

Ischaemic stroke and prognostic factors in elderly

Diurnal blood pressure variation and nutritional status

Peter Krogh Brynningsen

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Official opponents : Grethe Andersen, Marianne Schroll and Ole Lederballe.

Tutors: Else Marie Damsgaard and Steen E Husted.

Correspondence : Peter Brynningsen, Geriatric Department G, Aarhus Sygehus, P.P. Ørumsgade 11, 8000 Århus C, Denmark.

E-mail: nlgl3pbr@as.aaa.dk

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ABSTRACT

The PhD study was carried out at Geriatric Department, Aarhus Sygehus.

The aim of this PhD study was to gain further knowledge about the prevalence and persistence of different patterns of diurnal blood pressure (BP) variation and nutritional status in elderly patients with ischaemic stroke, and about aspects of prognostic significance of these variables.

89 elderly patients were included in a follow-up study with examinations at specified times from 1 week to 6 months after stroke. Diurnal BP variation was recorded with an oscillometric recorder. Nutritional status was assessed by anthropometrical and biochemical data.

The study showed that, more than 80% of the patients had a lack of nocturnal BP fall (non-dipping and inverse-dipping pattern) during rehabilitation. Inverse-dipping was related to poor functional status in the first 3 months. 35% of the patients were malnourished in the first weeks after stroke, but during follow-up nutritional status improved. We found no significant association between malnutrition and low functional status, length of stay in hospital, and the number of infectious complications. Neither did we find an association between diurnal BP patterns and nutritional variables.

Diurnal BP variation should be more widely used in elderly stroke patients to make an individual risk evaluation. Further studies are needed to answer the question whether a change in diurnal BP variation by antihypertensive treatment or timing of drug administration can influence the diurnal BP profile and the prognosis of the patients. Future studies are needed to investigate the prognostic significance of sustained malnutrition in elderly stroke patients and to evaluate the effect of nutrition intervention studies.