Minutes from Nordic Liver Transplant Group Meeting (NLTG)
Copenhagen March 22nd 2022 (virtual meeting)

1. Ilse Duus Weinreich presented the minutes from NLTG Tartu October 2021
3. Center-wise update:
   Gothenburg: 2021: In total 100 liver transplantations in 98 recipients, 1 death, 1 pediatric (Living donor), 1 multi visceral, 1 DCD liver Tx. 2022: 24 transplantations
   Stockholm: 2021: In total 70 liver transplantations, 7 pediatric, 6 DCD. 2022: 14 transplantations, still low number of donors, increasing number on waiting list
   Tartu: 2021: In total 4 liver transplantations. 2022: 2 transplantations
   Helsinki: 2021: In total 75 liver transplantations. 2022: 10 transplantations, increasing waiting list
   Oslo: 2021: In total 98 liver transplantations, 4 pediatric, 0 DCD. 2022: 20 transplantations
   Copenhagen: 2021: In total 50 liver transplantations, 1 death (PNF), 5 pediatric (1 Living donor). 2022: 11 transplantations, 1 pediatric. A very low number of referrals of potential recipients during the Covid era, number of patients on the waiting list is still much lower than normal but increasing.
4. Update from Scandiatransplant, Ilse Duus Weinreich
   a. Payback and balance
   b. Pediatric exchange statistics
   c. Other
   It was decided to evaluate the new procedure with split-liver offers more systematically and present the data at the next meeting.
5. NLTR annual report 2021, Espen Melum.
• For the first time with center-wise comparison (agreement about respect when using these data).
• In the future DCD included in donor characteristics.
• In the future pediatric data?
• Suggestion: Data on the adult recipients of split liver-grafts

6. Organ allocation for recipients of multi-visceral transplants, Gustaf Herlenius, Gustaf presented Gothenburgs' results of 39 transplantations (28 adult, 10 pediatric recipients), 33 liver containing allografts and 6 isolated intestinal allografts.
Gustaf showed the technique for a Reduced-size, en bloc-adult donor-combined liver and intestinal graft (modified "Omaha technique") and staged abdominal closure and graft reduction. Median waiting time for pediatric MV transplantation with liver containing allograft is > 1½ year. Improving with split-liver exchange program, can be better with increased awareness of the MV recipients on the waiting list and the possibility to do in situ split at hospitals in the other Scandinavian countries.

7. Prevention of transmission of infectious diseases committee on Covid-19 pos. donors (Scandiatransplant guidelines), Morten Hagness. See presentation attachment.

8. Questions for Scandiatransplant Groups regarding a possible future membership for Latvia and Lithuania (see attachment from Working Group), Virge Pall.
Nicolai will collect the answers from all Scandinavian liver transplantation centers and then write and circulate a suggestion for the answer from NLTG. The Working group has been informed that we need more time.

   Gothenburg: DCD program including liver, NRP.
   Have a protocol for hypotherm machine perfusion of livers > 70 years
   Stockholm: Until now 10 DCD livers (6 in 2021), NRP.
   Protocol for hypotherm machine perfusion of livers > 70 years (together with Gothenburg)
   Oslo: Have re-started their DCD program including liver, NRP. But haven't done any DCD liver transplantations since the program re-started.
   Machine perfusion: Study collaboration with prof. Porte in Gronningen, rewarming to normotherm perfusion, pig-model and then clinical protocols on extended criteria donor livers (not accepted for transplantation). Open for collaboration?
   Helsinki: DCD kidney program
   Copenhagen: DCD working group has finished a protocol. Expect to start a DCD program with NRP within a year.
Have bought a Liver Assist perfusion machine, and will start machine perfusion after workshop in Groningen ultimo April.

Tartu: No plans for DCD or machine perfusion.

**Conclusion on DCD and Machine perfusion:** Increasing interest for DCD in Scandinavia. Gothenburg, Stockholm, Oslo and Copenhagen have the same perfusion machine, Liver Assist from XVIVO. Collaboration will be discussed at meeting in Gothenburg May 24th.

10. Status on Expanded pediatric outcome parameters, William Bennet:
   William will arrange a kind of “workshop” during next meeting.

11. Presentation of new studies and update on ongoing studies
   a. De novo malignancies in liver transplant recipients (DETECT) – a Scandiatransplant collaboration, Hans Christian Pommersgaard: H.C. presented a fully funded protocol, all members of NLTG are invited and expected to participate.(There is an ongoing study of de-novo malignancy in transplantation in Norway. No conflict of interests, collaboration could be possible).
   b. DSA Study, Allan Rasmussen: Waiting for at least 1-year follow-up of all patients. Allan will arrange a meeting in August/September with presentation of data from 5,000 analysis.
   c. Factors associated with waiting time and waitlist mortality, Carl Jorns: Needs a little re-work before manuscript is ready.
   d. Results of Hepaticoduodenostomy in Denmark, Nicolai Schultz: Have got data ~ 100 patients.
   e. Evaluation form of CT examination in deceased donors, Ulrika Samuelsson, William Bennet: Huge impact on decisions of donor-recipient match (31 % of recipient selections), 10 % livers abandoned based on CT of the donor. Data are not complete, but close to 100 % of potential donors for liver transplantation have a CT-scan now. Suggestion that we try to get missing data before publication.

12. Next meeting

   October, 10-11th, 2022
   Gothenburg
List of meeting participants

**Oslo**
Espen Melum, Pål-Dag Line, Morten Hagness, Monika Olofsson Storrvø

**Helsinki**
Arno Nordin, Carola Schauman,

**Tartu**
Andrei Uksov, Andres Tein, Virge Pall

**Gothenburg**
William Bennet, Bengt Gustafsson, Gustaf Herlenius, Ulrika Samuelson

**Copenhagen**
Nicolai Schulz (writer of minutes), Allam Rasmussen, Christian Ross, Ulla Plagborg, Carina Lund Sørensen, Hans Christian Pommersgaard

**Stockholm**
Carl Jorns, Gunnar Söderdahl, Bo-Göran Ericzon, Øystein Jynge, Marie Tranäng, Björn Fischler

**Scandiatransplant**
Ilse Duus Weinreich