

Description of Gulf War Research Projects

Investigator: Julia Golier, MD

Completed:

Title: Neuroendocrine Activity in PTSD: A Comparison of Gulf War and Vietnam Veterans

Funding Source: VA Merit Review Award

Start and End Dates: 2003-2006

Brief Description of Purpose and Results:

This project tested four different models of HPA axis dysfunction in PTSD, using several different challenge tests (CRF challenge test, low-dose ACTH test, dexamethasone suppression test). Results provided evidence of HPA axis dysregulation in GWV, which may be related to deployment exposures (pesticides and pyridostigmine bromide).

Current:

Title: A Randomized, Double-Blind, Placebo-Controlled Crossover Trial of Mifepristone in Gulf War Veterans with Chronic Multisymptom Illness

Funding Source: Department of Defense (CDMRP, GWIRP)

Start and End Dates: September 1, 2007- August 31, 2011

Brief Description of Purpose and Results:

We are performing a clinical trial to compare the effects of mifepristone to placebo for Gulf War veterans with chronic multisymptom illness. To further characterize the neuroendocrine mechanisms involved in chronic multisymptom illness and the extent to which they are malleable, the effect of mifepristone on HPA axis biomarkers will also be studied. In addition, we propose to examine whether HPA axis biomarkers or their response to mifepristone are useful predictors of clinical response. If this pilot study suggests mifepristone improves health or significantly reduces constituent symptoms of chronic multisymptom illness in Gulf War veterans, it would be considered a suitable candidate for a larger, randomized clinical trial. The blind has not yet been broken, so detailed results are not yet available.

Pending:

Title: HPA Axis and Metabolic Outcomes in Gulf War Veterans

Funding Source: Department of Defense

Start and End Dates: 2011-2014

Brief Description of Purpose and Results:

We seek to further characterize the nature and extent of HPA axis alterations associated with chronic multisymptom illness in GWV and their relationship to adverse metabolic outcomes. Using data from the glucose tolerance test and dexamethasone suppression test, we seek to investigate the associations of CMI in GWV and Gulf War deployment with HPA axis parameters, particularly with glucocorticoid responsivity and related functional impairments in the stress response, and to investigate the associations of CMI in GWV and Gulf War deployment with metabolic outcomes. In addition, we plan to explore the associations between neuroendocrine and metabolic measures, whether the associations differ by subgroup, and whether the associations of CMI with metabolic outcomes are direct, or indirect reflecting their associations with glucocorticoid responsivity.