The Minutes for the Nordic Liver Transplant Group Meeting
Gothenburg April 11, 2016

Venue:
Elite Park Avenue Hotel
Kungsportsavenyn 36,
411 36 Göteborg
+46 31 727 10 00

Welcome (William Bennet)
The meeting was opened.

Minutes from NLTG meeting in Copenhagen in October 21 2015. The minutes were approved without comments or changes.

Center wise update reports (all centers)
- Helsinki: Increased activity for 2015 with approximately 70 transplants.
- Gothenburg: Good activity. Expected number in 2015 app 94.
- Stockholm: No major changes regarding activity or staff. In need of nurses.
- Oslo: Slightly less transplant activity compared to previous years.
- Copenhagen: Increased activity for 2015.

NLTR Annual report 2015 (Espen Melum)
Espen Melum gave a summary of the NLTR Annual report for all liver transplants performed 2015. The total number of Ltx performed 2015 in the Nordic countries has reached an all time high with just over 400 liver transplantations for 2015. The donor and recipient median age continues to rise. Finland and Copenhagen has increased their transplant activity whereas that of Norway has dropped slightly.

Automated NLTR->ELTR transfer - status and remaining challenges (Espen Melum & Helena Isoniemi)
The work in progress for a future automatic transfer of data from NLTR to ELTR is ongoing and will be possible in the future. The major point of concern which may be problematic is the fact Vincent Karam insist that a retrospective update/correction of discrepancies in the ELTR of previous transplants be performed after the data transfer. This will be very laborious and time consuming, especially since it will have to be done back to the start of the ELTR. An alternative from the NLTR point of view would be to only prospectively transfer the data from the date that a transfer is possible. It was decided that we will invite both Prof. Rene Adam and Vincent to our next NLTG meeting to discuss these issues at the next NLTG meeting in Oslo in the fall.
Espen M. will formally invite them. Furthermore, Isonemi expressed skepticism and concerns to the additional data, requested by the LICAGE, that has been added to the ELTR.

The organ allocation “abroad” and on the ROTA-list. Does it work as intended? Room for improvement? (William Bennet)

William B raised the issue of who determines if a liver should be offered if the regional center will not use the liver. William presented an example a case where the liver was not offered despite pre-operative data in Scandia Transplant suggested a transplantable liver. The point was to raise awareness that the decision to accept a liver for a transplant should be taken by the potential recipient centers and not the donor center. This was agreed on by most the centers. This is normal policy in many European organ allocation organizations as well as in UNOS. This should generate even more livers for transplantation in the Nordic countries. The discussions

Information on revised Swedish liver allocation practice for acute-on chronic recipients (William Bennet & Gunnar Söderdal)

Work in progress to determine how to priorities among the severe liver insufficient patients within Sweden in order to reduce the National mortality rate. This was considered uncontroversial and no objection from the NLTG group was raised.

Status of our common pediatric waiting list and how "successful" or "unsuccessful" we have been complying with split criteria since October 2015? (Ilse Duus Weinreich)

- 22 total fulfilled splits criteria (October 2014-march 2016)
- 7 to split (>50%)
- 4 not performed (1 logistic, 1 resources, 2 medical reasons)
- 11 prior to the start of the in December

Very good start with the goal to have transplanted away the waiting list within a year. The routines of identifying the split donors with the help of the Scandia transplant registry works as intended with 10 % compliance with reporting the cause for not splitting. Over 50% of the split criteria were split for pediatric purposes!

Donor organ allocation for intestinal/multivisceral Tx (Gustav Herlenius)

Update on present/ongoing studies:

- Liver transplantation and cancer- Nordic Multicenter Study (Arno Nordin) Almost ready for publication –discussion regarding a higher odds Ratio for certain cancers in Denmark compared to the rest of Scandinavia. Additional data analysis ongoing. Hopefully ready for submission to journal later this year.
- Alcohol Study on Liver Transplant Patients (Maria Castedal)- Gothenburg complete recruitment, Stockholm still recruiting. New update from Knut Stockeland/ Maria C at the next meeting.
- Nordic DSA study (Andreas Rostved)
  Denmark recruiting. Sweden awaiting ethical approval and hopes to start enrolling after the summer. The same applies for Finland and Norway.
- Optimization of anti-CD25 induction therapy in relation to Liver Transplantation (*Christian Ross*) – CR to contact potential centers
- ABO incompatible liver transplantation (*Ulrika Skogsberg-Dahlberg*)- update on Gothenburg data presented.
- NAFLD/NASH as an indication for liver transplantation (*Hannes Hagström*)
  This study has just been initiated.

- Factors affecting long-term survival in patients transplanted due to alcoholic cirrhosis in the Nordic countries (*Espen Melum*) - short synopsis of what is planned. More information at the next NLTG meeting.

New study proposals:

- The influence of AB0-compatibility in liver transplantation: a Nordic Liver Transplant Registry study (*Allan Rasmussen*)- Accepted by all centers and the study has been initiated.

Presentation by *Astellas* (*Maiken Laursen*)

**Any other business - None**

**Next meetings:**
The next meeting for the NPLTG was decided to be in Oslo on Monday, October 24th 2016.
The next meeting for the NLTG was decided to be in Oslo on Thursday, October 25th 2016.

William Bennet/ Host
Liver exchange and pay back rules - revised December 2, 2015

High urgent call (HU)
- An acute liver failure patient who is at a risk to die within few days (no prior liver disease)
- Need for re-transplantation within 2 weeks after transplantation (includes primary non-functioning graft)
- if several HU call exist at the same time, the first one has priority over a later HU call. This is also true if the second center has a local donor.
- Within 72 hours after the HU call, every center has an obligation to offer available livers for the recipient center
- The first available donor liver with compatible AB0 blood group must be offered to recipients on HU call.

Paediatric recipients (<18 years at entry on liver waiting list):
- A paediatric donor liver (<18y.o) should be used for AB0 compatible paediatric recipients
- A paediatric donor liver, a splittable liver or a segment can be used without any limitation for a paediatric recipient in own center.
- If there is no paediatric recipient in own center, the pediatric or splittable liver has to be offered to a paediatric recipient in another center as a whole liver or as a split part if this is sufficient for the recipient as follows;
  1. Paediatric recipient with Hepatoblastoma, Hepatocellular Carcinoma (Liver cancer diagnosis must be defined in the database) or a pediatric kind request recipient.
  2. The paediatric recipient with the longest waiting time on the waiting list

Kind request
- Should be used only for very selected cases
- HU call 72 hour limit has exceeded without transplantation and the patient is still transplantable
- Rapidly deteriorating acute-on-chronic patient according to consideration of the center
- There is no obligation to send a liver from other centers, this is voluntary

Pay back after urgent calls (HU) / Kind requests:
The receiving center has to do the "pay-back" with the first available ABO identical liver of the same quality group as the liver received. The recipient center can voluntary do the pay-back with a liver from a better quality group.

Quality groups
- Pediatric liver.
- Splittable liver. Criteria is defined by the NLTG group
- Normal liver. Any other liver up to 65 years as defined by the responsible surgeon on call
- Donor age > 65 years

Pay back after segment or whole "splittable liver" for paediatric transplantation (<18 years):
- The pay back of a paediatric donor liver for a paediatric recipient shall be done with the first available splittable liver.
Pay back after segment: with a normal whole liver within 6 months.
Pay back after whole splitable liver. The receiving center has to do the pay back with the first available splitable liver.
Pay back must be with identical AB0 blood type.

Under certain occasions the pay back can be postponed after mutual agreement between the responsible surgeons in the 2 centers.

All donors fulfilling the split criteria shall be recorded
If a splitable liver is not used for a paediatric recipient, the reason for not splitting the liver shall be recorded. According to 4 categories.

- Logistics
- No paediatric recipient on the waiting list
- Medical
- Other. Specify:

Criteria’s for splitable donor liver:

- < 51 years
- BMI < 26
- < 4 days in ICU
- ALT / AST < 3 x normal

Liver rotation rules (surplus livers):

- When a surplus liver is available other centers will be contacted
- All centers must respond positive/negative to the offer within 30 minutes,
- The center at the highest position on the rota list accepting the surplus liver will receive it
- Only the accepting center is rotated and in practice the donor center is responsible for the rotation a.s.a.p.
- Whether a surplus liver is offered as a whole or a split liver the accepting center must be rotated
- Pay back livers are not causing any changes in rota list

Rotation has to be done when a surplus liver is offered and accepted of another country

Accepted October 21st 2015 and effective from December 7th 2015
On behalf of Scandiatransplant liver centers and NLTG

Copenhagen
Allan Rasmussen
Gothenburg
William Bennet
Helsinki
Helena Isoniemi
Oslo
Pål Dag Line
Stockholm
Bo-Göran Ericzon