

## **Introduction**

This instructional video will illustrate the downstream consequences of ineffective communication between clinical providers and OPO staff in the transplant community.

Consider that an action taken by an OPO or Transplant Hospital during a procurement in California can have impact on a patient to be transplanted on the east coast later the same day. How do we prevent or contain safety events that could start a chain reaction and impact patient safety in the next room or hundreds of miles away? The following cases are derived from similar events evaluated by the Organ Procurement and Transplantation Network's (OPTN) Ad Hoc Disease Transmission Advisory and Membership and Professional Standards committees.

## **Case Scenario #1 - Switched Kidney Laterality and Organ Discard**

Following head trauma due to a fall, a young man is pronounced brain dead and becomes an organ donor. Both kidneys and the liver are offered for transplant.

Prior to recovery, the OPO allocates the kidneys to high CPRA candidates. The offers were accepted pending anatomy and biopsy results, as well as the coordination of travel. Organ packing and shipping labels are prepared then verified by two OPO staff members during a time out. Both staff members were available during the time of recovery.

The liver recovery surgeon agreed to also recover both kidneys. Once in the operating room he communicates to OPO staff his need to leave immediately after the kidney recoveries to get the liver to his patient. After the kidneys are recovered, the surgeon places both kidneys on the back table, completes the anatomy, and places each in a jar. The surgeon then verbally confirmed laterality with the OPO preservationist and left urgently with the liver. The preservationist finished packaging both kidneys and placed the labels on the jars.

The kidneys were accepted by the hospitals after the biopsy and anatomy information was made available, and they were then transported to the accepting hospitals.

The left kidney was delivered to the operating room of the transplant hospital. Their patient was already prepped and ready for transplant. However, when the kidney was unpackaged, it was immediately noted that the right kidney had been delivered instead of the left kidney. The surgeon declined the kidney due to his patient's particular anatomical need for a left kidney. The patient did not receive a transplant.

The OPO was notified of the issue and immediately reallocated the kidney. Ultimately, the right kidney was not accepted and was discarded due to increased cold ischemia time.

The transplant hospital that accepted the other kidney was notified of the laterality error while the kidney was still in route. In spite of the error, the hospital accepted the kidney and transplanted it into their patient with no issue.

There are several areas of concern in this case:

- The surgeon left the OR quickly after the kidneys were recovered.
- Verbal verification of laterality was not effective between the OPO preservationist and the recovering surgeon.
- No marking or label was placed on the jars at the time of verbal laterality confirmation between the surgeon and preservationist.

**Reflection: In this case scenario, what could have been done to avoid the discard of this kidney?**

(Stat) – Communication issues resulting in switched organ laterality are a common type of patient safety event reported to the OPTN. Based on a report of trends and patterns in patient safety situations, 25 switched kidney laterality cases were reported between January 2012 and December 2014. Approximately one out of five (20%) of these cases resulted in organ discard.

Effective Practices:

- Mark kidney laterality during the recovery surgery.
- Develop a system in which the laterality marking process will clearly and quickly enable a receiving transplant center to know which kidney has been received.
- Implement a process in which one kidney is examined and packaged on the back table at a time.
- Utilize a second staff member to confirm and document correct laterality marking, such as calling a time out to ensure that laterality marking is correct.

**Case Scenario #2 – Disease Transmission due to Delayed Communication of Test Results**

On July 6<sup>th</sup> a woman suffers a severe intracranial hemorrhage and ultimately becomes an organ donor the next day. She was a native of Guatemala and had been in the United States for greater than 10 years.

Since the donor was from a country with epidemiologic risk for Chagas disease (*Trypanosoma cruzi*), the OPO obtained a blood sample to test for the disease. During the donor work-up, the sample was sent to a commercial lab for testing. The donor summary in DonorNet<sup>®</sup> was not updated to note that additional testing was sent due donor geographic risk.

Organ recovery took place on July 7<sup>th</sup>. Both kidneys, the heart and bilateral lungs were recovered. Over the next 24 hours, all organs were transplanted.

One week after the transplants took place, the Chagas ELISA test result came back from the commercial lab. However, the OPO staff member involved in the donor's recovery was out of the office for several days. Other OPO staff were unaware of the need to follow-up on the result.

Four weeks later, the heart recipient came into the transplant hospital with fever, muscle pain, diarrhea, vomiting and rash. On physical exam the patient had swollen glands and mild enlargement of the spleen and liver, and was admitted to the hospital. On August 29<sup>th</sup>, a weekend day before the Labor Day holiday, PCR testing was performed and results were positive for *T. Cruzi* (Chagas). On September 1<sup>st</sup>, the hospital notifies the OPO of their sick recipient and the OPO in turn notified all transplant hospitals of the positive result.

At the time of notification, the OPO learned that one of the lung recipients had been admitted to the hospital the previous week with similar symptoms.

Despite intensive care support and aggressive antiparasitic therapy, the heart recipient died from disseminated Chagas infection. The lung recipient, though initially symptomatic, received

treatment and recovered. All other recipients were monitored and in follow-up did not develop clinical or serologic evidence of Chagas infection.

There are several areas of concern in this case:

1. First is the lack of process to track pending lab results after organs were offered and transplanted.
2. Second, additional donor testing was ordered and pending at the time of transplant. However, there was no way for the OPO to document this so that the transplant hospital was aware.
3. And lastly, there is no requirement for how the positive infectious disease test results must be shared between the OPO and transplanting hospitals. In this case, the results were not communicated, verbally or through other means. Currently, policy requires a transplant hospital to provide phone notification within 24 hours to the OPO when they discover that their recipient is sick.

**Reflection: In this case, what could have been done to ensure that communication of infectious disease testing results were shared effectively?**

(Stat): Delays in communication of information related to a potential for disease transmission can adversely affect transplant recipients. In the article, "Communication Gaps Associated With Donor-Derived Infections," 67% of potential disease transmission cases where there were communication delays or errors resulted in an adverse event in at least one recipient. Some of these adverse events resulted in death to the recipient.

Effective Practices:

- OPOs can develop a system for tracking pending labs, or other results such as autopsy reports.
- It's important to remember that current OPTN policies require that infectious disease results are communicated to the transplanting hospital. OPOs should work with their transplant hospitals to determine the best way to share information about pending test results. They should also define the result types that require after-hours calls versus a work day notification.
- OPOs can implement a process for direct and prompt communication to confirm that results are received by transplant hospitals.

## **Conclusion**

The success of the transplantation system relies on trust, integrity and a set of ethical responsibilities. As members of the OPTN, the system relies on you to report safety events. UNOS has a method for reporting and evaluating these events, and the data collected through this system are analyzed for patterns and trends to identify opportunities for improvement. These improvements may lead to clarification, modification or development of policies. And from these data, educational opportunities are identified that can enhance transplant patient safety.

We all know that in times of crisis and high stress, communication often goes lacking. Therefore, it's important to take particular care when communicating information throughout each step of the transplant process. These handoffs of information generally occur during busy times with multiple distractions and time constraints. By not communicating effectively, patient safety is at risk and can negatively impact your patient or donor. Good communication

encourages collaboration, helps prevent errors, and is the responsibility of all transplant professionals.

Utilize the following practices whenever possible. These practices can ensure effective communication and enhance patient safety:

- Develop consistent processes for the handoff of patient information to reduce errors attributable to incomplete or inaccurate information.
- Use real-time verbal updates to transfer clinical and time sensitive patient information.
- Incorporate information read backs to ensure that the patient information conveyed is accurately received.
- And, the transfer of responsibility should be delayed when there is confusion or concern about the patient information that has been conveyed.

In conclusion, ineffective communication of patient information has been cited as the most frequent root cause of sentinel events. Effective communication and handoffs of important information can reduce communication errors and ensure that critical information is transferred effectively to protect the safety of the patient.

## **Resources**

Thank you for your time and attention to this recording. For more information about patient safety, effective communication and guidance that can enhance patient safety, access the references handout posted with this recording.

## **Credits**

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