海外招請講演

## [IL(E)10]海外招請講演10

座長:川前 金幸(国立大学法人山形大学医学部附属病院麻酔科) Fri. Mar 1, 2019 4:45 PM - 5:35 PM 第5会場 (国立京都国際会館1F Room D)

## [IL(E)10]A multidisciplinary rehabilitation approach to facilitating early engagement and mobilization in the ICUs at Stanford Medical Center

Shohei Takatani (Stanford Health Care, USA) 【 同時通訳付き】

Shohei Takatani is a Senior Occupational Therapist who works with Stanford Health Care as a primary occupational therapist on the Critical Care team at Stanford Hospital. As a part of a multi-disciplinary medical team, Shohei is dedicated to developing, enhancing and restoring functional capacity to his patients whose ability to cope with the tasks of daily living have been impaired or threatened by physical illness or injury, psychosocial disabilities, aging process or developmental deficits. Assessing patient needs in consultation with the individual patient, family, and other appropriate persons, Shohei considers elements such as prevocational evaluation, physiological and psychosocial re-conditioning, fabrication and training in the use of orthotic or prosthetic devices and other assistive technology devices, as well as the adaptation of environments and processes to enhance functional performance. Shohei also has extensive experience managing rehabilitation of critically ill patients in the ICU and cardiopulmonary patients requiring advanced therapies, such as mechanical circulatory support devices and solid organ transplants.

In addition to mentoring and advising new occupational therapists, Shohei has made presentations at the American Occupational Therapy Association, Stanford University Medical Center, Kaiser Permanente Santa Clara Medical Center, and San Jose State University among others. Shohei also holds an Advanced Practice Certification in Hand Therapy.

## **EDUCATION**

BS, MS, Occupational Therapy (2007-2010) San Jose State University

## PROFESSIONAL EXPERIENCE

Stanford Hospital & Clinics

Customer Service Professional (2002-2003)
Japan Airlines Passenger Services of America
Occupational Therapy Intern: Pediatrics (2009)
San Jose State University
Occupational Therapy Level II Intern – Critical Care (2010)
Stanford Hospital and Clinics
Occupational Therapy Intern II (2010)
Santa Clara Valley Medical Center, Acute Psychiatric Services
Senior Occupational Therapist - Critical Care (2011-)

Advances in critical care have led to increased survival and, as a result, the recognition of prolonged physical and psychosocial morbidity after critical illness. Neuromuscular dysfunction has been identified in many intensive care unit (ICU) patients with sepsis, multi organ failure, or prolonged mechanical ventilation and is associated with a longer duration or mechanical ventilation and increased length of ICU and hospital stay [1].

Early Mobility (EM) and engagement is an essential component of the ABCDEF bundle that has been effective in reducing ICU - Acquired weakness as well as an effective intervention to significantly affect delirium.

The three ICUs at Stanford Medical Center (SMC) consist of the Cardiovascular ICU, the Medical Surgical Neurological ICU, and the Coronary Care Unit (CCU). Every ICU has a designated rehabilitation team comprised of occupational therapists (OT), physical therapists (PT), speech language pathologists (SLP) and rehabilitation aides (RA). At SMC, over 90% of ICU patients receive consults to PT and OT when medically appropriate, and are initiated on a standard, intermediate, or intensive rehabilitation program based on appropriateness. All rehabilitation programs emphasize the utilization of structured activity programs, progressive exercise programs and safe patient handling equipment such as hospital beds with tilting features, overhead lift systems, chairs with pressure relieving capabilities in order to facilitate safe and effective participation in EM and engagement for both patient and staff. Incorporating family involvement. In order to care for our critically ill patients, we collaborate with interdisciplinary members on a daily basis. EM can be performed by any part of the interdisciplinary team including nurses, physical therapists, occupational therapists, or physicians and it can consist of activities from passive range of motion to ambulation.

As a result of our ICU early mobility and engagement rehabilitation program, cardiac surgery and transplant patients' length of stay (LOS) in the ICU and overall hospital length of stay has been reduced. Additionally, we have also noted a reduction in staff injury rates related to EM and engagement practices in the ICU.

EM has been a standard of practice in the ICUs at SMC and the emphasis on early mobility and engagement in structured ICU rehabilitation programs have been very safe and successful for our patients at SMC as well as for the care team members. Through close collaboration with nursing staff, primary medical team members, and other ancillary services, i.e., respiratory therapy (RT), perfusionists, dietitians (RD), we have a strong mobility culture and we continue to strive to provide effective EM and early engagement in our critically ill patients.

[1] Stevens RD, Dowdy DW, Michaels RK, Mendez-Tellez PA, Pronovost PJ, Needham DM, Neuromuscular dysfunction acquired in critical illness: a systematic review. Intensive Care Med 2007; 33:1876-91.