OPTN Ad Hoc Disease Transmission Advisory Committee
Meeting Summary
March 19, 2021
Conference Call

Ricardo La Hoz, MD, FACP, FAST, FIDSA, Chair
Lara Danziger-Isakov, MD, MPH, Vice Chair

Introduction

The Ad Hoc Disease Transmission Advisory Committee met via Citrix GoToMeeting teleconference on 03/19/2021 to discuss the following agenda items:

1. Closed Session: Confidential Peer Review
2. Open Session: CDC presentation of SARS-CoV-2 cases in organ donation reviewed so far
3. Open Session: OPTN Data on SARS-CoV-2 Testing in Deceased Donors
4. Open Session: OPO Feedback on SARS-CoV-2 Lower Respiratory Testing
5. Open Session: Discussion of SARS-CoV-2 Testing
6. Open Session: PHS Risk Criteria Data Collection
7. Closed Session: Confidential Peer Review

The following is a summary of the Committee's discussions.

1. Closed Session: Confidential Peer Review

Summary of discussion:

The Committee had a closed session of confidential medical peer review of potential donor derived transmission events.

2. Open Session: CDC presentation of SARS-CoV-2 cases in organ donation reviewed so far

CDC medical officer reported on the Solid Organ Donor-Derived COVID-19 reports investigated by the CDC from March 2020-March 2021. The Committee held discussion until after all presentations.

Data summary:

- Of 35 completed investigations:
    - 1 case of proven donor-derived transmission of SARS-CoV-2 to a lung recipient and healthcare worker (transplant surgeon)
    - 2 cases of probable donor-derived transmission with pending additional testing
    - 16/35 cases involved recipient infections with no evidence of donor infection (in 13 – infection acquired post-transplant; in 3 – infection likely acquired pre-transplant/present at time of transplantation)
        - Nosocomial transmission most likely in a majority of the 13 cases with infections acquired post-transplant
    - Discordant results were seen with in-house assays and assays identified by FDA as having a concerning number of false-positives: BD MAX, TaqPath Combo Kit
    - 3 cases were associated with undiagnosed COVID-19 in recipients pre-transplant

CDC Conclusions:

- Transmission of SARS-CoV-2 through solid organ transplantation is possible
    - Testing of all donors should be performed; could consider testing donor upper and lower respiratory tract specimens when lungs are to be transplanted
    - Testing transplant candidates by upper and lower respiratory tract specimens could be considered, given that undiagnosed COVID-19 in recipients at time of transplant has resulted in severe illness
- Discordant results highlight variability in testing platforms
    - To minimize discarding of organs/tissues unnecessarily, specimens tested by platforms identified by FDA as resulting in false-positives or false-negatives should be retested
- Undiagnosed COVID-19 in recipients pre-transplant underscores the ongoing risk of COVID-19 to healthcare workers
    - Further study is needed to understand the prevalence/manifestation of unrecognized COVID-19 in recipients pre-transplant and the best testing approach in this group

3. Open Session: OPTN Data on SARS-CoV-2 testing in Deceased Donors

UNOS staff presented on COVID-19 testing data for lung donors, based on OPTN data collected in DonorNet® COVID-19 infectious disease fields for deceased donors recovered between April 21, 2020 and March 12, 2021. The Committee held discussion until after all presentations.

Data summary:

- There were 2298 lung donors between April 21, 2020 and March 12, 2021. 285 of those lung donors did not have COVID-19 testing reported in the discrete infectious disease fields, although they did have COVID-19 testing reported either in an attachment or free text field
    - Of lung donors with reported testing: 29.9% had testing performed with a lower respiratory specimen, 83.9% had testing performed with an upper respiratory specimen, 1.1% had testing performed with a blood specimen, and 2% had testing performed with another specimen.
        - A donor may have tests done via multiple modalities and multiple times
    - There was about a 5% increase in lower respiratory tests performed in March, although the data for the month is incomplete
    - 42 of 57 OPOs have performed at least 1 lower respiratory COVID-19 test. All OPOs have recovered lung donors.
    - Of lung donors with reported testing: 1% had antibody testing performed, 2.7% had antigen testing performed, 85.6% had nucleic acid testing performed, 3.9% had other testing performed, and 12.4% had an unreported test method
        - A donor may have tests done via multiple modalities and multiple times

4. Open Session: OPO Feedback on SARS-CoV-2 Lower Respiratory Testing

UNOS staff presented on feedback given by OPTN committee members from 25 unique OPOs on limitations of obtaining lower respiratory testing for lung donors (2 more OPOs responded after the meeting date making the total feedback from 27 OPOs). 15 of those OPOs had at least one test for COVID-19 with a lower respiratory specimen reported in DonorNet® as of March 1, 2021, and 10 of those OPOs did not. An in-depth summary of feedback was provided to committee members in their meeting materials. The Committee held discussion until after all presentations.

Data summary:

Feedback given on limitations fell into a few general categories:

- When OPOs are obtaining lower respiratory specimens

- Testing lower respiratory specimens for SARS-CoV-2
- Turnaround times for SARS-CoV-2 lower respiratory testing

Potential barriers reported:

- Access to a laboratory to perform testing on lower respiratory samples (particularly BALs) with adequate turnaround time
- Smaller hospitals not always having pulmonary staff able to perform BALs available
- Procurement of lower respiratory specimens more difficult in DCD cases, with specimens often not available until the time of procurement
- Wide range in turnaround times for testing, from 1 hour to 5 days

Reported changes over the course of the pandemic:

- Easier to find lower respiratory testing now, early in the pandemic it was more difficult to find labs to test
- There are many additional assays with validated lower respiratory specimen types
- Increased number of lung transplant programs asking for lower respiratory testing due to the American Journal of Transplantation (AJT) article on the first proven transmission of COVID-19 through lung donation, as well as the DTAC Summary of Evidence

Main takeaways:

- Challenges exist in terms of testing turnaround times, especially for BALs, and DCD donation could be a barrier given when specimens may be obtained
- OPOs overall moving towards consistently performing lower respiratory testing for lung donors as these barriers are less significant than they were earlier in the pandemic and relationships with labs are built

5. Open Session: Discussion of SARS-CoV-2 Testing

Committee chair requested the committee's feedback on the risk of donor-derived COVID-19 infection in lung donors and potential solutions: the goal being to ensure that OPOs are performing lower respiratory testing for lung donors. The options presented were to change policy on an emergent timeline and/or to update the summary of evidence.

<u>Discussion of non-pulmonary organs:</u>

Committee members were concerned about the potential for both COVID transmission and organ discard. In reviewing cases, they noted that in some cases abdominal organs were being discarded after false positive testing. They were unsure if there was a concern for COVID positive donation in non-lung donors, or if additional testing was required to transplant these organs safely.

<u>Discussion of lung donors:</u>

Committee members discussed that the 3 COVID transmissions, as presented by the CDC, presented the biggest patient safety risk to lung recipients when there was a negative COVID NP swab with no lower respiratory testing. The committee chair asked the committee if there was a need for emergency policy, an update to the summary of evidence, or both. He outlined that the committee would be finalizing either or both options to send to the OPTN Executive Committee for approval on their April 26th meeting. The need for policy and in particular emergent policy stems from the risk of additional transmissions, as OPOs can currently allocate to lung programs that are not requiring lower respiratory specimens be tested for acceptance. If policy is pursued, the Committee agreed it should be emergent given the patient safety implications and the accumulating evidence. The main concern with pursuing

policy that the Committee discussed related to OPO barriers with DCD procurement and in turnaround times for performing lower respiratory tests, particular bronchoalveolar lavages (BALs). An alternative would be to only update the Committee's Summary of Evidence on potential SARS-CoV-2 donor-derived transmission; the Committee agreed to update this document regardless of changing policy. The document reflects current information for the community and the CDC's presentation highlighted highly relevant information that should be included in the Summary of Evidence. This document will be updated and reviewed ahead of the Committee's April 6th call.

Regarding the potential for policy, lung physician on the committee pointed out that a lot of the programs in her region won't accept lungs without a BAL tested for COVID, but that requiring a BAL in policy could be too onerous for OPOs if it impacts organ utilization. This in turn could impact waitlist mortality. However, transplant program acceptance practices increasingly require lower respiratory testing regardless. Some lung programs still accept donors without lower respiratory testing, and there is also variation in the ability of OPOs to obtain lower respiratory testing. The past chair pointed out that lung programs will always have different criteria for accepting or declining organs.

The CDC representative asked if there are any OPOs that are performing lower respiratory tract testing for all lung donors. A UNOS liaison answered that we are seeing that some OPOs are performing this testing on all donors. One member pointed out that there may be regional differences in acceptance practices, driven by what programs are/are not willing to accept. Some OPOs will likely be able to place lungs without this testing, but some will not, based on their surrounding transplant hospitals. One member mentioned that if the donor OPO can't source testing, even if they're out of town, their transplant hospital is running the tests in their lab.

A committee member reminded the committee that the goal should be to ensure safety of transplant recipients and equal access to organs with the necessary testing. She suggested that the safety of recipients should guide the committee in its decisions, not the acceptance practices of the lung programs.

The CDC representative agreed that with the new information reported by the CDC, the summary of evidence needs to be revised. There are time constraints related to the accumulating evidence and changing behavior of OPOs and lung transplant programs to consider. The CDC representative supported the committee considering policy, but deferred to the committee on its ultimate decision whether policy should be ultimately pursued.

The Committee itself was overall supportive of pursuing an emergency policy change but still had concerns about OPOs obtaining lower respiratory testing, particularly BALs, and the potential impact on DCD donation. The Committee discussed ways to gather feedback from the lung and OPO communities to ascertain the best path forward for this important and time-sensitive issue. UNOS staff identified that feedback could be solicited from the OPTN Lung and OPO Committees for review on the Committee's upcoming April 6th call, in which the Committee would vote on final policy language and/or the updated summary of evidence.

Next steps:

The Committee will review feedback from the OPTN Lung and OPO Committees on its April 6th meeting, along with draft policy language and an updated summary of evidence. If the Committee voted to support the proposed policy and/or summary of evidence, those would both go to the Executive Committee for approval on April 26th.

6. Open Session: PHS Risk Criteria Data Collection

Committee Vice Chair presented on the current status of the PHS risk criteria data collection project as approved by both the Data Advisory Committee (DAC) and Policy Oversight Committee (POC). The main feedback given was that this would be important data collection that isn't consistently available currently. One POC member mentioned looking into other impacts of the PHS changes, such as cost, but agreed that it was likely out of the scope of the current proposal. Another member recommended to work with the refusal code project team to see if any risk criteria are affecting organ acceptance more than others.

Summary of discussion:

Committee members had no questions or concerns.

Next Steps:

The committee will discuss specifics of the criteria being added to DonorNet® and implications for the UNet^{SM} systems on the April 26th open session call.

7. Closed Session: Confidential Peer Review

Summary of discussion:

The Committee had a closed session of confidential medical peer review of potential donor derived transmission events.

Upcoming Meetings

- March 22, 2021, 12 PM EST, Teleconference (CLOSED)
- April 6, 2021, 3 PM EST, Teleconference (CLOSED)

Attendance: Closed Session 1

- **Committee Members**
  - Ann Woolley
  - Avinash Agarwal
  - Charles Marboe
  - Debbie Levine
  - Gary Marklin
  - Helen Te
  - Jason Goldman
  - Kelly Dunn
  - Lara Danziger-Isakov
  - Marian Michaels
  - Meenakshi Rana
  - Raymund Razonable
  - Ricardo La Hoz
  - Saima Aslam
  - Stephanie Pouch
- **HRSA Representatives**
  - Jim Bowman
  - Marilyn Levi
- **CDC Staff**
  - Ian Kracalik
  - Rebecca Free
  - Pallavi Annambhotla
  - Sridhar Basavaraju
- **UNOS Staff**
  - Abigail Fox
  - Cassandra Meekins
  - Courtney Jett
  - Darby Harris
  - Emily Womble
  - Kristine Althaus
  - Laura Cartwright
  - Liz Robbins Callahan
  - Nicole Benjamin
  - Sandy Bartal
  - Susan Tlusty
- **FDA Staff**
  - Brychan Clark
  - Scott Brubaker

Attendance: Open Session

- **Committee Members**
  - Ann Woolley
  - Avinash Agarwal
  - Charles Marboe
  - Debbie Levine

    - Gary Marklin
    - Helen Te
    - Jason Goldman
    - Kelly Dunn
    - Lara Danziger-Isakov
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    - Courtney Jett
    - Darby Harris
    - Emily Womble
    - Kristine Althaus
    - Laura Cartwright
    - Leah Slife
    - Liz Robbins Callahan
    - Nicole Benjamin
    - Sandy Bartal
    - Susan Tlusty
- **FDA Staff**
    - Brychan Clark
    - Scott Brubaker
- **Other Attendees**
    - DongHeun Lee

Attendance: Closed Session 2

- **Committee Members**
    - Ann Woolley
    - Avinash Agarwal
    - Charles Marboe
    - Debbie Levine
    - Gary Marklin
    - Helen Te
    - Jason Goldman
    - Kelly Dunn
    - Lara Danziger-Isakov

    - Marian Michaels
    - Meenakshi Rana
    - Raymund Razonable
    - Ricardo La Hoz
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    - Stephanie Pouch
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