

**Highlights:**

- ▶ Hippocampal atrophy is related to both encoding and retrieval deficits in aMCI patients
- ▶ Encoding deficits specifically correlated to CA1 hippocampal subfield atrophy
- ▶ Retrieval deficits are related to diffuse hippocampal atrophy
- ▶ Retrieval but not encoding deficits correlated to white matter tract disruption
- ▶ Retrieval to white matter correlations concerned medial parietal and frontal regions