose from anastomotic or non-anastomotic).*
8. Hypertension requiring treatment? Y/N
9. PTLD? Y/N *(if Yes, then choose from the following treatments: minimized immunosuppression; Rituximab or other chemotherapeutic agent).*
10. Quality of Life: Back to school/work? Y/N

**To Do:** The suggestion will be presented at the next NLTG meeting.

**Scandiatransplant pediatric liver transplant allocation system**

We decided that it now is time to summarize and publish the Scandiatransplant pediatric liver transplant allocation system as a model for efficacy and optimizing pediatric liver transplantation using splitting criteria and organ sharing. This collaboration and establishing a common pediatric waiting list has shortened the waiting times for many children and reduced the need for living donor transplantation for the majority of pediatric recipients.
A transplant surgeon and a pediatric hepatologist/gastroenterologist from each center should be involved writing/editing the manuscript.

**To Do:** Nicolai Schultz and William Bennet will initiate the planning for manuscript.

**Future NPLTG meetings**

William suggested that the Nordic pediatric hepatologist/gastroenterologist from now on be in charge of the NPLTG group, both for the agenda, calling participants and deciding on when and where to have meetings. This was accepted by the pediatric hepatologist/gastroenterologist center representatives present. The meetings should need to be announced in reasonable time and address specialties interested and involved in pediatric liver transplantation. So far (prior to the pandemic), the meetings have been annual and in connection with one of the NLTG meetings.

Upcoming meetings can possible be announced through a delegates list administered by Scandiatransplant as is planned for the NLTG meetings. No new meeting date and location was agreed on today.

**To Do:** William Bennet and Nils Ekvall (hosting this meeting) will plan for how the NPLTG can operate in the future.

William Bennet

Meeting moderator

Gothenburg 2022-10-12