Rehabilitation outcomes of elderly patients with severe burn injuries.

Objective: Investigation in functional recovery of elderly patients with severe burn injury during the hospitalization period.

Methods and Study Patients: Retrospective review in consecutive 33 cases of elderly patients with severe burn injuries, aged 65 or older admitted to the Burn Care Unit of Kyorin University Hospital.

Results: They were 33 patients, 17 male and 16 female, aged 79.4±8.4 (mean ± standard deviation: same indication hereinafter), TBSA 23.0 ±19.5, and BI 16.7±15.0. Immediately after the time of injury and early debridement, rehabilitation was started and kept progressed as far as possible. Rehabilitation included articular exercise, maintenance of good limb position, assistive equipment therapy, muscle training, and uprisin/ambulation training etc. Mean length of hospitalization was 73.2 ±46.9 days. Among 33 patients, 5 patients deceased. Eleven patients returned home with recovered ADL and social ability. More than half of the patients were transferred to convalescent hospitals or facilities for continuing the treatment and care. In survived cases, the Functional Independence Measure (FIM) point improved from 38.1±28.8 to 75.3±41.2 during the hospitalization. In most cases, the locomotion ability level before injury was walking with support. At the time of leaving or changing the hospital, it weakened in 11 cases, recovered to the original level in 11, and improved in 6. No significant correlation was indicated between the improvement of locomotion ability and TBSA, BI or complications.

Discussion: Even though treatment for elderly burn patients is often confronted with vital and functional difficulty in prognosis, it is important to apply an early and aggressive rehabilitation for minimizing such difficulties, with attention to clinical and daily life context of each patient. It is suggested that an implementation of dynamic rehabilitation along with burn care treatment may be capable of further improvement in prognosis.

Conclusion: Aggressive and early intervention of rehabilitation may improve functional outcomes of elderly patients with severe burn injuries.

Remarks – Previous Presentations

This paper was partially presented at the 27th and 30th annual meeting of the Japanese Society for Burn Injuries (2000 and 2004, Okayama and Tokyo), and at the 13th congress of the International Society for Burn Injuries (2004, Yokohama, Japan)