

# Preliminary VBM Analyses in GW Veterans

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## Rationale & Methods

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- Previous published papers suggest white matter loss is associated with exposure to sarin
  - Heaton et al. 2007
  - Yamasue et al. 2007 (1995 Tokyo subway sarin attack)
- SPM 5 used to compare GM, WM, and CSF volumes between Group A (n = 12) and Group B (n = 14).

## Preliminary Finding

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- Group A has significantly less WM volume than Group B ( $p < .01$ , uncorrected)

## Implications

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- Highlights the importance of understanding white matter dysfunction in Gulf War Syndrome
- More sophisticated volumetric techniques are being applied to further understand these preliminary findings