CO-MORBIDITY AND MORTALITY IN ALZHEIMER'S DISEASE: A SEVEN YEAR FOLLOW-UP

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Objectives: Neurodegeneration and cognitive deficits may influence the pattern of co-morbid disorders and their possible effects on mortality in late-onset Alzheimer's disease (AD). However, subjects with AD have to live long enough to experience and be diagnosed with dementia. We investigated whether the pattern of co-morbidity and its relevance for later death differed between hospitalised AD and elderly controls subjects.

Methods: Diseases with a prevalence of more than 1% were compared between 634 hospitalised AD and 72244 control subjects aged above 70 years referred to the University of Birmingham NHS Trust. Predictors of mortality within the seven year follow-up were identified using regression analyses. Confidence intervals of relative risks were used to compare the relevance of risk factors for later mortality between groups.

Results: Subjects with AD suffer more infections, brain diseases and neck of femur fractures than other hospitalised elderly patients. In contrast, cardiovascular diseases and diabetes mellitus were less prevalent in AD subjects in comparison with hospitalised controls. Diseases that might contribute to later mortality in AD were pneumonia, ischemic heart disease and gastroenteritis, but there were no significant differences in their impact on mortality compared to other hospitalised elderly control subjects.

Conclusions: Patients with Alzheimer's disease have a different pattern of co-morbidity, but die from the same diseases as other hospitalised patients. Infections including pneumonia, and diseases that may occur secondary to neurodegeneration and confusion may need special attention in patients with Alzheimer disease who might not be able to identify or report the early symptoms.