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β-amyloid deposition is Associated with Gait variability in Usual Aging

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Research highlights

- In usual aging, amyloid burden is associated with gait variability, not the mean.
- Being PiB+ is associated with higher integrated temporal gait variability.
- Associations are also localized in motor-related cortical and subcortical regions.
- These associations are prominent in men.

Abstract

Background: Higher amyloid burden predicts gait slowing in aging. Whether and which gait characteristics are associated with amyloid burden is less clear. Gait variability may be more sensitive to amyloid burden than mean gait characteristics. **Methods:** In the Baltimore Longitudinal Study of Aging, 99 older participants without neurological disease had concurrent amyloid imaging and assessment of gait characteristics. β-amyloid burden was measured using ^{11}C-Pittsburgh compound B (PiB) positron emission tomography. PiB+/- status was based on a mean cortical distribution volume ratio (DVR) cut point. Gait characteristics were quantified by 3D