Traumatic injuries and the risk of dementia-A 40-year retrospective nationwide study

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The overall aim of the present project is to investigate risk factors for dementia associated with traumatic brain injuries and fractures in the total Swedish population.

The individuals considered for inclusion in the present study include all men and women at least 50 years of age, living in Sweden December 31, 2005. This cohort will be collected through the statistics Sweden (SCB). In this cohort we will track all individuals with a diagnosis of Alzheimer's dementia, vascular dementia, or dementia NUD through the national patient register, administered by the National Board of Health and Welfare. Each of these cases will be matched towards five control from the total Swedish population based on year of birth and sex. Previous TBIs and other traumatic injuries will be tracked retrospectively in both cases and controls until 1970 with focus on temporal perspectives. Examples of other covariates of interest include cardiovascular disease, cerebrovascular disease, depression, substance abuse and socio-economic factors, such as highest education. This study was approved by the regional ethics board in Umeå (DNR, 2013-304-32) and by the National Board of Health and Welfare in Sweden.

To further evaluate the association between traumatic head injuries and dementia would be of importance given the impact of dementia on the society.