Available online at
ScienceDirect
www.sciencedirect.com
Elsevier Masson France
EM|consulte
www.em-consulte.com
Annals of Physical and Rehabilitation Medicine 57S (2014) e149–e155
ANNALS OF PHYSICAL AND REHABILITATION MEDICINE

Geriatrics

Lectures

CO48-001-e

Aging in spinal cord injured patients

G. Vanderstraeten[a,*], A. Viaene[b]
[a] *European Academy of Rehabilitation Medicine, Gent, Belgium*
[b] *University Hospital Gent, Belgium*
*Corresponding author.

Keywords: Spinal cord; Aging

Life expectancy in spinal cord injured patients is still growing (men 78 years, women 83 years). The challenge is to take care of the possible complications and multi-morbidity like pain, bladder and bowel disease, muscle spasms, and osteoporosis.

Some diseases are not age related like decubitus, urinary tract infections and deep venous thrombosis. DVT is mostly seen in the first year post-injury and seldom afterwards. Cardiac and pulmonary complications, diabetes, bone mineral density loss, and fatigue are related to age. Other complications are related to the years of the spinal cord injury like musculoskeletal complications and gastrointestinal problems, especially in the rectal region. Spinal cord injured patients show symptoms indicating a form of premature aging in different organ systems. Cardiac and respiratory failure, urinary infections are the mean causes of mortality, but also new pathologies like cancer and septicemia. As the life expectancy is growing we have to face also the problems of suicide and euthanasia.

http://dx.doi.org/10.1016/j.rehab.2014.03.539

CO48-002-e

Dignity of elderly patients in rehabilitation

C. Gutenbrunner
Department for Rehabilitation Medicine Hanover Medical School, Hannover, Germany

Rehabilitation aims "to enable persons with health conditions experiencing or likely to experience disability to achieve and maintain optimal functioning in interaction with their environment." Within this context functioning may be related to education and labor but also to independent living and social inclusion. In elderly patients functioning must be reflected on a different level as the functional capacities may be significantly limited and the rehabilitation goals must be adapted. Overlaps with maintenance palliative care in many cases are unavoidable. From the perspective of ethics many specific points must be reflected:

– careful assessments of rehabilitation goals in terms of body functions, activities and participation;
– priority setting in these goals (e.g. pain relief and self-care);
– to create environments that make social participation possible;
– to communicate appropriately even in reduced mental capacity;
– to respect the persons wishes and privacy; - to avoid restriction of interventions in case of financial limitations;
– ethical issues of the end of life and possible questions to help to die;
– and others.

An intensive reflection and debate about these points are needed to ensure dignity of elderly patients in rehabilitation.

http://dx.doi.org/10.1016/j.rehab.2014.03.540

CO48-003-e

The role of exercise in prevention of sarcopenia and frailty of elderly

X. Michail
Melissia Athens, Greece

Keywords: Sarcopenia; Frailty; Exercise; Elderly

Sarcopenia, initially defined as an age-related loss of muscle mass, is now considered a syndrome characterized by progressive and generalized loss of skeletal muscle mass and strength with a risk for adverse outcomes such as physical disability, poor quality of life, and death.

Frailty is a syndrome of decreased reserve and resistance to stressors that results in an increased risk for adverse outcomes. Although the word frailty has been used for quite a long time, a good definition is still lacking. Physical frailty is closely related to sarcopenia. Sarcopenia plays a principal role in the pathogenesis of frailty and functional impairment that occurs with aging.

Exercise has shown to be beneficial for a number of diseases and conditions; it benefits muscle function and reduces the risk for disability-related outcomes in older people.

In a recent meta-analysis on the Influence of Resistance Exercise (RE) on Lean Body Mass in aging adults it has been proved that RE is effective for eliciting gains in lean body mass among aging adults, particularly with higher volume programs.

Further reading

Peterson MD, Sen A, Gordon PM. Influence of resistance exercise on lean body mass in aging adults: a meta-analysis. Med Sci Sports Exerc 2011; 43: 249e258.

http://dx.doi.org/10.1016/j.rehab.2014.03.541

CO48-004-e

Driving assessment of older drivers

C. Marincek
University Rehabilitation Institute, Medical Faculty, Ljubljana, Slovenia

Keywords: Driving assessment; Older drivers; Stroke

Assessment of older drivers should be based on functional ability rather than age. Age is associated with a decline in motor, sensory and cognitive skills. Older

people may be able to compensate for a reduction in skills by changes in driving behavior. Assessment should focus on the ability to compensate for any reduction in function. For the assessment of driving ability a multidisciplinary team is needed. Enabling the person with disability to drive a car is an integral part of a complex rehabilitation program. The experience in the driving assessment from the University Rehabilitation Institute in Ljubljana will be presented with the emphasis on strokes, which are a common cause of disability in old age and the most common reason for driving assessment referrals. For functional assessment the Mediatester is used, special standardized platform, which is very useful and reliable regarding different reaction times, strength in upper and lower limbs, field of vision, etc. Many times an experienced clinical psychologist, skilful in the use of cognitive tests, is included.

Further reading

Working group, Hunter J, de Vries J, et al. Handbook of disabled driver assessment. Editors PORTARE. Ljubljana, Republic of Slovenia: Institute for Rehabilitation; 2009.

http://dx.doi.org/10.1016/j.rehab.2014.03.542

CO48-005-e

Training in rehabilitation in an ageing low-resource country

M. Chamberlain[a], S. Andrianabela[b]
[a] *University of Leeds, Leeds, United Kingdom*
[b] *Ministry of Health, Antananarivo, Madagascar*

In developed countries populations are ageing rapidly but majority of life is disability-free. In developing countries a higher proportion of a shorter life is lived with disability. Doctors working in the 8 major rehabilitation centers in Madagascar were without rehabilitation training until 2011.

The authors met in 2008 to draw up an academic diploma of the University of Antananarivo with a curriculum appropriate to the population. Teaching was largely by staff of the Leeds Teaching Hospitals (UK) intensively 2 or 3 times a year in 2011–2013. It aimed to equip the doctors to work according to modern rehabilitation principles. The major adult conditions were mainly degenerative (backache, osteo-arthrosis, and other musculo-skeletal conditions). The dominant neurological condition was stroke. We taught, using modern methods and the ICF, the specifics of these conditions introducing audit, critical appraisal of publications and the production of self-help leaflets. Doctors examined rigorously all passed. We believe the course has helped produce better rehabilitation of more people with disorders of ageing and that it may be of use in other sub-Saharan African countries. How this may best be done needs discussion.

http://dx.doi.org/10.1016/j.rehab.2014.03.543

Oral communications

CO40-001-e

Stationary geriatric early rehabilitation is well known and well organized in many countries. But is it sufficiently in outcome for patients from all assigned specialists departments? A randomized outcome study of 1651 patients

C. Angleitner
Hospital of the Sisters of Charity Ried, Ried, Austria

Keywords: Early geriatric rehabilitation; Functional outcome; FIM

Purpose.– Is it possible to reach for all stationary geriatric early rehabilitation patients no matter from which department they come from a sufficient therapeutic progress in functional outcome?

Methods.– The retrospective study includes all the patients from 2008 to 2012. The development was measured with the FIM.

Results.– The study contains 1651 patients, 500 orthopaedic patients with an average age of 75.7 years, a residence time from 16,4 days and a FIM development from 99 to 115 points; 465 traumatological patients with an average age of 81.5 years, a residence time from 18.5 days and a FIM development from 82 to 103 points; 454 neurological patients with an average age of 76.4 years, a residence time from 20,06 days and a FIM development from 76 to 93 points as well as 232 cardiological/internal patients with an average age of 80.3 years a residence time from 17.3 days and a FIM development from 79 to 96 points. The FIM development of all patient groups is 1.21 ($\pm$0.13 points) per therapeutic day.

Conclusions.– It is possible to obtain a sufficient functional progress for all patients in stationary early geriatric rehabilitation independently from which specialist department they were overtaken from.

http://dx.doi.org/10.1016/j.rehab.2014.03.544

CO40-002-e

Prevalence of pressure sores in EPHAD in Britanny

B. Nicolas[a], S. Robineau-Beneux[a], M.P. Lebot[b], A. Durufle[a], S. Petrilli[a], P. Gallien[a]
[a] *Pôle Saint-Helier, Rennes, France*
[b] *Centre Hospitalier Saint-Malo, France*

Keywords: Pressure sore; Prevalence; EHPAD; Elderly

The incidence of pressure ulcers increases with age but also because of polypathologies. The population of the Hospitallers Establishment for elderly dependent people seems to be particularly at risk.

Materials and methods.– Five hundred and fifty EHPAD in Brittany were interrogated by a postal questionnaire on their population, human and technical resources, the number of pressure sores on a given day with a description of stages and locations.

Results.– The results are based on 174 structures with a response rate of 31.6%. Mean age is 85.6 years. Mean weighted Gir is 663.6. The day of the survey 858 pressure sores were reported for a total of 14,960 residents, and a prevalence of 5.73%: pressure sores predominate on the heels and sacrum with 41% of stage 1. There was 57.2% of the EHPAD that used a risk scale.

Discussion.– Our study on nearly 15,000 residents finds a comparable prevalence then previous French studies in such structure but lower than prevalence studies of health structures. Location of pressure sores is consistent with literature but with a greater ratio of stages 1 (persistent redness). This highlights the importance of prevention, at this stage.

http://dx.doi.org/10.1016/j.rehab.2014.03.545

CO40-003-e

Training algorithm for elderly patients undergoing surgical treatment

I. Stulikova*, K. Lyadov, T. Shapovalenko
Treatment and Rehabilitation Center of the Ministry of Health, Moscow, Russia
*Corresponding author.

Keywords: Elderly patients; Perioperative care

Introduction.– The study aimed to improve the results of surgery and reduce hospital stay in elderly patients.

Methods.– The study included 35 patients aged 70.1 $\pm$ 6.5 years with routine abdominal surgical intervention, 20 patients of the study group received preoperative preparation course (PPC). After complex preoperative evaluation (abdominal CT, esophagogastroduodenoscopy, colonoscopy, US of the lower extremities veins, chest X-ray, electrocardiography, echocardiography, Holter monitoring, ergospirometry, pulseoximetry, blood pressure monitoring, blood gases, CRP, albumin, glycemic profile), PPC (10 days) was performed, including: interval hypoxic training, training on simulators under cyclic cardiac monitoring, inhalation therapy, halotherapy, psychological counseling for anxiety, individual and group training in the preoperative period.

Results.– The following result of the implemented technique were observed: reduction of ICU stay (2.5 vs. 1.3 days, $P < 0.05$), decrease in postoperative stay (16.5 vs. 12.8 days, $P < 0.05$), earlier activation (89% vs. 42% of patients were verticalized the first day after surgery).