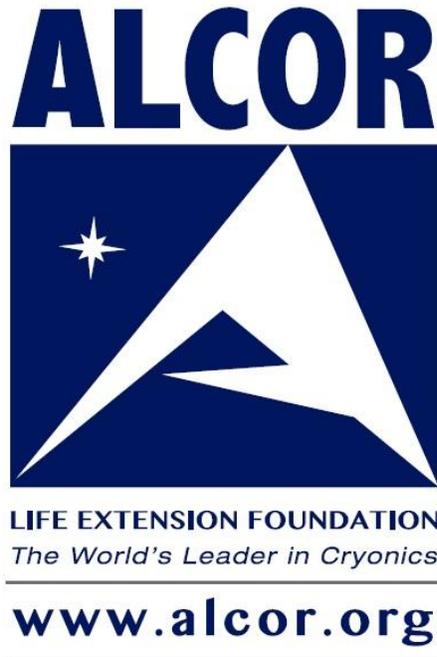


# **Alcor A-1175 Case Report**



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**October 2016**

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## 1. Overview

*\*Note: Names and identifying details have been edited or removed to protect patient privacy and out of sensitivity for the nature of the described events.*

*\*\*Note: All times are expressed in Mountain Standard Time (MST) unless otherwise indicated.*

Alcor member A-1175 was a 68-year-old man who suffered a terminal, self-inflicted intentional brain injury on approximately August 18, 2016. The member had sent letters to his brother, his best friend (FB), and the police department detailing what he had planned to do. On the morning of August 19, 2016, local police received a letter from the member advising of his planned suicide. Police officers subsequently performed a welfare check at the member's residence where they found the member had sustained a gunshot wound to the head which they determined to be self-inflicted.

The member was transported to the Medical Examiner's Office (ME). A full autopsy was ultimately avoided. The member remained at the ME's Office until August 24, 2016. The bullet was removed and the member was received by the cooperating funeral home. The member was placed on dry ice immediately, and neuroseparation was performed the next day. The member's cephalon was put in an Alcor dry ice shipper and sent by courier to Alcor. The cephalon was then placed in the neuro cooldown system on arrival and cooled in liquid nitrogen (LN<sub>2</sub>).

No audio or video recordings were made throughout any part of this case, and no CT scan was performed.

## 2. Personnel

### **Alcor Life Extension Foundation (Alcor):**

Josh Lado, Alcor Medical Response Director, (known as JL)

Steve Graber, Alcor Technical & Readiness Coordinator, (known as SG)

Forrest Bennett, Close friend of patient; Patient Advocate and Representative (known as FB)

Direction and oversight were provided by:

Max More, Ph.D., Alcor Chief Executive Officer (CEO) (known as MM), and

Steve Harris, MD, Alcor Chief Medical Advisor. (known as SH)

### 3. Pre-Deployment and Patient Assessment

#### Friday, August 19, 2016:

Alcor received a TeleMed alert for member A-1175, who had sustained a self-inflicted, terminal gunshot wound to the head. Contact was made from FB, the member's close friend who had initiated the call to Alcor. Police had notified him earlier in the day of the member's status.

Contact was made with the member's brother, who was in Hawai'i, and also an Alcor member. He stated that he did not know that his brother was experiencing suicidal ideation. Assurances were made that Alcor would do their best to preserve the member in the best way possible under such challenging circumstances.

The member was being held by the ME's Office awaiting an autopsy. JL was able to speak with an investigator who stated that all of the medical examiners had left for the weekend and that a note would be attached to the member's ME file for a call to be made to Alcor before any autopsy was planned on the following Monday. Documentation was sent to add to the patient's file including the member's advance directives and his *Last Will and Testament* for the ME to review.

#### Saturday, August 20, 2016:

A call to FB and other Alcor members in the area was made to discuss plans and procedures for the coming days. Concerns were voiced, due mainly to previous experiences with medical examiners. It was decided that an Alcor representative would be at the office when they were to re-open on Monday, August 22, 2016. The decision was made to have FB be at the ME's office and have MM call in to the same on the morning of Monday, August 22, 2016. Alcor's legal counsel was made aware of the case, including possible complications such as the chance of a full autopsy.

#### Sunday, August 21, 2016:

MM contacted FB to update and plan for the following days. MM sent all available paperwork to FB regarding the member. MM asked FB if he would act as a representative for Alcor at the ME's office Monday morning. MM contacted legal counsel to discuss if FB could serve as a representative for Alcor. Legal counsel advised MM to write a letter authorizing FB to be a Patient Advocate and Representative. MM faxed a letter to both FB and the ME's office.

## 4. Preparation and Deployment

### Monday, August 22, 2016:

FB went to the ME's office. Alcor wanted to do everything possible to stop a full autopsy from occurring. MM also called just after regular business hours began. The ME had received the notes sent over the weekend and was aware of the position Alcor had on an autopsy, but no decision had been made. The ME had other cases ahead of the member's and would look at the member's case later in the day or the following day.

Alcor made arrangements to send the *neuro shipper* to FB in anticipation of the ME or the funeral home helping with the neuroseparation. JL made arrangements with the funeral home to ensure that Alcor had someone to perform the neuroseparation in place.

### Tuesday, August 23, 2016:

The ME advised FB that a full autopsy was not required and they would only be recovering the bullet from under the member's scalp. The ME also stated that the member would be released the same afternoon. FB relayed this to Alcor. He was then advised to do his best to collect approximately 100 to 200 lb of dry ice to begin cooling the member as soon as the funeral home came to receive him.

JL spoke with the funeral home to discuss the procedures Alcor would need to be performed, as well as with FB. These duties were ultimately all carried out as follows: The funeral home was asked to be responsible for getting a Ziegler Transfer Case, which they succeeded in doing. FB then lined the bottom of the case with dry ice and placed the member on top of it. A towel roll was placed behind the member's shoulders to elevate his neck to an angle that would facilitate his neuroseparation. Then, more dry ice was placed on and around the member's head, torso, and all around his body using the remaining dry ice. At this point, the member began the cooling process for 24-hours before the neuroseparation took place. After the neuroseparation, the member's cephalon was put into the *neuro shipper* with dry ice filling the rest of the box. The member was shipped back to Alcor as soon as possible after packing into the *neuro shipper*. The funeral home agreed and stated they could not get a Ziegler case until the following day due to limitations from their supplier.

The funeral home ME arranged to pick up the member from the ME's office at 14:00 hrs on Wednesday, August 24, 2016.

## 5. Stabilization

FB was able to secure 210 lb of dry ice on the morning of Wednesday, August 24, 2016. He called JL to review the procedure, to ensure that nothing was overlooked.

The funeral home and FB arrived early at the ME's Office and was able to receive the member at 13:47 hrs. At 14:19 hrs, the member was placed on dry ice in the Ziegler case with a towel roll behind the member's head and transported to the funeral home.

## **6. Field Surgery and Washout**

The funeral home morticians performed the member's neuroseparation on Thursday, August 25, 2016. The member was shipped to Alcor at 15:30 hrs. No washout was performed.

## **7. Table of Medications Administered**

None.

## **8. Shipping**

The member arrived at Alcor at 10:10 hrs, on Friday, August 26, 2016.

## **9. Cryoprotective Surgery**

None.

## **10. Cryoprotective Perfusion**

None.

## **11. Cooling to Liquid Nitrogen**

The member was placed into a cooldown box. The automated program to gradually bring Alcor Member A-1175 down to LN<sub>2</sub> temperatures began at 10:15 hrs MST on Friday, August 26, 2016. Cooldown finished at 01:15 hrs on Wednesday, August 31, 2016. The member is currently resting in long-term care.

## 12. Timelines

*\*Note: All times are expressed in Mountain Standard Time (MST) unless otherwise indicated*

### Friday, August 19, 2016

- 18:14 hrs Alcor received text/phone call from TeleMed stating that member A-1175 was terminally injured due to a self-inflicted cranial gunshot wound. This event was reported to Alcor by FB, the member's best friend of 28 years.
- 18:19 hrs JL contacted FB. He stated that police had contacted him, saying that the member had shot himself in the head the previous day (August 18, 2016). The member had sent the police a letter stating he was going to commit suicide and for police to find him at his house. The police did not give FB any further details about the contents of the letter.
- 18:27 hrs JL called the detective with the police department handling the case. A message was left.
- 18:28 hrs JL called the member's brother. He said he did not think there was anything left to be preserved. He was advised that Alcor would still be proceeding to preserve as much as possible. This was based on the member's most recent stated wishes in his Alcor paperwork, and reinforced by his early 2016 contact with Alcor in which he indicated that he wanted to ensure that his new will was fully compatible with his cryonics arrangements.
- 18:32 hrs JL called MM to provide a status report.
- 18:51 hrs JL called the ME and left a message.
- 19:04 hrs The ME's Office called back to speak with JL. They stated that the member would require an autopsy due to the nature of the member's terminal injury and the first available time would be on the following Monday morning. Alcor would be able to obtain custody of the member on Monday, August 22, 2016, in the afternoon. They asked for the member's *Last Will and Testament* and any other paperwork to be faxed to their office so that it would be filed with the patient.
- 19:25 hrs JL called MM and asked to have the paperwork faxed.
- 19:48 hrs MM faxed the member's documents to the appropriate Medical Examiner's Office in Santa Clara, California.
- 20:32 hrs MM called FB to provide him with an update.

**Saturday, August 20, 2016**

- 10:25 hrs FB called JL to discuss what the plans were for the member and what the next steps would be. FB also stated that he had a friend who is a lawyer in Los Angeles who would fly up and offer assistance if necessary.
- 10:39 hrs JL spoke with MM to provide a status report.
- 11:45 hrs JL talked to the funeral home staff. They indicated a willingness to assist with Alcor's needs but were unable to go into details as they were with another family at the time.
- 11:58 hrs JL contacted a local Phoenix, AZ mortuary to find out about the possible complications of transporting human remains via commercial air or ground transport. They would have another employee contact JL who had more knowledge about transportation issues.
- 12:29 hrs MM emailed an update to legal counsel about the planned autopsy and its potential complications.
- 12:42 hrs The ME's office was contacted to request that a note be placed in the patient's chart which asked them to contact Alcor before performing an autopsy and to discuss possible virtual autopsy options using a CT scanner or X-ray technology.
- 13:20 hrs JL spoke with another employee of the local mortuary. He stated that Alcor could work with the funeral home in California to obtain a donation/cremation permit which would allow transport back to Scottsdale, Arizona. He did not know about regulations specific to transport onto a commercial plane and directed us to contact airlines about those details.

**Sunday, August 21, 2016**

- 11:18 hrs MM updated FB.
- 11:35 hrs MM forwarded all of the member's paperwork to FB.
- 14:43 hrs MM called the local mortuary to ask if FB would be able to pick up the member directly, or if the matter needed to be handled by a funeral director.
- 15:01 hrs MM asked questions of legal counsel and the local mortuary about authorization to pick up the member.
- 15:06 hrs MM emailed his team for information on the transport of the member back to Alcor regarding the *neuro shipper*.

- 15:30 hrs MM emailed a letter of authorization to FB, for him to act on Alcor's behalf to obtain custody of the member.
- 15:38 hrs MM sent a letter of authorization by fax for FB to the ME's office.
- 17:08 hrs The address for the mortuary was obtained. A letter of authorization, phone number, and dry ice information was sent to FB.

**Monday, August 22, 2016**

- 08:10 hrs MM contacted the ME about the possibility of an autopsy. FB was present at the ME's office. No decision was made by the ME, but an autopsy would not happen that day.
- 11:03 hrs MM emailed the Alcor staff to ensure that the *neuro shipper* box was sent.
- 15:15 hrs JL spoke with the funeral director about performing the neuroseparation and packaging the member's cephalon in the *neuro shipper*. The funeral director advised that they would have no problem doing this for Alcor.
- 16:02 hrs MM sent an email to FB about the *neuro shipper*.

**Tuesday, August 23, 2016**

- 09:07 hrs FB received the *neuro shipper*.
- 10:50 hrs FB stated that the ME would release the member "intact" that afternoon and that they would not remove the member's brain.
- 14:26 hrs FB advised they would need approximately 100-200 lb of dry ice for the Ziegler case and the *neuro shipper*.
- 15:31 hrs JL spoke with the funeral home staff. They would be unable to get a Ziegler case until the following morning.
- 16:24 hrs FB, the funeral home and the coroner office set up a time of 14:00 hrs to pick up the member and place him into the Ziegler case with dry ice for transport back to the funeral home.

**Wednesday, August 24, 2016**

- 11:24 hrs FB reviewed with JL the proper procedure for placement of dry ice on the member, and the towel placement behind the patient's shoulders. FB stated that he was able to secure 210 lb of dry ice.

- 13:47 hrs FB and the funeral home staff arrived at the ME's office
- 14:19 hrs The funeral home staff left with the member in the Ziegler case. He was covered with dry ice.

**Thursday, August 25, 2016**

- 02:20 hrs FB emailed MM and JL stating that he and the member's brother received letters from the member about his planned suicide (Letters omitted from the case report)
- 15:30 hrs The funeral home staff performed the neuroseparation and packed the *neuro shipper* with dry ice. The package was shipped and scheduled to arrive at Alcor before 08:00 hrs on Friday, August 26, 2016

**Friday, August 26, 2016**

- 10:10 hrs The member arrived at Alcor in the *neuro shipper*. An eye-screw was placed into the exposed spinal column
- 10:15 hrs Cooldown from -80°C to LN<sub>2</sub> began using a fanless cooldown lid.

**Wednesday, August 31, 2016**

- 01:15 hrs End of the cooldown. The patient was placed in long term storage.

**13. Issues & Actions**

None

### 14. Graphs



--End of report--