

The Love Surrounding the First Skin Graft in Taiwan

"British Skin" That Will Stay in Taiwanese Hearts

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Abstract: There is a painting that looks like a representation of a simple surgical procedure. However, it holds a warm story of the love surrounding the first skin graft made by Dr. David Landsborough III for a Taiwanese child in 1928. He harvested the donor skin from his wife, Marjorie Landsborough, to save a poor boy. Although the grafted skin could not grow onto the wound, the graft of love was permanently imprinted on Taiwanese People's hearts. The first Taiwanese recipient of MD, PhD degree, Dr. Tsung-Ming Tu invited an artist to recreate and draw the surgical procedure to immortalize the unforgettable love and memory of Dr. Landsborough III. The painting hanging on the hospital wall portrays an important professional role model for every student and health care provider. The life story of this medical missionary in Formosa from 1895 to 1936 contributed greatly to the development of medical care in Taiwan. It is hoped that this story, outlining great love and selflessness, can be glorified and remembered for the world to appreciate for generations to come.

Key Words: skin graft, Taiwan, British, David Landsborough III, medical history

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There is a painting hanging in Kaohsiung Medical University, a painting of what seems to be a simple surgical procedure (Fig. 1). Despite its seemingly ordinary appearance, it holds a story to be remembered for the ages, a selfless tale summarizing the foundation of values the physicians of today hold dear to their hearts. It represents the everlasting memory of Dr. David Landsborough III (Fig. 2) and the love that brought about the first skin graft done in Taiwan.

From 1895 to 1936, Dr. David Landsborough III worked for the English Presbyterian Church in Taiwan, demonstrating his love for the people through his passion and dedication to improving the country's medical facilities. He also is credited with setting a professional medical model for future generations of physicians. A touching true story, "The Love Surrounding the First Skin Graft in Taiwan," tells the story of his efforts in Changhua County, Taiwan, to save the life of a young boy. This memory that will be forever held in the hearts of the Taiwanese. The purpose of this excerpt is not only to endear to the community to the actions of Dr. David Landsborough III but also to impart to others how he spent his whole life serving the people of Taiwan, representing the very core of what all physicians should uphold and value.

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Born in Scotland in 1870, he and his family deeply believed in the Christian faith, down to the very roots of their blood and soul. In fact, his father, Dr. Landsborough II, was actually a famous naturalist and minister in England, having a road in Kilmarnock, Scotland, called Landsborough Drive. The road was named after him to commemorate his great contributions to his hometown. When Dr. Landsborough III was in school, he made the decision to follow in the Christian faith after being influenced by Henry Drummond, who had done great work for Christ at the University of Edinburgh. *Soon after, he began attending his father's communicants' class and participating in Bible studies for young people at the local church during the weekends.*

From the age of 17 to 20 years, David Landsborough III studied liberal arts for his bachelor's and master's degree at Glasgow University. Surprisingly for a man of his stature, in 1890, after graduating with his master's, he did not know what the next step in his life would be. Seeking enlightenment, he went to consult Dr. Hugh Barbour, who played a huge role in influencing him in his adolescent years. After some contemplation, he knew that, deep in his heart and mind, he wanted to pursue the career of a medical missionary and decided to enroll in the University of Edinburgh's 5-year medical course. Finishing medical school at the age of 25, he was assigned to a Presbyterian mission in Taiwan (also then called Formosa by the Portuguese), which was in urgent need of a physician to replace Dr. Gavin Russell. Dr. Russell had previously been sent by the English Presbyterian Church; however, tragically, his career was cut short as he met an untimely death from typhoid.

During this period, Dr. Landsborough faced one of the most difficult decisions of his life, and was forced to choose between traveling to the foreign land of Formosa with a few other missionaries and taking the post of house surgeon offered by Mr Alexander Miller, surgeon at the Royal Infirmary at the time. In the end, he chose the road less taken, a decision that would forever influence and alter the course of medicine, first and foremost in Taiwan.

On December 1895, David Landsborough III, Campbell Moody, and Andrew Neilson spent 3 months traveling from London to Tainan, Taiwan, taking a route through Shantou and Xiamen, China. Possessing a medical degree in General Surgery but lacking any clinical experience at the time, he started practice with Dr. Anderson on the basis of medical missionary duties at Sin-Lau Hospital in Tainan, Taiwan. One year later, David Landsborough III moved to central Taiwan with Campbell Moody, settling down in Changhua County. Unbeknownst to him, this was where that he would make medical history and set an example for the future generation of physicians.

With few available resources at the start, he, along with other fellow missionaries, made use of what they had to continuously improve the quality of Changhua Christian Hospital (Fig. 3). There, Dr. Landsborough frequently performed operations while several trainees watched, creating one of the earliest forms of a teaching hospital in Taiwan. Despite the initial lack of beds for patients and the long working hours, all the personnel never gave up, persevering and providing the best possible care for the ill. Over time, as the medical quality gradually advanced, many events transpired, including the marriage in 1912 of Dr. David Landsborough III and Marjorie Learner (Fig. 4), an individual who would, along with her husband, go on to play a huge role in the lives of the Taiwanese people.



FIGURE 1. Oil painting titled “The Love Surrounding the First Skin Graft” was painted by Shih-Chiao Lee in 1958 and now is kept in Kaohsiung Medical University.

Unfortunately, during the onset of World War I, from 1916 to 1919, Changhua Christian Hospital closed and the Landsboroughs left for England. However, once the war ended, they swiftly returned, bringing with them more local professionals and sophisticated equipment to further the growth of the medical facilities.¹⁻³

On one fateful day in 1928, a 13-year-old poor farmer’s son named Chou Chin-Yao from Changhua County accidentally fell over a rock, severely injuring himself in the process. Because of improper medical treatment, the wound on Chou Chin-Yao’s right knee festered, eventually developing a serious ulcer and infection, threatening the boy’s very life. Finally persuaded to seek medical treatment, the boy and his family looked for the services of Dr. David Landsborough III. By that time, the necrotic area had already spread up the thigh by roughly 30 cm, inhibiting the skin’s ability to heal. As a result, the boy was at risk for developing osteomyelitis, which could possibly lead to amputation of the limb. Understanding the severity of the injury and realizing that they were left with very few options, Landsborough and his wife dared to step where no one else had at the



FIGURE 3. The beginning of Changhua Christian Hospital in 1899.

time, turning to the quite unknown technique of skin grafting. Dedicated to saving the life of Chou Chin-Yao, Marjorie Landsborough made the selfless decision to donate skin from her right thigh, despite the risks of the operation. Without any previous clinical experience and armed with knowledge from the only true reference at the time, the textbook of “The Operations of Surgery” by R.P. Rowlands, MS (Lond), FRCS (Eng), published in 1915, Dr. David Landsborough III undertook the mammoth challenge of performing skin graft surgery. Carefully, with all the concentration in the world, he took 4 pieces of skin from his wife and grafted them to Chou Chin-Yao, thereby performing the very first skin graft surgery in the history of Taiwan. Despite the fact that the surgery failed due to allograft rejection, he took confidence from his attempt, continuing on to second and third surgeries using Chou Chin-Yao’s skin to perform autologous skin grafts. After making a full recovery, Chou Chin-Yao attended school on Landsborough’s generous financial aid and later became the Chairperson of the Presbyterian Church in Taiwan. With the Landsboroughs’ selfless, loving actions forever remembered, Chou Chin-Yao often mentioned that “although the grafted skin could not grow onto my body, the graft of love is permanently imprinted on my heart.”



FIGURE 2. Photograph of Dr. David Landsborough III.



FIGURE 4. Photograph of Marjorie Landsborough.



FIGURE 5. Photograph of Tsung-Ming Tu, the first recipient of the MD and PhD degree in Taiwan.

Years later, following in the spirit of his father, Dr. Landsborough IV continued his family's legacy at Changhua Christian Hospital. Born in 1914 in Changhua County, Taiwan, he could speak native Taiwanese fluently, calling himself "a son of Taiwan" and stating that "my home is in Britain, but my roots are in Taiwan." After World War II, Dr. Landsborough IV came back to Changhua County, Taiwan, in 1952, enlarging the scope of the hospital. For 28 years, he and his wife dedicated themselves to serving the Taiwanese, and eventually, he took the position of superintendent at Changhua Christian Hospital. Over the course of his lifetime, he never once accepted any paycheck from Changhua Christian Hospital, opting to help those in poverty receive medical care and sponsoring poor children to pursue an education. Today, thanks to the efforts of the Landsboroughs, for both young and old, the medical center, committed to providing the best possible service to those in need and upholding the virtues of its founders, is one of the best teaching hospitals in the whole of Taiwan.⁴⁻⁷

Adamant on upholding the virtue of humility, the Landsborough family was completely against any form of recognition, against making



FIGURE 6. The artist of "The Love Surrounding the First Skin Graft," Shih-Chiao Lee.



FIGURE 7. Dr. Landsborough III retired and moved back to England in 1936. The doorplate "Formosa" on the front door of his house was in honor of his memory of Taiwan.

their names renowned based on their humanitarian actions. To them, what they accomplished was something they should have done all along, not anything extraordinary to be lauded. In fact, it took Dr. Tsung-Ming Tu (Fig. 5), the first Taiwanese recipient of the MD, PhD degree from Kyoto Imperial University in 1922 and the first president of Kaohsiung Medical University in 1954, to come forth and inform the people about exactly how much the Landsboroughs had done for the community over the years. In 1958, he invited Marjorie Landsborough to come to Kaohsiung Medical University and share the tale of "The Love Surrounding the First Skin Graft in Taiwan" to the students. Touched by the story, after the speech, he asked an artist, Shih-Chiao Lee (Fig. 6), to recreate the everlasting moment of the surgical procedure, immortalizing the Landsboroughs' unforgettable love and compassion. The painting was placed on a wall in Kaohsiung Medical University as a medical professional model for the students.

"The Love Surrounding the First Skin Graft in Taiwan" is a heartwarming and well-known story in Taiwan. The great missionaries, David Landsborough III and his son, poured their hearts and souls into helping the Taiwanese. They cared for the people through their acts of good will, the true representation of compassion. Despite the fact that they were both foreigners, they viewed Taiwan as their second home and served its people with humble hearts, earning respect, and leaving an undying impression on the memories of the people (Fig. 7). David Landsborough III and his son contributed their knowledge and love to Taiwan, demonstrating the meaning of holistic care for each and every individual. Their influences in medical education and professionalism became the greatest role models in Taiwan, epitomizing what it truly means to take the oath of a physician. Perhaps, most awe inspiring of all, none of the Landsboroughs wished for anything in return, never asking for any credit, whether it be in the form of the commemorated painting or the written history of their contributions. As such, I hope that this story, outlining great love and selflessness, can be glorified and remembered for the world to appreciate for generations to come.

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