Affinity of Marrow Stem Cells Donation

Try Harder to Retrieve Names from the Death List

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On a sizzling afternoon, cicadas' loud buzzing sound rang through the Tzu Chi Park area in Hualien, eastern Taiwan. Staff at the Tzu Chi Stem Cells Center, as usual, buried their heads in all sorts of documents, searching for donor matches for blood cancer patients. They organized in groups to contact volunteers of different areas, transplant hospitals, and marrow stem cell donors. Sounds of conversations and phones kept ringing showed their intense urge to compete with time.

What are we doing? We try hard to retrieve one more name from the Death's List, one more and then one more.

What If a Donor Back out, What Would Happen to the Waiting Patient?

For a blood cancer patient in critical conditions, marrow stem cell transplantation is the only hope to survive. Normally, when a matched donor is found, the attending physician of the patient will set a transplant date and start giving the patient a high dose of chemotherapy and radiation treatment to eliminate cancer cells before peripheral blood stem cell transplantation. His/her survival rate is determined by whether or not the transplantation is completed.

However, if the donor changes his or her mind, or due to some other unexpected circumstances such as pregnancy, accidents or illness, it usually destroys any hope of the transplantation. For he/she who is about to receive the transplantation, the donor's cancellation is really a devastating blow.

This time a young child patient is waiting for the marrow stem cell transplantation. This child mentioned a tiny little wish – "I want to be alive, I want to be with mom."

Not Giving Up Any Hope, Immediately Starting the Most Urgent Task

The center just couldn't bear to see a life disappearing like this. One day, Tzu Chi Stem Cells Center staff quickly organized and immediately initiated "the most urgent" mission while praying for one dying child to get a second chance.

The rescue was urgent; therefore, everyone put aside their scheduled work and tasked to contact potential donors - the first step of the matching process. In the end, two donors living in different areas of Taiwan screened with good match results. The staff reached them in 10 minutes. Holding the phone and shaking, the staff summoned courage and asked the difficult question. Everyone in the office was holding breath and waiting for the "yes" answer from the other side of the phone...

"What? You will do it! Really? Wow, is it real? Thank you so very much!" We confirmed a donor, and then hang up the phone. Every staff cheered with excitement. However, there were still many steps to follow. Next, we needed to convince the family members and check the donor's blood to make sure the donor can meet the requirements.

Our staff immediately assigned volunteers to deliver the information about the procedure to the donor's family. Tzu Chi commissioners Sister Lin and Liu are well-trained marrow donation-company volunteers. They, realized the urgency of the mission and immediately, set aside their work at hand and went to the donor's house. Sisters recalled, "When we visited the family, the mother and sister were there. They all agreed. The donor said he could make his own decision. Saving people was something he wanted to do."

At first, the two volunteers were tense, but now relieved. But then they realized they need to race against time, in three hours they had explained the procedure and brought this kind donor who agreed to the donation to a nearby clinic for a blood test. It was already nine pm but the clinic extended its opening hours to finish the task.

It was after 10 pm when the bloodwork was done. The delivery service at convenience stores and post offices were closed for that day. These two experienced volunteers immediately reported to the Center and decided to send the blood sample on the first express train to Hualien the following day.

In order to get this blood sample to the HLA Lab as soon as possible, our staff rushed to the Hualien train station before 8 am waiting for the first train arrival while the patient was waiting in critical care. Everyone was "running" every process to compete with time.

When the train was slowly approaching the station platform from a distance, our staff who was waiting felt a sense of longing for the arrival. After the train rolled to a stop, the car door opened and a train conductor handed over the blood sample box. She quickly rushed back to the office and sent one blood sample to the HLA lab and the other to Hualien Tzu Chi hospital's Laboratory Medicine Dept. Inside the HLA Lab, technicians sped up the whole process, no one relaxed with the result pending. Many hearts were hanging in the air.

That day around 4 pm, the phone rang, a high pitch voice was heard: "All match! All match!" The HLA Lab had completed a perfect match. There was a round of applause in the office. "It is wonderful! The patient can survive! Great!" Smiles finally appeared on everyone's face. The donor had a successful physical exam the next day and went on the final process of donation. Undertaking this mission in such an urgent circumstance, the donor only said lightly, "If only taken a little bit of blood can save a person's life, why not?"

Working in High Gear to Save a Young Life

In 2014, Xiaotong (alias) was diagnosed with aplastic anemia at age 14. The test result was a shock and he was close to collapse. He was like a flower wilting, losing strength to enjoy the beautiful surroundings and his friends. He had to receive a bone marrow transplantation to regain life. However, failing to find a match among his relatives



Each tube of blood sample donated for marrow stem cells data registry may be the chance to save a dying leukemia patient on the earth.



There are two segments of the administration team of the Tzu Chi Stem Cells Center, one is for donation and the other is for match work, in collaboration to bridge the donors and the recipients.

had again quashed his hope.

Fortunately, the hospital that oversaw his care delivered the good news that there was a match from Tzu Chi Stem Cells Center's data registry. The date for transplant was set on April 2, 2016. However, on his fourth day of chemotherapy in a desinfection chamber, the expected donor was gone, unable to get in touch with. His doctor said if we could not find another match on the last day of chemotherapy, Xiaotong would no doubt be dead.

That donor reneged because his/her parents wouldn't approve. On the night of March 27, 2016, our staff urgently contacted the hospital to update the donor's situation. The attending physician indicated that Xiaotong was undergoing total body irradiation, therefore, changing the date for transplantation was not an option. Since then, our staff worked overtime and restarted the first stage of the matching process and filtered 11 donors in Taiwan. Then all the volunteers in different areas launched the "most urgent" people search mission.

When volunteers in different corners of Taiwan received this urgent request, they all stressed at the details. Sister Xiao in Kaohsiung, southern Taiwan, who just went to a hospital for an IV to treat her diarrhea immediately started contacting donors upon her return home.

Another volunteer Sister Chen who handled the task to contact one donor,

felt dizzy and went to ER for treatment after successfully received this donor's agreement and reported back to the Center. Ms. Wu, another volunteer dislocated her pelvis while accompanying a donor for physical examination. Volunteers put the patient's life in front of themselves because they knew the patient did not have any time to waste.

After extraordinary efforts, four donors agreed to donate. To race against time, all four donors did the lab work as well as physical examinations. In order to save a life, the Center did not concern about the costs - saving life was the most important matter.

Normally, it takes about a month

to complete a physical exam, to inject G-CSF (granulocyte colony-stimulating factor), and to harvest peripheral blood stem cells. Due to the urgency of this case, within a week, the Center was able to do all those steps to save a precious life.

Unpredictable Result, Passing Every Difficulty

Whenever donors reneged on a promise, we immediately launch the most urgent mission. Saving a life is not just determined in the hospital's emergency room, transplant room, but also in how the administrative system and volunteers





Tzu Chi Stem Cells Center organizes lecturers and certification education training courses annually for the caring group volunteers. Volunteers must participate for a specified number of hours each year and pass the exam to obtain certification qualifications.

working closely in locked steps.

"Mr. Huang, congratulations! You have a match. Do you agree to donate your marrow stem cells?" These words had been copied and used by scammers.

In recent years, internet fake news and rumors seriously damaged Tzu Chi Stem Cells Center's data registry. As a result, it not only creates difficulties for the registration of donors but also causing repeated cancellations from matched donors who are hard to find. Our administration staff and volunteers faced people hanging up on calls, treating them as scams and even with words of insults.

We and volunteers have to endure various impertinent remarks, as well as

all sorts of reasons for refusal.

. . .

"What? The deities said you cannot donate!

How could deities stop saving people?"

"The donor said if she asked for a day-off for vacation, the boss will have her fired!"

"The donor said we will sell his blood for money. We are making illegal money."

Being refused repeatedly and hung up on the phone are quite common. Some reasons are annoying and some amusing. Most answers are reasonable, but some are ridiculous. Our staff and volunteers often feel depressed and helpless after these phone calls.

The donors who were matched

but reneged would not feel the impermanence of life. They did not realize how easily they destroyed a dying person's hope – merely to live.

Support with Countless Faith and Love; Fulfill Every Miracle

Every day our administration team staff in the Center make calls to contact potential donors. They do their best with patience even when encountering refusals. There were moments when people distorted their intentions and even said bad words. Sadness and anger are inevitable; however, our staff wipe off their tears and continue their mission. It is tough and sometimes challenging.

The administration team consists of less than 15 people who are responsible for the whole stem cell donation program. It is hard work, but they keep





going and never retreat. If there were no such devoted volunteers working unconditionally with them and giving without asking for return behind the scenes, the connection between patients and donors would not be possible and the miracle of love would not be actualized.

There are over ten thousand certified volunteers for the Center in Taiwan. They are in different counties, cities, and towns which include Ponghu and Jinmen islands. They are ready for the mission day and night or during holidays. It is their mission to overcome obstacles during the process of donation. Due to work or family issues, some donors are abroad. When they agreed to donate, Tzu Chi volunteers overseas will help to contact the donors and take over the mission. Tzu Chi Stem Cells Center assists marrow stem cell registries worldwide. If any matching donor in other data registry happens to be in Taiwan, for study or work, the international case can be transferred to us for help. Our service covers the entire world. In 2018, an exchange student from Italy, for instance, is the fifth donor completing marrow stem cell donation in Taiwan. The donation was received by the hospital in Italy for their patient.

When medical treatment enters its era of precision and high technology, there is still a group of people physically racing against time. They try to find hopes despite layers of difficulties. They are like the warriors and guardians to blood cancer patients, they do not fear the difficulties but only the opportunity to save lives.