

Nordic Liver Transplant Group (NLTG) meeting in Helsinki October 22, 2012

at Hotel Scandic, Pavilion (8th floor)

Present: Allan Rasmussen (C), Christian Ross (C), Marianne Joergensen (C), William Bennet (G), Bengt Gustafsson (G), Christina Wibeck (G), Magnus Rizell (G), Helena Isoniemi (H), Heikki Mäkisalo (H), Marko Lempinen (H), Arno Nordin (H), Leena Toivonen (H), Carola Schauman (H), Ilari Puustinen (H), Krister Höckerstedt (H, Sc), Axel Foss (O), Tim Scholtz (O), Kirsten Muri Boberg (O), Truls Sanengen (O), Trygve Thorsen (O), Stein Foss (O), Bo-Göran Ericzon (S), Gunnar Soderdahl (S), Per Stål (S), Susanne Klang (S), Antonio Romano (S), Knut Stokkeland (Gotland), Lars Bäckman (Uppsala).

1. Helena Isoniemi welcomed everyone to Helsinki.

2. Minutes of NLTG meeting in Stockholm in March 2012 were approved.

3. Center reports

- Copenhagen: Two new surgeons in the unit. Liver transplantation figures will probably be the same as earlier, around 40 to 50. Pancreas transplantations (simultaneous pancreas kidney) will start in spring 2013.

- Gothenburg: The director of the unit is now Per Lindnér, otherwise the staff is same. Liver transplantation will be estimated 80 this year, the donor figure is fairly good this year approximately 20 per million.

- Oslo: Some 90 liver transplantations will be done this year, for kidneys 330. The single pancreas transplantation program will start next year with estimated 40 to 50 procedures per year. Three colleagues have retired but two younger surgeons coming. A new department of regenerative medicine will start 2013.

- Stockholm: The new director of the unit is Gunnar Söderdahl. Estimated number of liver transplantation this year would be 70. Two hepatocyte transplantation have been done.

- Helsinki: first adult bowel transplantation done this year, the number of liver transplantations so far is only 41, so estimated total seems to go about 50 this year. Six pancreas transplantations have been done this year.

4. Common waiting list for pediatric segm 2+3

William Bennet updated the current situation of this list. According to Scandiatransplant registry 352 donors were used during the period from the first to end of the third quarter of 2012. Using strict split operation criteria (BMI <25, age <40, ICU stay < 3d, ALT <3 x normal) only 32 donors would have been suitable. However, only 7 cadaver donors were used for splitting. Some 5 live donor operations were performed during the same time period. The finding is not much different from European registries as there were 824 donors fulfilling split criteria and only 80 were used for the procedure. As the patient and even graft survival seems not to be different whether using whole or split livers William suggested that we should intent to split more. In many European countries split is mandatory if the donor fulfils the criteria. It was pointed that in Nordic countries the waiting time is still not high nor the mortality on the list and split livers are frequently associated with biliary complications.

Everyone agreed that this list serves as a reserve so far, and that it seems more appropriate to send the whole liver to recipient center for use it in two recipients. Of course this can also be discussed case by case and the donor center has the right to decision as they are offering voluntarily. Naturally the recipient center has the right to accept the graft or grafts, respectively. For more detailed problems, like if not sending the whole graft, who is going to split and how do we solve this question during night time, it was proposed that WB and BG would prepare a protocol for this entity into the next meeting to be discussed with other centers.

5. Immunosuppression regimens between centers

Kirsten Muri Boberg (O) proposed that all centers would report their immunosuppression protocols and long term use in order to evaluate the differences and situation at the moment. All centers presented shortly their protocols and in **Helsinki** the initial calcineurin inhibitor is cyclosporine whereas in other centers tacrolimus. The starting regimen is cyclosporine, MMF and corticosteroid in Helsinki and for patients with renal insufficiency delayed start of CNI is used with IL2 receptor blockade. For immunologically unstable patients the CNI is switched to tacrolimus. For autoimmune hepatitis continue steroids. Protocol biopsies are taken every 1, (3 in HCV+), 5, 10, 15 etc. In long term some 56% of patients have still cyclosporine based therapy. **Oslo** showed their protocol in more details and is not presented here. The standard starting immunosuppression is tacrolimus, MMF and steroids (tapered off at 6 mo) and also the delayed CNI starting protocol is used for renal insufficiency patients. In autoimmune hepatitis, PSC and PBC they continue with small dose of cortisone. In both Helsinki and Oslo rapamycin is also an used option for renal insufficiency patients. For HCV patients the steroids are used up to 2 yrs, in order to avoid rejection episodes and also to avoid stimulating the replication of viruses. In **Stockholm** the HCV protocol includes starting with cyclosporine, azathioprine, and steroids up to 5 yrs. The standard immunosuppression consists of tacrolimus, IL2-receptor blockade, MMF, and steroids. Steroid free regimens are not very popular nowadays as the increase in rejections may be more disadvantageous than the use of low dose steroids. In autoimmune hepatitis triple therapy is continued longer than in other indications. **Gothenburg** use two protocols with and without steroids. Induction IL2 receptor blockade is used routinely, tacrolimus, and MMF. Low dose tacrolimus is used depending on kidney function. All try to become steroid free except AIH and PSC. In **Copenhagen** the use of tacrolimus is adjusted according to kidney function quite similarly as in Gothenburg. The standard is also tacrolimus, MMF and steroids, which is tapered off at 1 year. Allan reminded that steroids are good alternative to use if one wants to maintain renal function by decreasing the CNI dose. For HCV positive patients they use cyclosporine based protocol with tapering off the steroids around 1 yr. In HCC patients Copenhagen and other centers seem to wait for Silver-study results, some centers are using sirolimus and some everolimus.

6. Retransplantation at different centers.

At last NLTG meeting Oslo wanted to know the retransplantation rates in all centers. The ELTR data of retransplantation rates was presented and also NLTR data. William Bennet pointed out that it must be distinguished whether these figures represent early or late graft failure needing retransplantation. In Gothenburg the estimated retransplantation rate for this year will be much lower than in earlier years when there was an opinion to favor early retransplantation if problems arise. When asking the possible reason for this change William told that introducing the pay-back system has definitely reduced the need for retransplantation but also improved anesthesiology services, less blood transfusions and other things. Antonio Romano presented their re-transplantation results: 45 re-tx's has been done between 2005 – 12, and of these 30 where acute (under 50 days).

7. The implementation of EU directive (2010/53/EU) to national legislation.

In Finland the process is still going and implementation of directive to national legislation will go to parliament in the beginning of next year. Also in countries the same process is still going and Norway is also renewing their organ legislation .

8. The possible role of Scandiatransplant to report for competent authorities.

This problem arose earlier as the different national laws seemed not to permit reporting of registry data abroad, in this case to Denmark where the Scandiatransplant registry data is situated. Krister Höckerstedt reported that this is now accepted by all, even Sweden seems not to be a problem anymore. Also the EU directive approves one center to combine the results and registries from many centers as we have done for years. So, we can continue doing this as lawyers did not find any problems in it. Some nations, like Sweden, may need some own reporting procedures which, however, should not interfere with Scandiatransplant registry. HI will meet the competent finnish authority in this matter.

9. NLTR

Last NLTG meeting decided to organize meeting also to the personnel filling up the NLTR data. This was planned to be held during every spring meeting as a parallel to NLTG meeting. These persons were also invited to Helsinki. They shortly presented themselves and helped to go through the next agenda which was the filling of forms C and D. All agreed that these forms should be filled promptly.

Tom Karsten will go through the data at next meeting. The situation of planning data transfer to ELTR is still under work, although all centers do report individually to ELTR.

The rule of publication was reminded, there is written rules somewhere (KH) but it was not available at this meeting. It was proposed to prepare such for the next meeting. The publication of studies using the NLTR data should include persons from each center and also the manuscript should circulate with them before publishing.

10. New studies

Lauri Puustinen (Helsinki) presented the study of recurrence of autoimmune hepatitis after transplantation. The data should be easily available from each center. All centers were interested to start this study and Lauri promised to send the protocol for further discussion.

William Bennet presented the idea to study ABO incompatible transplantations. Gothenburg is analysing their results and at least those centers that use ABOi seemed to be interested to participate. Long term outcome should be one of the end points. There was also discussion about the high urgent rule, but this study should not interfere with this.

Rizell presented the study plan of down staging HCC with TACE before transplantation. The study protocol was discussed and it was proposed to lengthen the follow up to five years and some of the details needs further evaluation.

11. Ongoing studies

Arno Nordin reported shortly that the Nordic liver transplantation and cancer study has moved a great step as Sweden has the licence now. The plan is to do detailed protocol during autumn, and early winter, then to extract data from NLTR and combine it with national cancer registries and finally combine these all in Finland. This could take place in spring 2013. Then the manuscript could be prepared during spring and summer 2013.

Bo Göran presented the pediatric transplantation study (Silvia M. was not able to come to this meeting) in which the data is almost complete now, some of the results were presented.

Knut Stokkeland reported about the alcohol-study, in which the start has not occurred in Copenhagen and Gothenburg and Huddinge is third center in this study. The study period is now expanded to 3 years. Helsinki and Oslo? is not going to participate to this study

Kirsten Muri Boberg presented the results of PSC and colorectal neoplasia study which is published.

The study of very old and very young donors is going on, preliminary results were shown and it was planned that the paper would be prepared and submitted next year. This study was initiated by Oslo.

HI reported that causes of premature death in the long-term after LTx is now only waiting update for Gothenburg data and the statistical analyse will start.

12. The Estonia question was not discussed because of no new information

13. The next meeting will be in Copenhagen. Date 8.3.2013 was accepted.

Later on it came up that this day will be unsuitable due to many coincidences and the day is now changed to 22nd Apr 2013