

Combined Surgery for Urinary Leakage

(Wang Juan and Li Hualei, China Medical Team for Zanzibar)

October 25, 2021 was a memorable day for Wang Juan, an obstetrician and gynecologist at the First Affiliated Hospital of Soochow University and a member of the China Medical Team for Zanzibar. She had barely worked in Abdulla Mzee Hospital on the Pemba Island for one month when she encountered this difficult case. Although she was prepared for the situation before arrival, she was still shocked by the complexity of the illness of the patient named Animia, a 21-year-old mother.

Animia had been leaking urine for nearly seven months, and the smell of urine made her so embarrassed that she couldn't even leave her house. According to Aboud, Vice Director of Abdulla Mzee Hospital and Head of Obstetrics and Gynecology, the patient had delivered a healthy child by cesarean section five years earlier, seven months ago when she expected her second child with great joy, the baby died in childbirth due to a shoulder dystocia. She suffered from sequelae of a large vesicovaginal fistula with an area of 4 cm² due to bladder rupture during childbirth, which caused great psychological and physical trauma to Animia, making her even more sad. With all her clinical experience, Dr. Aboud felt it a great challenge for her due to the complexity of the case and the patient's history of a failed repair surgery, and reached out to China Medical Team for help.

After receiving the case report, China Medical Team implemented a consultation and discussion immediately within the team, formulated a detailed surgical plan, and reported to the Chinese Consulate General in Zanzibar and the Foreign Cooperation and Exchange Office of Jiangsu Health Commission. After getting unanimous consent and support, Li Hualei and Liu Donghua, consultants of Affiliated Hospital of Nantong University, were dispatched from Unguja to Pemba for this task.

In order to treat this patient more effectively, the medical team set up a multi-disciplinary group of diagnosis and treatment, consisting of Li Hualei, the urologist, Wang Juan, the obstetrician and gynecologist, Yin Jun, the general surgeon, Shan Xisheng, the anesthetist, Liu Donghua, the acupuncturist, Wang Haipeng, the cardiologist, and Ye Aihua, the radiologist. The group members worked together and each made their own contributions. Wang Haipeng and Ye Aihua were mainly responsible for the preoperative assessment, Shan Xisheng for the monitoring of the patient during the operation, Li Hualei, Wang Juan and Yin Jun the implementation of

the operation, Liu Donghua the development of the patient's postoperative rehabilitation treatment plan.



Li Hualei, the urological surgeon, has years of rich clinical experience and unique insights in the diagnosis and treatment of urinary fistula. Before the operation, he joined the case discussions within the team and discussed the treatment plan with a number of urology experts back in China via internet. Due to the lack of medical resources in Pemba, he made a simple cystoscope with Chen Hongsheng, Consultant of Anesthesiology, through repeated experiments, using visual light sticks brought from China.

On October 17, 2021, Li Hualei and Liu Donghua flew to Pemba from Unguja, carrying suitcases full of various medical equipment. In the afternoon, with the cooperation of a number of departments, doctors from departments of urology, obstetrics and gynecology, and anesthesiology performed the joint surgery. Local doctors were present to observe the procedure for it was a rare and complex case.

The operation was difficult as the patient's obesity made it difficult to provide enough vision for surgery; it was hard to separate the scar adhesion, and the fistula opening was too large and too close to the bilateral ureters for the safe suture of the bladder fistula. Li Hualei, Wang Juan and Yin Jun overcame all the difficulties through close operation and finished the repair within 5 hours. The bladder then was observed with a self-made cystoscope and the bilateral ureteral openings were confirmed to be normal. Methylene blue staining test showed no vaginal blue stain. The operation was a great success.



Fistula repair alone is not enough. Good postoperative care is as important as a perfect repair for a quick recovery. The next morning, Wang Juan, Li Hualei and Liu Donghua went to visit Animia in the ward. The examination showed a most desired condition: the patient's urine was clear, abdominal incision dry, and no urine leakage in vagina. Follow-up treatment suggestions were made to the ward staff. Doctor Liu Donghua formulated a plan for preventing postoperative abdominal distension and rapid functional recovery from the perspective of Traditional Chinese Medicine. The combination of Traditional Chinese and western medicine was expected to secure a quick recovery. Seeing the smile on the patient's face, Doctor Aboud, Vice Director of Abdulla Mzee Hospital, gave a thumb-up to China Medical Team.

According to Doctor Li Hualei, urinary fistula is the formation of abnormal channels between the reproductive tract and the urinary tract, urine is discharged from the vagina and hard to be controlled. Obstetric injury is the main cause of urinary fistula, which often occurs in areas with backward medical conditions and seriously affects women's quality of life. A fistula of this size of Animia's is very rare in clinic. The success of this operation results not only from the adequate preoperative preparation and the close cooperation of multidisciplinary experts, but also from the sincere cooperation within China Medical Team.



Commitment, dedication, life-saving, and great love. This is the motto of China Medical Team. While they are far away from China, all team members remain true to their original aspiration and keep their mission firmly in mind. With their own efforts, they strive to consolidate and deepen China-Africa friendship.