

# 29th International Conference on Health Promoting Hospitals and Health Services

## Reducing the Loss Rate of Lower Extremity Muscle Strength in Patients After Liver Transplantation

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### Background and objective

After liver transplantation, patients are restricted to stay in bed for several days due to doctor's orders. Limb immobility leads to loss of muscle mass, increases the risk of falls when getting out of bed, affects the safety of activities, and even prolongs hospitalization. The analysis identified the problem as 33.3% of patients with lower extremity muscle weakness after liver transplantation. The reasons were summarized as follows: the patient's willingness to move was affected by the pain of the wound and the pipeline on his body, the nursing staff's lack of awareness of rehabilitation exercises, the lack of rehabilitation care standards for patients after liver transplantation and the rehabilitation standards of the activation note, and the patient's rehabilitation plan not handed over between the medical teams and no rehabilitation aids. The purpose of the project is to reduce the rate of loss of lower limb muscle strength to 14.8%.

### Methods/intervention

Through rehabilitation exercise education and training for nursing staff, construction of rehabilitation nursing process in intensive care unit, rehabilitation exercise prescription paper, creative pipeline fixing belt and additional rehabilitation tools and other strategies.

### Results

After liver transplantation, the rate of loss of muscle strength in the lower limbs of patients has been reduced from 33.3% to 12.5%. The strategy has been expanded in parallel to other surgical intensive care units to improve the quality of patient care.

### Conclusions/lessons learned

Nursing staffs rehabilitation exercise education and training, construction of rehabilitation nursing process in intensive care unit, rehabilitation exercise prescription, creative pipeline fixation belt, and addition of rehabilitation tools can effectively improve the lower limb muscle strength of patients after liver transplantation.

### Relevance to health promoting hospitals and health services

Improve the quality of medical treatment and hospital care for inpatients through effective intervention measures, and improve the muscle strength of the lower limbs of patients after liver transplantation to facilitate early activities and smooth return to society and return to a new life.

### Keywords

Liver Transplantation, Improve lower limb muscle strength

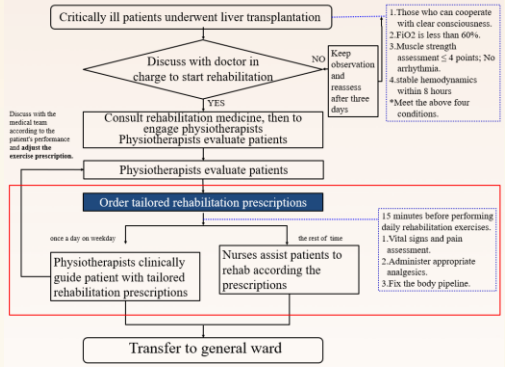


Fig. 1. Rehabilitation care standardization in surgical ICU



Fig. 2. Fixing pipeline

日期	姓名	床號	醫師	護理師	醫師處方	護理師處方	執行日期	執行時間	執行地點	執行者	執行結果	備註
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	10:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	14:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	18:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	22:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	02:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	06:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	10:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	14:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	18:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	22:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	02:00	ICU	張國華	執行順利	
10/10	張國華	1010	張國華	張國華	每日兩次，每次15分鐘	每日兩次，每次15分鐘	10/10	06:00	ICU	張國華	執行順利	



Fig. 3. ordering rehabilitation prescriptions rehabilitation exercise.