Hearing impairment is associated with cognitive decline, brain atrophy and tau pathology

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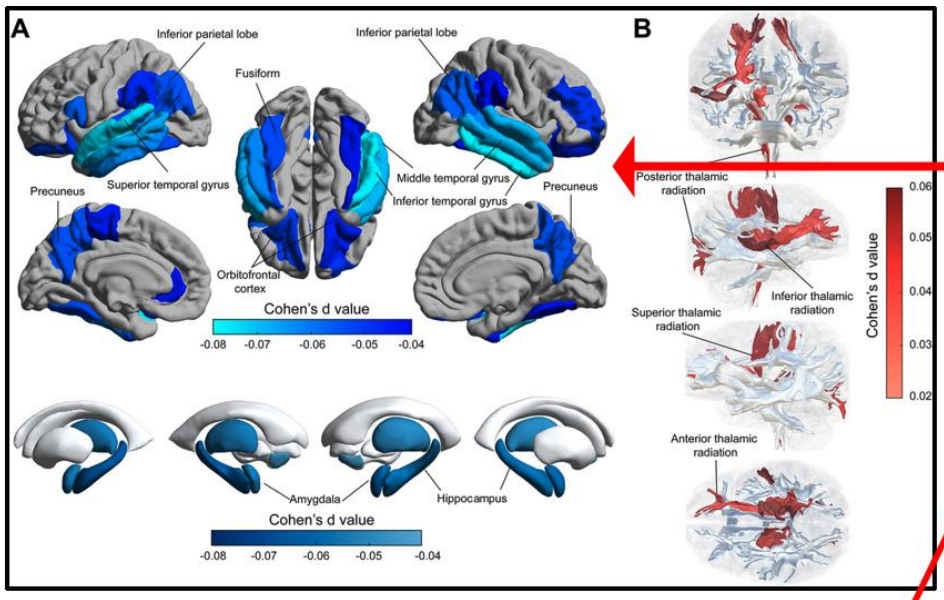
- **Take home: Untreated hearing loss is associated with worse cognition, more atrophy, and an increase in a key protein involved in Alzheimer's disease call tau**
- There was more atrophy in brain regions affected in Alzheimer's disease in persons with untreated hearing loss than in persons without hearing loss including the hippocampus
- Higher levels of tau and phosphorylated tau, which is a protein specific to Alzheimer's disease and correlates to symptoms, was found in the cerebral spinal fluid of persons with untreated hearing loss
- https://www.thelancet.com/journals/ebiom/article/PIIS2352-3964(22)00518-7/fulltext



There was increased atrophy in the regions shaded blue in persons with untreated hearing loss

Phosphorylated tau (p-tau) levels were elevated in the cerebral spinal fluid of persons with hearing loss indicating more neurodegeneration in those individuals