

and uncontrolled T2D, and 3) lower DSST were more likely to have uncontrolled and untreated T2D ( $P$ 's<0.05). After adjusting for significant demographics and cardiovascular risk factors, only having uncontrolled T2D was associated with lower DSST ( $\beta$ =-3.164,  $P$ =0.04). These data indicate the need for longitudinal studies to further explore dynamic relationship and causal pathway between T2D control and cognitive impairment.

#### RISK FACTORS FOR DEMENTIA ONSET IN OLDER ADULTS WITH METASTATIC RENAL CELL CARCINOMA

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Renal dysfunction is a driver of dementia. It is also associated with renal cell carcinoma, possibly the result of the tumor itself or from cancer treatment. This study evaluates metastatic renal cell carcinoma (mRCC) as a risk factor for developing mild cognitive impairment or dementia (MCI/D) as well as the impact of RCC-directed therapies on the development of MCI/D. We identified all patients diagnosed with mRCC in SEER-Medicare from 2007-2015. The main outcome was incident MCI/D within one year of mRCC diagnosis or cohort entry. Exclusion criteria included age <65 at mRCC diagnosis and diagnosis of MCI/D within preceding year of mRCC diagnosis. Patients with mRCC ( $n=2,533$ ) were matched to non-cancer controls ( $n=7,027$ ) on age, sex, race, comorbidities and year. Cox proportional hazards regression showed that having mRCC (HR 8.52, 95% MCI/D 6.49-11.18,  $p<0.001$ ) and being older (HR 1.05 for 1-year age increase, 95% MCI/D 1.03-1.07,  $p<0.001$ ) were predictive of developing MCI/D. A second Cox proportional hazards regression of only patients with mRCC revealed that neither those initiating treatment with oral anticancer agents (OAAs) nor those who underwent nephrectomy were more likely to develop MCI/D. Black patients had a higher risk of dementia compared to white patients (HR 1.92, 95% MCI/D 1.02-3.59,  $p=0.047$ ). In conclusion, patients with mRCC were more likely to develop MCI/D than those without mRCC. The medical and surgical therapies evaluated were not associated with increased incidence of MCI/D. The increased incidence of MCI/D in older adults with mRCC may be the result of the pathology itself.

#### SOCIAL DISENGAGEMENT AND COGNITIVE FUNCTION: DOES THE ASSOCIATION VARY BY GENDER?

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Although social disengagement is considered to be a predictor of cognitive decline, and increase risk of Alzheimer's

and related dementias, little is known regarding the gender-specific association between social disengagement and cognition among Korean middle-aged and older adults. Korea's Confucianism-based gender roles provide unique contexts to examine gender differences in the influence of social disengagement on cognition. This study investigated the association between social disengagement and cognitive function in a nationally representative sample of Koreans aged 45 years or older ( $N = 5,196$  women and 2,707 men), using data from the Korean Longitudinal Study of Aging (2008-2018). Results from the generalized estimating equation model showed that compared to consistent social engagement, consistent non-engagement was significantly associated with lower cognitive function among both genders. Transitioning from social engagement to non-engagement was significant for males only. Of various types of social activities (religious, senior center, sport, reunion, voluntary, political), consistent non-engagement in a senior center was most associated with lower cognitive function among both genders, while consistent non-engagement in religious activities was significant for females only. While household arrangements were not associated with cognition in men, widowed women had increased risk of cognitive decline than married women, as did women living in households of three or more people. Depression was a predictor of cognitive decline among males only. In this gender-specific study, we found that consistent participation in social activities, especially via membership in a senior community center, is beneficial in preventing cognitive decline among both genders.

#### SUBCLINICAL CARDIAC DYSFUNCTION AND COGNITIVE FUNCTION: A SYSTEMATIC REVIEW

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Background: Cardiovascular disease, and more recently, subclinical cardiac dysfunction have both been implicated as important risk factors for cognitive decline. Several measures have been used to detect subclinical cardiac dysfunction, with global longitudinal strain (GLS) emerging as an important and more sensitive indicator than traditional measures. Yet, the association of GLS with cognitive function remains relatively unexplored. Objective: The aim of this review is to systematically summarize the literature exploring the association between GLS and cognitive function. Methods: We conducted a systematic review of the literature following PRISMA guidelines using the following databases: PubMed, OVID Medline, Embase, Web of Science, and CINAHL. Inclusion criteria were observational studies published in English, measuring GLS and assessing cognitive function through neuropsychiatric tests or brain imaging. Quality assessment was done using the Newcastle Ottawa Scale. Results: The initial search revealed 394 studies, of which three met inclusion criteria and were included for final review. The three studies included were cross-sectional and of high quality. They all reported that lower GLS scores were associated? with worse cognitive function and more