Neuropsychiatry and behavioral neurology: The neuropsychiatry of subjective cognitive disorder and prodromal AD

Subjective cognitive decline, anxiety symptoms, and the risk of mild cognitive impairment and dementia

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Abstract

Background: Subjective cognitive decline (SCD) and anxiety symptoms both predict neurocognitive disorders, but the two correlate strongly with each other. It is unclear whether they reflect two independent disease processes in the development of neurocognitive disorders, and hence deserve separate attention. This cohort study examined whether SCD and anxiety symptoms demonstrate independent risks of mild cognitive disorder and dementia (MCI/dementia).

Method: The study included 11,522 participants aged ≥60 years and diagnosed with normal cognition at baseline, recruited from Alzheimer’s Disease Centers across USA. The participants were evaluated for SCD and anxiety symptoms at baseline, and followed-up almost annually for incident MCI/dementia (median follow-up 4.5 years; interquartile range 2.3–7.4 years). SCD and anxiety symptoms were included in Cox-regression to investigate their independent risks of MCI/dementia.

Result: SCD and anxiety symptoms demonstrated independent risks of MCI/dementia, with HR 1.3 (95% CI 1.1–1.6) and 1.9 (95% CI 1.7–2.1) respectively. Co-occurring SCD and anxiety symptoms demonstrated the highest risk (HR 2.6, 95% CI 2.0–3.4) – half of the participants in this group developed MCI/dementia within 6.2 years of follow-up (95% 4.4–8.1), compared to 12.3 years in participants without SCD or anxiety (95% CI 12.1–12.6).

Conclusion: The findings suggest that clinicians should not dismiss one over the other when patients present with both SCD and anxiety, and that both constructs may potentially be useful to identify high-risk populations for preventive interventions and trials. The findings also point to the need for further research to clarify on the neurobiological distinctions between SCD and anxiety symptoms, which may potentially enrich our understanding on the pathogenesis of neurocognitive disorders.
FIGURE 1

| Number at risk | 0   | 2   | 4   | 6   | 8   | 10  | 12  |
|----------------|-----|-----|-----|-----|-----|-----|-----|
| Anxiety & SCD  | 441 | 289 | 105 | 69  | 35  | 14  | 0   |
| SCD only       | 285 | 178 | 107 | 59  | 31  | 15  | 4   |
| Anxiety only   | 555 | 406 | 260 | 138 | 81  | 37  | 0   |
| No Anxiety or SCD | 7823| 5964| 3944| 2439| 1478| 712 | 52  |