Introduction: Vascular Dementia (VD) patients have increased co-morbidity and higher mortality in comparison to other patients. Neuro-degeneration, cognitive deficits and underlying medical conditions may influence the pattern of co-morbid disorders and their possible effects on mortality in VD.

Aim: To investigate whether the pattern of co-morbidity and its relevance for later death differed between hospitalised VD and elderly controls.

Method: Diseases with a prevalence of more than 1% at hospital admission were compared between 341 hospitalised VD and 72244 control subjects aged above 70 years referred to the University of Birmingham Hospital, UK. Risk factors i.e. co-morbidities that were predictors of mortality within the seven year follow-up were identified using logistic regression and cox regression analyses. Confidence intervals of relative risks were used to compare the relevance of risk factors for later mortality between groups.

Results: Subjects with VD suffer more with peripheral vascular disease, atrial fibrillation, type 2 diabetes mellitus, pneumonia, ischemic stroke and urinary tract infections than other hospitalised elderly patients. In contrast, myocardial infarction was less prevalent in VD subjects in comparison with hospitalised controls. The prevalence of hypertension, ischemic heart disease, angina and heart failure was not statistically different in the two groups.

Conclusion: Patients with Vascular Dementia have a different pattern of co-morbidity, but die from the same diseases as other hospitalised patients. Infections including pneumonia may need special attention in patients with vascular dementia who might not be able to identify or report the early symptoms.