

Affinity of Marrow Stem Cells Donation

Seeing Light through the Dust,

Love Turns Life around

BY Liu Chen-Chen

Cai Feng-Can is one of the victims of the dust explosion at Formosa Fun Coast Water Park in 2015. At the time of the accident, the skin of his limbs was burnt and the flesh could be seen, especially his feet were so badly burned that the skin on the soles of his feet peeled off on the spot. After being admitted to the hospital, he underwent multiple skin grafts, with the medical team taking skin from his back, buttocks, and thighs for transplantation. He stayed in the hospital for over two months, surviving the unbearable pain followed by itching that is experienced by every recovering burn victim, and working hard to recover without losing heart. He is now back to normal, except for the scars left by the burns.

At the end of 2020, the Buddhist Tzu Chi Stem Cells Center notified him of his successful match, and he immediately agreed to donate and fully cooperated with all the preparations and examinations before, during, and after the procedure. Previously, it was difficult to apply needles due to his severely burned skin, but during the donation process, he still smiled lightly in the face of needles and was not afraid at all. He has come out of the abyss of his life, a purgatory of pain and suffering. Every step he took was once so difficult. Now, with his feet firmly planted on the road to recovery, he doesn't miss a single opportunity to help others. Using his hard-won health to save the lives of others, he gives himself and others a chance to restart a new life. Turning lives around with love, he has also made his own life rich and splendid, just as his name, Feng-Can, implies.

In January 2021, it was freezing cold in Taiwan due to the cold air mass that enveloped the country, but the donor in the hematopoietic stem cell collection room, Cai Feng-Can, still wore summer clothes - short sleeves and shorts. It turns out that the cold temperatures are just right for him because of the many years of physical training he received from his early days in the military, and because he enjoys climbing mountains. On the other hand, it is also due to the slow heat dissipation from the burned

skin, which makes the low temperature comfortable for him. Sitting on the donor chair, his feet were covered with melanin deposits and scars, and the marks left by the fire were striking. Burn scars were also evident on the hands that were injected with needles to collect blood stem cells. However, he still had a warm and friendly smile on his face, not minding the curious inquiries of others. He answered casually that the wounds were caused by the dust explosion accident at Formosa Fun Coast water park. He recounted the experience in a light-hearted manner, but those who heard it were shocked because it was a world-shattering accident that brought tragic casualties.



Although his hands and feet have been tattooed with fire, leaving tight, dark scars, Cai Feng-Can is still smiling while enthusiastically extending his hands to donate blood stem cells to save lives.

A World of Fun Turned into a Living Purgatory

On June 27, 2015, a “colorful” party was held at the Formosa Fun Coast water park. It was supposed to be a fun party for youngsters at the water park, where colored cornstarch was sprayed to add to the fun. Unexpectedly, at 8:32 p.m., a cloud of cornstarch was ignited by the heat from the stage lights, and the instantaneous dust explosion caused a fire. In just forty seconds, 499 people were burned, 41 with over 80% burns on their bodies and 240 with between 40% and 80% burns on their bodies. Cai Feng-Can went to the party with four friends, and all five of them were hospitalized with burns after the fire. His burns were mainly on his feet and hands, with 22% of his body area burned. Although his burns were mild compared to others who were seriously injured, he



On June 27, 2015, Cai Feng-Can goes to a colorful party with his friends in a happy mood. He wears flip-flops to the party, not realizing that disaster is creeping up on him.

still spent more than two months in the hospital and suffered a lot.

“When the fire started, I think most people thought it was just a special effect, and the time difference between visual perception and physical sensation increased a million times at that moment!” Feng-Can, wearing flip-flops at the time, walked out in pain to escape the fire. As he was walking, the skin on the bottom of his feet separated. Fortunately, a friend who was with him at the time found a cart and a swimming ring to transport him to the plaza near the outer perimeter. While waiting for the ambulance, a girl cried out in pain, “What have I done wrong?” Those words stuck in his mind. It started as a happy party for everyone to have a good time, but how on earth could they have imagined that it would turn into a fire scene in an instant? The wailing everywhere, the fear in the heart, and the great pain in the body made it seem as if they were all

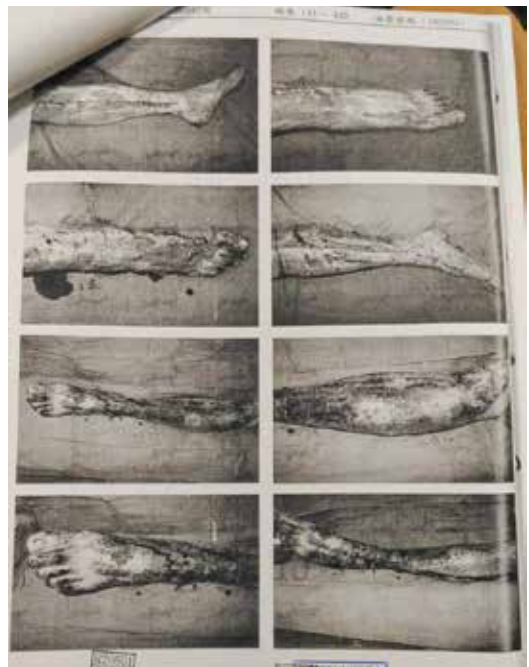


thrown into a living purgatory of pain.

“The dressing change time in the morning was usually chaotic, there was always screaming, and the pain medication never seemed to work. I was always a little nervous waiting for the dressing change cart to come in. Each doctor has a different style when

changing dressings. The day you feel less painful from the dressing change or the dressing is changed quickly, you will feel blessed and especially lucky.”

“During hyperbaric oxygen therapy, I had to wear an oxygen mask like a pilot. I freaked myself out thinking I wouldn’t be able to breathe if I took my mask off.



His feet are covered with melanin deposits and scars. The marks left by the fire are striking.

When he escapes from the fire scene of the dust explosion, his feet are burned, severely damaging his skin and tissues. He subsequently undergoes multiple skin graft surgeries.

The pressure chamber could not be re-opened immediately, and had to wait for the pressure to be released. Lying in it created intense, claustrophobic psychological pressure, but I was unable to sleep, so I kept counting the minutes. It was worse than being dead.”

“I had several surgeries during my hospitalization. The night before the surgery, I had to start fasting, but the surgery might start early or late the next day. So, I always set an alarm to wake up at 23:30 the night before the surgery to eat and drink until the last minute. Skin grafts were taken from my back, buttocks, and thighs to treat my burned hands and feet. There were times when I needed a blood transfusion after surgery and I felt that the phrase ‘I don’t know you, but thank you!’ in the blood donation advertisement truly expressed my feelings.”

Post-burn sequelae include the discomfort caused by scar growth and joint shrinkage. In order to maintain normal joint mobility, it is necessary to stretch the scar tissue with various rehabilitation methods to avoid scar contracture and joint sclerosis.

Compression gloves and socks had to be worn for more than 20 hours a day and were only removed for bathing and dressing changes. As the skin was recovering, the pain turned into a stifling itch. Every time the itch got up, it was like an army of ants crawling through, and

the agony of not being able to scratch was even worse than pain. During Cai Feng-Can’s hospital stay, every second was an excruciating challenge.

“I slowly started doing rehabilitation exercises in bed. When I saw that some patients were already in wheelchairs or moving around out of bed, I felt envious and was motivated to catch up. I was very excited to get around the ward in



Compression stockings must be worn 23 hours a day and removed only for bathing and dressing changes. As the skin recovers, physical therapy devices are used to help relieve pain at the burn site, enhance circulation to reduce edema, and improve the flexibility of muscles and scar tissue.

a wheelchair for the first time. When I stepped on the floor for the first time and stood up again, it was almost a miracle of life.” Cai Feng-Can does not mind re-living the past. These difficult days have later become the nourishment for his life. Nothing is difficult for him anymore because he has gotten through the toughest times. What he is most grateful for is the care and encouragement he received from friends and family during his hospitalization. “When I was hospitalized, many friends and relatives came to see me or sent me messages of concern, many of which I had not expected. I believe there are two aspects to visiting a patient: the patient gets attention and the visitor gets peace of mind, so a qualified patient must be cheerful and upbeat in order to present positive energy. I was very good at that. It’s not difficult for an optimist like me.”

Saving Lives without Hesitation

When he was a student, Cai Feng-Can identified with the idea of “Marrow donation saves lives with no harm to oneself”, so he put the bone marrow registration on his to-do list. However, because he did not have time to attend the blood test and registration event, he

After many rounds of treatments and rehabilitation, Cai Feng-Can is able to stand on his feet for the first time, feeling that it is a miracle of life.





waited until he graduated and completed his military service. He registered in 2008, when he had more control over his schedule. He was working at a Japanese restaurant in Douliu. After finding a suitable venue, he went to the event, took a blood test, and registered. Feng-Can believes that it will be a good thing if he can help those who need help with whatever little help he can, so he participates in the bone marrow database registry without hesitation.

He was notified of the match 13 years after he registered. When the Tzu Chi volunteer contacted him, Feng-Can was surprised that he was a match among so many people. Although he knew his family would be concerned

and worried, he bravely told his parents, addressed their concerns, and asked for their approval and support. As for his friends around him, some supported him, while others discouraged him due to their lack of understanding. During this period, the volunteers accompanied and explained with all their hearts, hoping that Cai Feng-Can's example of bone marrow donation would make his friends and colleagues around him understand that donating bone marrow can save lives without harming themselves.

As his medical checkup and donation date approached, he didn't change anything in his life particularly for the donation. The only difference was that he paid more attention to his health



In order to save one person's life, Cai Feng-Can is not afraid to walk into the hospital to receive the injection again because he knows this time it will change another person's life.

and sleep, because he knew that only by maintaining a good lifestyle and diet could he have good quality stem cells to offer to the recipient. He also sincerely wished the recipient a speedy recovery.

He was once so badly burned and it was difficult to find a place on his body to administer needles. He suffered a great deal in order to be treated. “The intravenous site had to be changed from the groin all the way to the neck or alternated between the left and right hand. The groin had to be shaved before inserting the IV line. I received a crazy number of antibiotic injections. I think I probably got phlebitis as my arm was swollen for about 10 days.” The injections were a nightmare during the two-month-long skin grafting and burn treatment. However, after receiving the notification of a successful match, Cai Feng-Can immediately agreed to actively cooperate without hesitation, despite knowing that continuous injections of leukocyte growth hormone would be required before donation. When the needle was inserted again, Feng-Can knew very well that he would not be in the hospital for himself, but to save another person.

Although the fire has left clinging black scars on his hands and feet, Cai Feng-Can is able to get out of the abyss of his life and escape from the purgatory of pain and suffering with his optimism and positive attitude. Once, every step

he took was so difficult, but now that the light has emerged through the dust, he is firmly on the road to recovery, not missing a single opportunity to help others. He uses his hard-won health to save the lives of others, giving himself and others a chance to start over, turning lives around with love to become rich and bright, just like his name “Feng Chan”.



After recovering from the injury caused by the dust explosion, Cai Feng-Can has been actively participating in various marathon events, and at one time insisted on participating even in pressure pants. Photo taken at the Sanchih Marathon in 2017.