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Commentary

Geriatric assessment and rehabilitation in older stroke patients

Prof Dr Wilco P Achterberg

Leiden University Medical Center, Department of Public Health and Primary Care, Hippocratespad 21, Zone V0-P, PO Box 9600, Leiden 2300RC, The Netherlands

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Geriatric Rehabilitation (GR) is defined as *'a multidimensional approach of diagnostic and therapeutic interventions, the purpose of which is to optimize functional capacity, promote activity and preserve functional reserve and social participation in older people with disabling impairments'*. [1] The patients that are most included in GR are frail older persons after fractures, (elective) surgery, chronic organ failure, oncology patients, and older persons after a stroke, [2]. Rehabilitation of stroke patients has been developed in so called stroke units with networks of several care settings for good acute, but also post-acute care. Evidence for its effectiveness has been well established [3]. Early in-hospital mobilization after stroke, although not too intensive, leads to more favorable outcomes. [4]

Comprehensive Geriatric Assessment (CGA) is a key starting point of GR, and the cornerstone of the holistic approach of geriatrics of vulnerable older persons. In CGA, physical, functional, mental and social/environmental aspects are assessed in vulnerable older persons in addition to the specific disease history. One would assume, that the benefits of CGA are well established, but there still remains conflicting evidence of its effectiveness, especially for post-hospital older patients [5].

The study by Hosoi et al. describe a large Japanese nationwide, retrospective cohort study with over 300,000 older (65+) stroke patients on the effects of CGA. [6] Propensity score-matched analysis in over 50,000 pairs showed that outcomes of the patients that received CGA were better- this applied for in-hospital mortality and long-term hospitalization. Also the post-acute care pathways changed, with higher rates of rehabilitation intervention and home health care. The proportion of Japanese older patients that received a CGA was low (21%), which is not a comforting thought for one of the most aged countries in the world. Also this study shows that there is much room for improvement of stroke care in Japan. The mean stay in hospital was 20 days (median) which is much longer that in other countries, such as the UK that has a median length of stay of 9 days. [7]. A considerable proportion of the older stroke patients in Japan stay longer than 60 days in the hospital: 10.1% for those without CGA and 8.7% for those who received CGA. An acute hospital is not in all phases of recovery after stroke the best place for an older person. After the acute neurological assessment and treatment with thrombolytics, surgery or hyperosmolar fluids (in this sample together less than 18%), the focus should shift as soon as possible to rehabilitation of function. It is not encouraging that in so many places this is not being implemented, while the Lancet in 1947 already warned for this, and stated that "the rehabilitation should start in the acute hospital." [8]

Another thing that the Hosoi et al. study shows, is that there is a relatively small group of older stroke patients that receive geriatric rehabilitation: 24.9%, and in the group that received CGA 30.3%. The approach that I want to advocate is to discourage older stroke patients' stay in the acute hospital when no longer necessary, and continue treatment as soon as possible under the responsibility of physician that has a holistic, geriatric approach. The treatment team must be interdisciplinary, containing nurses, physiotherapists, occupational therapists, speech therapists and social workers that have learned to work with rehabilitation plans that include individualized goals. The setting these teams work in may be different in different countries or regions, and may be special geriatric rehabilitation facilities (such as in Germany), specialized wards in nursing home (the Netherlands), Intermediate Care Facilities (UK), post-acute skilled nursing facilities (SNF's, USA), specialized wards in hospitals (Australia) but it may also be an ambulatory team that treats the patient in their own home setting. [1,2] Key is the change of focus of an organ centered approach by a medical specialist such as a neurologist, to a network approach that is based on both geriatric and rehabilitation principles. CGA is one of the main principles in this network.

Declaration of Competing Interest

I declare I have no conflict of interests

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E-mail address: w.p.achterberg@lumc.nl

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