

Hong Kong Association of Rehabilitation Medicine Newsletter



Hong Kong Association of Rehabilitation Medicine

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News:

On behalf of the editorial board and Hong Kong Association of Rehabilitation Medicine, we wish you have a successful and prosperous year in the Year of Rat. The newsletter is the only official publication used as a mean to compile and disseminate information and up-to-date knowledge to our members. We welcome members to submit articles which can be in the form of review articles, meeting reports, clinical vignettes, clinical quiz, and news about rehabilitation or interesting photos. Association has stopped giving printed copy of newsletter; instead, every member will receive hyperlink. Members can go to the Association's official website to download current issue as well as previous issues of newsletters. Members can send their articles to Dr Carmen Ho at hotk@ha.org.hk

Message from President

Dr Chui Tak Yi

Dear Colleagues,

The current council was reelected in late 2006 and will serve HKARM for a 2- year term till the end of 2008. May I take this opportunity to express my warmest welcome to the new council members, deep appreciation for the continuous contribution of council members who stay on, and special thanks to Dr Alex Chow, the ex-President of HKARM, and other outgoing council members.

While we are celebrating our 10th anniversary, at this milestone in the history of HKARM, we plan to focus our efforts in several areas:

(1) Defining the mission and objectives of the HKARM

The **Hong Kong Association of Rehabilitation medicine** (HKARM) was formally established in 1997 by a group of doctors with interest and enthusiasm in the field of rehabilitation medicine. At its establishment, the **mission** of the Association was to advance and promote the science, art and practice of rehabilitation medicine and its allied disciplines. HKARM was established for ten years and the council considers that a better definition of our mission and objectives could provide a better blueprint for the association to develop further. The missions and objectives are revised as follows with effect from late Dec 2007.

Objectives

- To promote education and research in rehabilitation medicine
- To increase the awareness of the roles and contributions of rehabilitation specialists
- To provide a platform of communication and collaboration of all local practitioners in rehabilitation
- To cooperate and maintain close liaison with other international societies in rehabilitation medicine
- To provide information to local government on good and evidence-based practices in rehabilitation
- To advocate on local policies that will enhance activities and participation of disabled persons in the community

(2) To enrich the platform for training and continuous education of local rehabilitation trainees, rehabilitation specialists and rehabilitation professionals

We have decided to increase the frequency of the interhospital rehabilitation meeting from once a quarter to monthly. The location will be in Hong Kong and Kowloon alternately so as to facilitate colleagues on both sides of the harbour to attend these meetings. Case discussion, topic review, multidisciplinary presentation and discussion will be arranged. Trainees will be required to have active participation. Practical workshops will also be arranged. Information on overseas training to top up local training will be compiled and sent to rehabilitation trainees, trainers and HKARM members.

(3) To increase public awareness of roles and contribution of rehabilitation specialists

As Rehabilitation Medicine is a relatively young specialty and historically, most rehabilitation is driven by organ specialists, especially in the private market. We plan to increase the awareness of the public to understand that rehabilitation medicine could provide a thorough assessment of needs of people who have acute or chronic disabilities, formulation of a comprehensive plan of functional restoration, collaboration with various disciplines, resulting in functional improvement and enhancement of quality of life. This will be done via different media, e.g. radio, television, magazines, newspapers. A series of radio interview has already been completed in Feb 08.

(4) To collaborate with tertiary institutes and professional societies

In 2006, we have co-organised the 4th World Congress for Neurorehabilitation in Hong Kong with the Hong Kong Neurological Society, and a scientific meeting with the Hong Kong Physiotherapist Association and the Rehabilitation Training subcommittee of the Hong Kong College of Orthopaedic Surgeons. In 2007, we are increasing our collaboration with the Department of Rehabilitation Sciences of the Polytechnic University of Hong Kong in scientific meetings and workshops and will

co-organise the 6th Pan-pacific Congress on Rehabilitation in 2008. We will continue to explore on the collaboration with other tertiary institutes and professional societies in providing the platform for multidisciplinary collaboration in advancement of knowledge in different sectors in the field of rehabilitation.

(5) To connect with others through the new HKARM website

From Nov 2007 onwards, we will launch our new website www.hkarm.org. Through this website we wish to communicate more closely with HKARM members, other professionals and the public.

Last but not least, we welcome the input from HKARM members to help the association to achieve its missions and objectives. May I wish you a Happy 2008 and HKARM another flourishing decade ahead.

TY CHUI (I will send you my electronic signature to be put here instead)

Academic Column

Why should a physiatrist volunteer to join a professional organization?

DeLisa JA, Am J Phys Med Rehabil 2007;86:687

Professional organizations are typically non-profit, cooperative and voluntary. They exist to serve their members in a variety of ways such as providing professional development activities, setting professional standards, analyzing public policy, and, networking social events. They compile and disseminate information about the field. Professional associations should try to improve the performance of their physician members, foster professionalism and provide mutual professional support for their colleagues. They should also help to advance medical knowledge and be leaders in improving the quality of health care within their discipline.

Reasons why you should play an active role in a professional medical association:

1. Access opportunities to meet and network with people in your field
2. Have a built-in support group.
3. Get up to speed in your field of interest. Medical associations sponsor conferences and workshops, publish newsletters that can provide you with valuable ideas and benchmarks for assessing and improving your own performance.
4. Find out about job and training opportunities
5. Stand out in the crowd and show your commitment to your specialty
6. Strengthen your leadership, presentation and communication skills.

Some keys to successful participation within professional organizations:

- Always be prepared and carefully read the material before the committee meeting
- Be sure to deliver a quality product on time
- Do not commit to too many projects or organizations. Concentrate on those that meet your personal interests, time constraints and goals
- Remember, if you failed to deliver or are ill prepared to participate, that unfavorable reputation may follow you for years in the future.

Prepared by Dr Carmen Ho

Nutrition and rehabilitation

Dr Carmen Ho

The concept of protein-calorie undernutrition (PCU) in hospitalized patients was first recognized in 1936 with a population of surgical patients with chronic peptic ulcers. This often iatrogenic complication of hospitalization became a topic of much study beginning in the mid 1970s. Continued research on this potential hazard of hospitalization has addressed identification, prevention, and early intervention.

In the elderly patient hospitalized for rehabilitation, the prevalence of PCU is great; with estimates that 49–67% of the population has some degree of compromised nutrition status. The most common factors that predispose elderly patients to PCU are listed in Table 1. These factors are associated with an increased length of stay and a decrease in functional status and can be used as indicators for intervention in PCU in the elderly.

Table1. Factors associated with protein-calorie under-nutrition in elderly with acute stroke and during inpatient rehabilitation

TABLE 1

Factors associated with protein-calorie undernutrition in elderly with acute stroke and during inpatient rehabilitation

Poor nutritional status at admission is defined as two or more of the following

- Body weight <90% of reference weight
 - Body weight <95% of usual weight
 - Body mass index <20
 - Sum of four skinfolds less than fifth percentile
 - Mid-arm muscle circumference less than fifth percentile
 - Albumin <3.5 g/dl
 - Prealbumin <18 mg/per liter
 - Transferrin 2.0 g/per liter
 - Total lymphocyte count <1800 n/mm
 - Use of tube feedings during admission
 - Advanced age
 - Paresis of the dominant limb and inability to self-feed
 - Dysphagia
 - History of diabetes mellitus
-

Serum albumin is a single protein that is synthesized in the liver during periods of adequate nutrition and not synthesized during inadequate nutrition. The two functions of albumin are maintenance of osmotic pressure 1 and transport of a variety of substances or ligands, 2 which include endogenous substances such as bilirubin and fatty acids, metals and other ions, hormones, and some exogenous medications.

The half-life of albumin is 21 days, and there is no storage capacity for excess production of albumin in the body. The rate of synthesis of albumin in an average person is approximately 15 g per day. Factors negatively affecting synthesis of albumin include hormones such as cortisone, thyroid, and

insulin; decrease in oral protein intake (PCU); oncotic pressure; and various forms of stress such as surgery, trauma, infection, radiation, open skin wounds or burns, and heat exposure; and hepatic, renal, and gastrointestinal disease.

Hypoalbuminemia is defined as less than 3.5 g/dl. The associations between hypoalbuminemia and increased mortality, poor functional outcomes, and longer length of stay in acute hospital settings have been studied in detail, including populations of patients with stroke and cardiac disease.

There have been some studies concluding that significantly increased mortality is seen only with relatively marked albumin depletion. However, the majority of literature suggests any albumin value less than normal to be a predictor of mortality. Additionally, other studies have found an inverse relationship between albumen level and mortality and length of stay.

Less work has been done on determining the relationship between nutritional status and the elderly acute inpatient rehabilitation population. A 1985 study by Glenn et al. (1) evaluated the effect of nutritional status on rehabilitation outcome by utilizing the Barthel index. They found a significant negative correlation between serum albumin and percentage of days restricted from performing rehabilitation and a positive correlation with Barthel index scores. Other studies (2, 3) have shown an inverse relationship between albumin levels and subsequent medical complications, particularly infections, and a positive correlation with functional outcomes. Nutritional status and albumin levels have also been positively correlated with a decreased length of stay, costs, and ultimate home health care needs in the rehabilitation population. (4, 5)

The initial work done in this area strongly reflects the importance of identifying PCU in the inpatient rehabilitation setting and the use of serum albumin as a predictor of mortality, medical complications, length of stay, and functional recovery. Serum albumin is also relatively easy to objectively measure; however, it is affected by a multitude of medical and physiologic occurrences and is therefore not necessarily the best predictor of nutritional status. Further studies utilizing more acute phase reactants, in addition to evaluation of medical interventions to treat PCU, could provide further insight into this important area of rehabilitation.

REFERENCES:

1. Glenn MB, Carfi J, Belle SE, et al: Serum albumin as a predictor of course and outcome on a rehabilitation service. *Arch Phys Med Rehabil* 1985; 66: 294–7
2. Hermann FR, Safran C, Levkoff SE, et al: Serum albumin level on admission as a predictor of death, length of stay and readmission. *Arch Intern Med* 1992; 152: 125–30
3. Rozzini R, Barbisoni P, Frisoni GB, et al: Albumin as a predictor of mortality in elderly patients (letter). *J Clin Epidemiol* 1997; 50: 865–7
4. Finestone HM, Greene-Finestone LS, Wilson ES, et al: Prolonged length of stay and reduced functional improvement rate in malnourished stroke rehabilitation patients. *Arch Phys Med Rehabil* 1996; 77: 340–5
5. Chima CS, Barco K, Dewitt MA, et al: Relationship of nutritional status to length of stay, hospital costs, and discharge status of patients hospitalized in the medicine service. *J Am Diet Assoc* 1997;97: 975–8

Editorial board choices:

1. **Mild Traumatic Brain Injury in U.S. Soldiers Returning from Iraq**

C. W. Hoge and Others, NEJM vol 358(5), 31 Jan 2008

15% of soldiers in the survey reported mild head injury defined by altered mental state or loss of consciousness during an injury. PTSD and depression are strongly associated with mild TBI and subsequent health status.

2. **Somatosensory stimulation enhances the effects of training functional hand tasks in Patients with Chronic stroke**

Pablo Celnik and others, Arch Phys Med Rehabil Vol 88, Nov 2007

In healthy subjects, brief somatosensory stimulation in the form of peripheral nerve stimulations (PNS) results enhanced activation of the contralateral primary sensorimotor cortex (SMI) and increased contralateral motor excitability. In patients with stroke, somatosensory stimulation applied to peripheral nerves of weak limb can transiently enhances motor performance.

3. **The effects of bromocriptine on attention deficits after traumatic brain injury: a placebo-controlled pilot study.**

Whyte J and others, Am J Phys Med Rehabil 2008;87:85-99.

It is a small pilot study. Authors found egative results for bromocriptine. More studies are needed to look into the issues.