

Repaired Both Legs, Regain Mobility

By Xie Xinpei

“Thanks the Heaven, it gave my daughter a chance to start a new life. Thanks the Land, it relieves our family from suffering. Thank you, Tzu Chi, for the generosity of warm-hearted volunteers. Thank you again to Dr. Wang Chen-Chie from the Orthopedics department of Taipei Tzu Chi Hospital for repairing my daughter’s feet.” The mother of Xiaoyu (pseudonym) wrote this thank you note to Dr. Wang Chen-Chie for his benevolence and the help of Tzu Chi’s volunteers.

Survived from an Accident Fall – Suffering from the After-effects Injury

Eighteen years ago, Xiaoyu was sent to a local hospital emergency unit after an accidental fall from a building. At the time, her Glasgow Coma Scale was 8. She had an open fracture and comminuted fracture on both legs, and suffered a fracture of the lumbar vertebrae. However, none

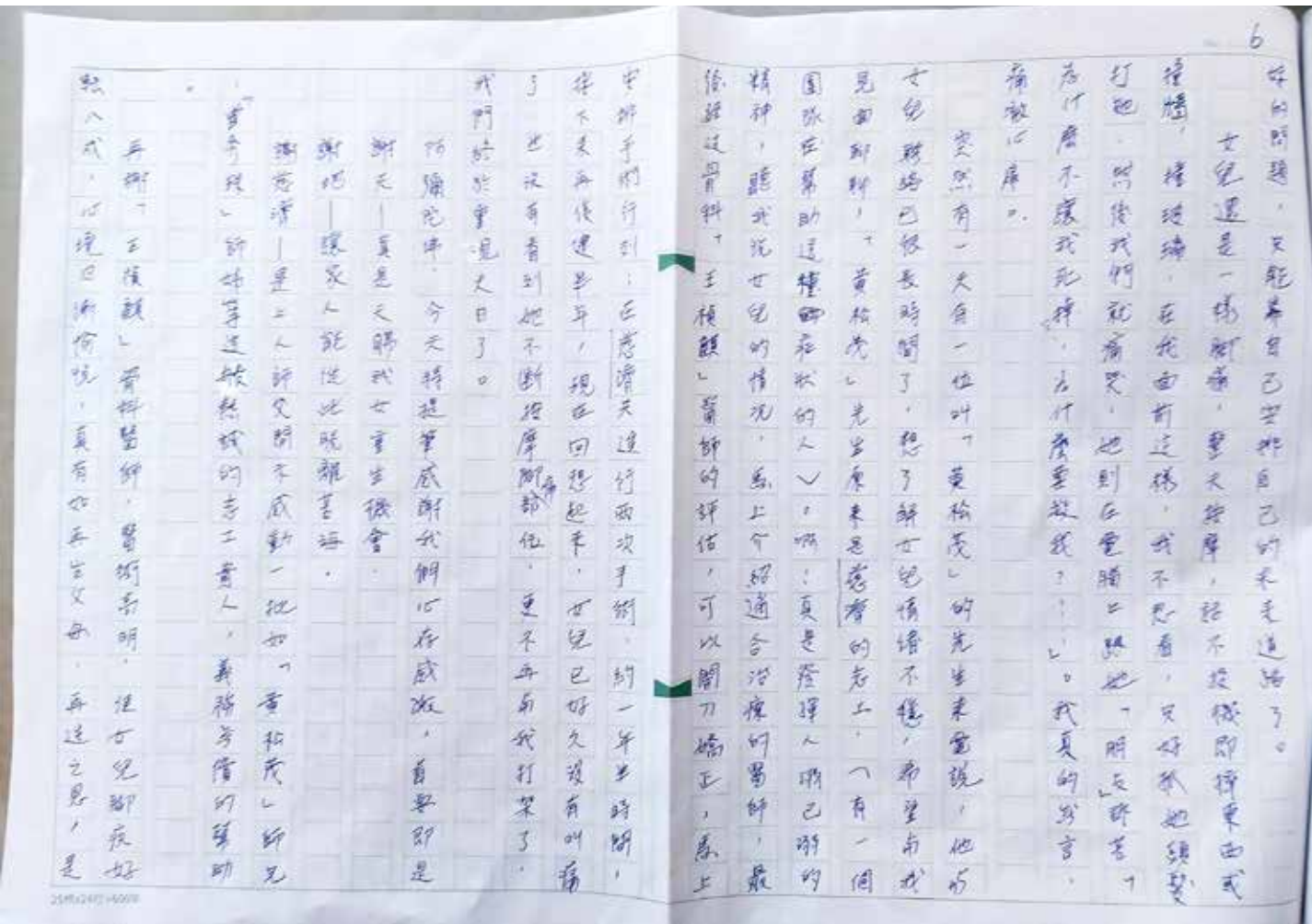


Xiaoyu thanked Dr. Wang Chen-Chie, orthopedics department, Taipei Tzu Chi Hospital with a bouquet.

of the orthopedic surgeons dared to take over her case. After a long wait, finally, a doctor was willing to perform an operation for her, and it went smoothly.

Witnessing Xiaoyu in coma for three weeks, and three months of big and small operations, her parents could only hug each other and cried. It was only

until Xiaoyu's condition stabilized; their hanging-in-mid-air hearts could finally settle down. After the operations, the doctor expressed that her injuries were severe, so aftereffect was inevitable even after all the treatment. She could only soak her legs in hot water when the legs hurt and go swimming when lumbar is



The Thank You letter to Dr. Wang Chen-Chie and Tzu Chi volunteers from Xiaoyu's mother.

painful.

The routine of soaking her legs in hot water and swimming became a daily ritual for Xiaoyu after she returned home from the hospital. The rehab she relied on for a long time could not alleviate the terrible pain. She had to stop after only a five or six steps walk. Facing with constant messaging on the injured legs, she was depressed. “We asked for help at several medical centers but the answer was the same: we missed the three-month golden healing period so treatment is unable to proceed,” said



The dislocation of Xiaoyu’s talus and calcaneus bones resulted in her distorted feet, affecting her life tremendously.

Xiaoyu’s mother. As she watched Xiaoyu suffer, she wished desperately that she could share her pain.

Recommended by Tzu Chi Volunteers, Perfectly Repaired Both Legs

Xiaoyu was fortunate to meet a Tzu Chi volunteer who learned about Xiaoyu’s injuries and suggested she seek treatment at Taipei Tzu Chi Hospital. Xiaoyu found Dr. Wang Chen-Chie online, then went to see him. Xiaoyu’s mom was



X-ray shows the length of both legs are different.

so happy and grateful when she heard Dr. Wang Chen-Chie was willing to treat Xiaoyu. It was like she saw a light of hope of her daughter living a normal life again.

Dr. Wang recollected the first time Xiaoyu sitting in a wheelchair. Inside of her right leg was distorted protrusion, and the collapse of the arch, causing uneven legs. According to the X-ray, the talus and calcaneus were displaced. This resulted in the oppression of the nerves near the talus bone. And the ligament of the right foot had an undesired



Dr. Wang carefully plan the orientation of the incision. He tried to minimize the incision to make it look nice.

recovery, and bone spurs were obvious. As a result, the pain was severe while standing, and had to rely on a crutch to walk.

Xiaoyu has slim legs, thin skin, and little subcutaneous fat. Therefore, the location and orientation of the incision must be carefully analyzed to minimized stitching and faster recovery. For this reason, Dr. Wang Chen-Chie had gone through many graphic designs and practices. Aside from memorizing the plan for the incision and the bone layout, he also wished the repair of Xiaoyu's right foot would be a success.

The First Stage: Osteotomy and Bone Graft - Thanks to Silent Mentors

The operation included an osteotomy and bone graft to realign the displaced talus and calcaneus. Based on his extensive clinical experience and 3D CT scan assessment, Dr. Wang Chen-Chie performed the surgery according to the incision orientation he designed. He also cleaned up the inflamed tissues surrounding the joint. Considering a large amount of bone lost as a result of two bones rubbing each other for a long time, he chose to use donated cadaver bone to repair and rebuild the damaged parts. Thanks to the body donors, as

known as Silent Mentors in Tzu Chi, their bones were preserved in good condition, which could provide a good environment for the growth of the patient's precursor cells. Eventually, the donated bones would become the patient's new bones, increasing the chance of healing. Finally, metal plates and pins were used to hold the bones in place, and x-ray imaging confirmed the condition of the realigned bones; it took more than two hours to complete the surgery.

The Second Stage: Micro Endoscopic Surgery to Restore Ligament, along with Rehabilitation

One year later, in consideration of the ligament on Xiaoyu's left foot, Dr. Wang performed a micro endoscopic surgery.

After the surgery Xiaoyu worked actively with a physical therapist. After 11-month effort, the recovery went well.



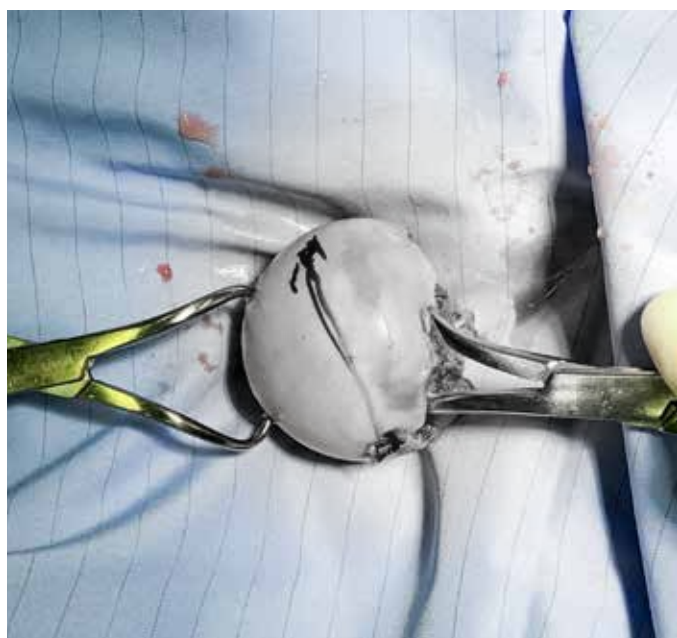
Dr. Wang Chen-Chie examined the recovery condition of Xiaoyu's right foot after the surgery.



The inside of the right foot was severely protruded and deformed, and the arch collapsed (left). Corrective osteotomy and fusion surgery were used to restore the bone (right).

She could walk through the help of a crutch, no more massage on the leg. Xiaoyu's mother was very grateful for all the changes after the surgery. Thanking Dr. Wang for giving Xiaoyu a chance to walk firmly again and free her family from misery. She also thanked the Tzu Chi family who suggested them to go to Taipei Tzu Chi to meet Dr. Wang. In gratitude for being able to walk once again, and have beautiful feet again, Xiaoyu offered Dr. Wang a bouquet.

Dr. Wang Chen-Chie said honestly that this surgery was not an easy one. Not every doctor wants to perform this type of surgery. It was not only because the surgery was complicated but also because the concern of how the incision might heal. However, he felt it was worth trying if it could reduce the patient's pain,



Utilize the cadaveric bones is part of bone integration of the surgery.

no matter how difficult it would be. He wished Xiaoyu a smooth future.