Minutes from meeting in the Prevention of transmission of infectious diseases committee meeting on May 24th 2022, Gardermoen, Norway.
Present: Morten Hagness, Susanne Dam Poulsen, Ingvild Nordøy, Ola Blennow; Helena Hammarström, Ilkka Helanterä, Anne Kallaste. On Teams: Magnus Lind

Action points for next meeting marked in yellow

Work with the guidelines:
Obligatory screening on of the donor:
HBV and HCV positive donors: Magnus Lind went through current literature on this. Since previous guideline published in 2018, there has been a growing body of evidence that grafts from donors with chronic hepatitis C or hepatitis B can be used safely given adequate precautions. Some alterations were made to the guideline, above all to emphasize avoiding using grafts where hepatitis D co-infection is suspected.[1-3]

Ingvild Nordøy went through current status on samples taken before donation but analyzed later. EBV: PTLD is particularly common in children and almost universally linked to EBV infection. Proper follow-up and surveillance for PTLD is required particularly in D+/R- children but also in adults. [4] For HTLV – 1/2 there is a discussion on false positives in donors from non-endemic areas. A precision of patients from high endemic areas are now provided in new guidelines. In potential donors who are tested for HTLV-1/2, results should be clear before using organs.

For the TB IGRA test there was a discussion on whether this was feasible in the setting of organ donation and this will be assessed at the next meeting, however a precision in the guidelines was made that the TB IGRA test always remains positive in TB treated patients.

Helena Hammarström went through Toxoplasma and tropical diseases. For Toxoplasmosis it is established that prophylaxis should be given to for heart recipients that are IgG negative, however there are emerging evidence that IgG negative recipients of other organs should be considered for prophylaxis when given a graft from seropositive donor. This is often covered by existing TMS prophylaxis for Pneumocystis jirovecii. [5, 6] For Malaria, Strongyloides, Leishmania and Chagas disease, updated information on treatment and endemic areas are provided in the guide. [7-9]

Susanne Dam Paulsen went through obligatory screening of the donor. Ilkka Helanterä went through other diseases. Anne Kallaste covered active infections in the donor. There were made no changes in the guidelines as such in these.

Strongyloides stercoralis were discussed in more detail. In Norway, universal screening of all donors was introduced in 2015, 10 positive donors have been identified since then. Notably, two of those donors were ethnic Norwegians. In the other centers only screening with donors from endemic areas has been performed. The possibility of false positives in Norway or lost cases in other countries were discussed. Common research in this field could be of interest, and this will followed up on in next meeting. Helena Hammarstrøm updated the guideline with maps for high endemic areas, and the recommendation that sero-postive donors should be treated is strengthened.

Covid addendum: Ola Blennow went through new studies since the meeting in February. There were a Cochrane report from Spain, where 48 kidneys, 18, liver, and 3 hearts were utilized from 57 donors in addition to 6 positive lung donors. Viral admission occurred from three lung donors where one died. They conclude that especially with low viral replication Ct> 30 it seems safe to utilize organs to non lung—donors even if persistent symptoms at time of procurement.[10] He further went through a new data from NHS, where until March 23, of 3602 potential donors 42 with NAT positive donors where 18 did not proceed to donation. Of the remaining 24, 14 *had a result profile suggesting*

previous resolved infection with detection of residual viral RNA; in the absence of proof of previous infection, weakly reactive results in 9 cases might have been due to resolved infection or false-positivity. Two donors had results compatible with current, nonevolving, asymptomatic infection. 68 organs fromt these organs were transplanted into 64 patients, (35 kidney, 4 SPK, 13, livers, 6 split liver, 3 hearts, 3 bliateral lungs. There were no demonstrable cases of donor – derived transmission. [11] He presented an American paper on 12 Covid+ donors with organs transplanted into 14 recipients with no clinical or melcular evidence of transpjmission of SARS –Cov-2 from donor regardless of vaccination status. [11] There were new guideline from NHS where one new Guideline from NHS since the other guideline. [12] There were a discussion on still obligatory testing of donors and how to handle donors with positive PCR. The new guideline for Sctp was drafted based on these findings. This issue needs to be continuously monitored. Both in the meetings in Reykjavik in September and online in November 2022 this guideline will be revisited and probably revised according to new data.

Other topics:

Donors with active intravenous drug abuse: In Norway and Denmark active intravenous drug abuse is considered a contraindication for organ donation, this practice differs between the centers of Scandiatransplant. Morten Hagness presented a material he had received from Gunnhild Holmaas from the western health region of Norway where intravenous drug abusers without known HIV, HCV or HBV were turned down for donation. The turned downed donors in the western health region was equivalent of about 10-15% of the donors per year in Norway. The risk for HIV in seronegative donor is exceedingly low [13], this is also the case for HBV and HCV.[14] With the use of NAT in diagnosis, the eclipse window is about 5-7 days for HIV and HCV, about 20 days for HBV.[5, 14] With more effective treatment options, longer waiting times and NAT, the usage of such organs can provide a valuable source for transplantation. [15]. There were a discussion on the use of these organs, and whether one should assess other risk-behavior, e.g. sex-workers, men who have sex with men etc. *However, the conclusion in the group is that donors with current intravenous drug abuse can be utilized as high-risk donors, NAT on HIV, HCV and HBV should be performed and timing of the eclipse window should be taken into account.*

Common prophylaxis in the Scandiatransplant area: From the coordinator group there was a question on whether one should seek to harmonize the use of prophylactic antimicrobial agents in the Sctp area. Now, Helsinki and Malmø/Lund gives AB as routine to all donors, while the other centers give by case to case. For lung-donors routinely, use of AB was given in Aarhus, Copenhagen, Odense and Oslo and in Oslo cefalolatin is given to heart donors as well. The group discussed the matter briefly; there are no big differences in the strategies and the group will not take initiative to a common prophylactic strategy for organ donors

NAT testing. There was a discussion on general NAT screening in donors. There is a development in the post-covid era and NAT is more easily accessible at any time. Anne Kallaste told that in Estonia there is capacity to NAT test also at night and holidays. The capacity for NAT testing and the impact for this will have on guidelines will be followed by the group.

CMV status in organ allocation: Magnus presented briefly a paper on CMV based allocation; this will be followed up on next meeting**. [16]**

1. Weinfurtner, K. and K.R. Reddy, *Hepatitis C viraemic organs in solid organ transplantation.* J Hepatol, 2021. **74**(3): p. 716-733.

2. Russo, F.P., et al., *HBV-positive and HIV-positive organs in transplantation: A clinical guide for the hepatologist.* J Hepatol, 2022. **77**(2): p. 503-515.
3. EDQM, *Guide to the quality and safety of organs for transplantation 8th edition*. 2022.
4. Dierickx, D. and T.M. Habermann, *Post-Transplantation Lymphoproliferative Disorders in Adults.* N Engl J Med, 2018. **378**(6): p. 549-562.
5. /CD-P-TO, E., *Guide to the quality and safety of organs for transplantation 8th edition*. 2022.
6. Dhakal, R., K. Gajurel, and J.G. Montoya, *Toxoplasmosis in the non-orthotopic heart transplant recipient population, how common is it? Any indication for prophylaxis?* Curr Opin Organ Transplant, 2018. **23**(4): p. 407-416.
7. Stanaway, J.D. and G. Roth, *The burden of Chagas disease: estimates and challenges.* Glob Heart, 2015. **10**(3): p. 139-44.
8. Navarro, M., et al., *Estimating chagas disease prevalence and number of underdiagnosed, and undertreated individuals in Spain.* Travel Med Infect Dis, 2022. **47**: p. 102284.
9. Pierrotti, L.C., et al., *Chagas Disease Recommendations for Solid-Organ Transplant Recipients and Donors.* Transplantation, 2018. **102**(2S Suppl 2): p. S1-S7.
10. Martinez-Reviejo, R., et al., *Solid organ transplantation from donors with recent or current SARS-CoV-2 infection: A systematic review.* Anaesth Crit Care Pain Med, 2022. **41**(4): p. 101098.
11. Ushiro-Lumb, I., et al., *Transplantation of Organs From SARS-CoV-2 RNA Positive Deceased Donors: The UK Experience So Far.* Transplantation, 2022. **106**(9): p. e418-e419.
12. NHS, *POL304/3-SARS-CoV-2 Assessment and Screening in Organ Donors and Recpients* 2022.
13. Kucirka, L.M., et al., *Risk of window period HIV infection in high infectious risk donors: systematic review and meta-analysis.* Am J Transplant, 2011. **11**(6): p. 1176-87.
14. Jones, J.M., et al., *Quantifying the risk of undetected HIV, hepatitis B virus, or hepatitis C virus infection in Public Health Service increased risk donors.* Am J Transplant, 2019. **19**(9): p. 2583-2593.
15. Trotter, P.B., et al., *Deceased Organ Donors With a History of Increased Risk Behavior for the Transmission of Blood-Borne Viral Infection: The UK Experience.* Transplantation, 2017. **101**(7): p. 1679-1689.
16. Lockridge, J., et al., *Cytomegalovirus serologic matching in deceased donor kidney allocation optimizes high- and low-risk (D+R- and D-R-) profiles and does not adversely affect transplant rates.* Am J Transplant, 2020. **20**(12): p. 3502-3508.