

NLTG and NPLTG 2023-10-10

Venue: Stockholm, Freys Hotel, October 10th, 10:00 – 16:30

Carl Jorns opened and welcomed 35 registered participants to the meeting.

Minutes from the NLTG and NPLTG 2023

Minutes from last NLTG-meeting April 18, 2023 in Oslo and the NPLTG meeting in Gothenburg October 11, 2022 were approved.

Centerwise update

Oslo: 70 liver transplantations of which 9 DCD with NRP, 1 living donor liver transplantation – total 91 donations. Oslo has seen an increase of pediatric patients listed for inherited metabolic liver diseases.

Gothenburg: 75 liver transplantations of which 8 DCD with NRP, 8 pediatric liver transplantations including 5 split grafts, 2 whole grafts, 2 multivisceral transplants, no living donors, 1 child combined liver and heart, 83 donors.

Helsinki: 58 liver transplantations of which 4 pediatric, not started with DCD liver transplantation yet.

Tartu: 9 liver transplantations, no pediatric transplantations, 17 deceased donors,

Riga: 1 liver transplantation, 19 donors. Riga has established an education cooperation program with Stockholm.

Copenhagen: 48 liver transplantations, 7 pediatric liver transplants, started with DCD and will participate in DCD/NRP-course in Stockholm November 2023.

Stockholm: 75 liver transplantations of which 14 DCD and 7 pediatric liver transplants. 2 patients deceased on the waiting list.

Update from Scandiatransplant:

Anne Ørskov Boserup presented the updates from Scandiatransplant.

Payback status

Currently there are 16 open cases for payback with mean time of 265 days which is in line with previous years. 6 cases have been waiting for more than 6 months. Anne presented these cases in detail. In all cases payback has been offered at least 3 and up to 14 times with a median of 6.5 times. 60 out of 61 possible pay backs have been offered suggesting that payback rules are followed. The group discusses to accept other blood groups for payback or to cancel paybacks after a certain amount of offers. Each center can opt in YASWA to accept other blood groups. DCD livers are accepted of every center as paybacks if logistics are favorable.

Classification of permanent withdrawals from the waiting list

Working group initiated in the Nordic Liver Transplant Group at previous meetings. The purpose of this work is to get a clearer picture of why patients are permanently withdrawn from the waiting list for better quality control and for improved reporting to competent authorities. Important to know is

that patients are permanently withdrawn in core-YASWA. Thus the classification is not organ specific and harmonization with other organ groups is advisable. The suggestion from the working group is presented. In summary, the working group suggest to change the 5 withdrawal causes: Tx outside Scandiatransplant, improved condition, worsened condition, not transplantable and other reason to 3 withdrawal causes: Tx outside Scandiatransplant, improved condition and not transplantable. The category not transplantable is subcategorized into progress medical condition, psychosocial/addiction, patient choice, progress malignancy (indication), other reasons. The new suggestion is approved by the NLTG meeting and will be presented by the Scandiatransplant office to the other organ groups.

NLTR data entry completeness

Anne presents ongoing work on a new functionality in YASWA with standardized reports on data completeness for each center. Reports for all NLTR forms will be available on YASWA and can be sent out by mail in regular intervals. The new functionality is welcomed by the NLTG meeting.

Status on the pediatric liver waiting list:

The total number of deceased donors 2022 in Scandiatransplant was 557. Of these 158 (28%) were within the age criteria and 89 (16%) were also within the BMI limit, of these 55 (10%) were within the limit for ICU days, and finally 30 (5.4%) fulfilled all split criteria.

When we consider all criterias, 5,4% of all donors met the criteria for split liver, which is a slightly lower than the previous years. Only 7 out of the 30 livers which fulfilled the split criteria were used for pediatric recipients which corresponds to 26% of the potential. At the same time 18 adult donors outside the split liver criteria were used to transplant pediatric patients. Most common reason for not using a split donor for a pediatric patient was medical (n=10) followed by no suitable recipient (n=5). 50% of donors used for pediatric split are imported from another country. In average 43 pediatric recipients enters the waiting list each year and 37 pediatric recipients are transplanted each year. 6 pediatric patients died on the liver waiting list from 2017 – 2022 of these 3 were waiting for re-transplantation.

In summary, the pediatric shared waiting is functioning well with low wait list mortality. The group decides to keep the current split criteria although more livers outside the split criteria are being used for pediatric recipients. To be followed up at next NLTG meeting.

Revision of NLTR forms

Espen Melum presented the status of the revision of NLTR forms. So far a NLTR Workshop was held February 21, 2023 in Copenhagen. The working group suggests a revision of the current forms aiming at improved data entry compliance, more long term complication parameter as well as PROM and PREM. All changes should maintain compatibility with ELTR parameters and should be aligned with similar processes in ELTR. The suggestion is approved by the NLTG and more representatives are added to the working group. To be followed up at next NLTG meeting.

Pediatric session

*“Nordic study on vaccination before and after pediatric liver transplantation” Silvia Malenicka
Silvia presents the study protocol and preliminary results. More centers are welcome to join.*

“Expanded pediatric outcome parameters in NLTR” William Bennet

William presents the suggestion of the working group for new pediatric outcome parameters in NLTR. The suggestions are approved by the NLTG and will be implemented into the NLTR forms by the Scandiatransplant office.

“Pediatric liver transplantation for inherited metabolic liver disease” Thomas Casswall/Nils Ekvall/Timo Jahnukainen

With improved outcomes pediatric liver transplantation for inherited metabolic liver disease has been increasing at all Nordic centers. Thomas Casswall presents the experience from Stockholm, Nils Ekvall from Gothenburg and Timo Jahnukainen from Helsinki. In summary, liver transplantation is an attractive treatment for an increasing number of metabolic liver diseases. Some of the diseases are not corrected by liver transplantation and thus the procedure is no longer simply life saving but can lead to a better quality of life. Thus, decision to transplant has become more complex necessitating an individual evaluation of the risk-benefit ratio. The group recognizes that international collaboration within NPLTG and ERN Transplantchild is an important tool to improve nutritional treatment, decision making and post transplant outcome.

“Future operations of NPLTG”

Everyone agrees on the importance of the NPLTG group and the close collaboration between NLTG and NPLTG. The meeting decides that the pediatric hepatologist will be responsible for the agenda of the annual NPLTG meeting in conjunction with the NLTG fall meeting. The fall meeting should be a two day meeting with one day dedicated for the NPLTG. However, the one day spring meeting should also have a pediatric agenda point and representation of at least the local pediatric hepatologist. Silvia Malenicka will produce an email list for all interested pediatric hepatologists to be included to all NLTG/NPLTG email alerts.

Ongoing studies

“Preliminary results of the Nordic study on HLA antibodies in liver transplantation (DSA study)”

Andreas Arendtsen Rostved

Andreas presents the preliminary data. In summary 759 patients have been included: Copenhagen 244 patients(32%), Gothenburg 235 patients (31%), Stockholm 178 patients (23%) and Helsinki 104 patients (14%). 858 pre-transplant, 707 3-month samples and 663 1-year samples are available for analysis. Unadjusted analysis shows significantly lower graft survival for patients with preformed class II DSA but not class I DSA. Further analysis of de novo DSA and adjusted analysis is ongoing.

“Outcome following re-transplantation for PSC”

Presented by Katrine Engesæter.

“DETECT: De-novo malignancies in liver transplant recipients” Hans Christian Pommergaard

Hans Christian presents the study protocol based on the patient and blood samples from the DSA study.

“Nordic study on Hepatico-duodenostomy in liver transplantation” Nicolai Schultz

Ongoing work to be followed up.

“Use of donor CT examination for allocation of liver grafts” William Bennet

Results are currently summarized in a manuscript.

“Outcome of Extended Right Lobe Liver Transplantations in the Nordic Countries” Vera Nilsén

Vera needs to visit the different centers to collect data. Collection of Stockholm and Gothenburg data is complete and Vera is welcome to visit the remaining centers for data collection.

“Liver transplantation for intrahepatic cholangiocarcinoma” Pål-Dag Line

Pål-Dag presents the study protocol and invites other centers to join.

“ScandiaTransplant pediatric liver transplantation allocation system” William Bennet, Nicolai Schultz ongoing work. To be followed up at next meeting.

EVINCE study/EVOLVE study: DHOPE-COR-NMP of discarded human livers” Søren Pischke

1. EVINCE study (ongoing): DHOPE-COR-NMP of discarded human livers with biosensors to objectively detect function (biosensors: microdialysis and CO2 tissue sensors). PI: Søren
2. EVOLVE study (approvals obtained, planned to start in January 2024): DHOPE-COR-NMP of discarded livers with function testing and transplantation to cancer patients (first study to implement MP in clinical practice in Oslo) PI: Søren, Morten Hagness

Søren invites other centers to join.

*“Study of albumin oxidation status during liver transplantation” Olav Rooijackers
PI not present. To be presented at next meeting.*

Any other business

William Bennet presents on behalf of Gustaf Herlenius responsible for the intestinal failure center. Save the date: CIIRTA-meeting 11-14 september 2025 – World Congress of the Intestinal Rehabilitation and Transplant Association

Gabriel and Carl inform about a 2-day NRP-course Spring 2024 in Stockholm. The course includes lectures, wet lab and pig lab training. Everyone interested is welcome to register.

Next NLTG meeting:

9th of april in Helsinki

List of participants:

Scandiatransplant office

Anne Ørskov Boserup

Oslo

Pål-Dag Line, Espen Melum, Lise Katrine Engesaeter, Søren Pischke, Monika Olofsson Storrø

Helsinki

Arno Nordin, Timo Jahnukainen (Teams), Johanna Savikko, Eija Tukiainen

Tartu

Andres Tein

Riga

Janis Vilmanis

Gothenburg

William Bennet, Bengt Gustafsson, Andreas Schult, Ulrika Samuelson, Nils Ekvall

Copenhagen

Nicolai Aagaard Schultz, Christian Ross, Ulla Brink Plagborg, Andreas Arendtsen Rostved, Hans-Christian Lykkegaard Pommergaard (via Teams)

Stockholm

Carl Jorns, Gunnar Söderdahl, Bo-Göran Ericzon, Gabriel Oniscu, Henrik Gjertsen, Björn Fischler, Silvia Malenicka, Ylva Andreasson, Tanja Mogerud, Håkon Haugaa, Thomas Casswall, Maria Söderström, Rafal Dlugosz, Vera Nilsén