The association between dementia and depression

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The temporal relationship between depressive symptoms and dementia
Chen P, et al. Arch Gen Psych 1999;56:261-266

Background: It has long been recognized that depression and dementia frequently coexist in the elderly but the nature of the relationship remains controversial. Cognitive decline may precede depression or depressive symptoms may develop before dementia. Should we regard whichever appears first as a risk factor or an early manifestation of the other illness?

Aim: To evaluate the temporal relationship between the appearance of depressive symptoms and the clinical onset of dementia prospectively in a community-based sample.

Methods: The subjects are part of the Monongahela Valley Independent Elders Survey starting with a cohort 1366 subjects age 65 or older who were assessed every two years. The data in this study represents 8 years of serial evaluations (every 2 years).

Main Findings: Dementia, especially Alzheimer Disease, increased the risk of developing depression compared with subjects without dementia. Adjusted odds ratios for the development of depression were 6.5 (95%, confidence interval 2.2-19.1) in those with Alzheimer Disease and 5.2 (95%, confidence interval 1.8-15.2) in all subjects with dementia. Depressive symptoms did not increase the risk of developing dementia.
Conclusions: In this sample, depressive symptoms appear to be early manifestations rather than predictors of dementia.

Limitations: The co-occurrence of depression and dementia was seen only in a small subgroup of the subjects. The sample was 97% white. This study does not refute the possibility that major depression may be a risk factor for dementia.

Impact on Internal Medicine: Apathy, social withdrawal, and poor concentration in the elderly commonly lead to referral for treatment of depression, but may instead herald an evolving dementia. Elderly patients with new onset of depressive symptoms should be screened via a brief cognitive mental status exam at that time and in follow-up for the possible development of dementia.

Related Reference: Another epidemiologic study, this one in Utah, demonstrated that psychiatric disturbances were common in those individuals who develop dementia. Apathy (27%), depression (24%), and agitation/aggression (24%) occurred commonly in those with dementia and were almost four times more common in those with dementia than in those without. (Lyketsos/Cache, 2000).