

FINAL PROJECT REPORT

Date: 18 November 2015

Name:

Dr Katie Douglas

Project Title:

Effect of glucocorticoid administration on brain function in PTSD

Please copy the "Specific Objective(s)" statement, entered on your application form, in the space below.

This study will investigate whether hydrocortisone administration affects regional cerebral blood flow (rCBF) in the medial temporal lobe and other relevant brain regions during traumatic recall in post-traumatic stress disorder (PTSD) sufferers (n = 12) and in individuals exposed to similar traumatic events who have not developed PTSD (n = 12), using functional magnetic resonance imaging (fMRI). The study will be conducted over one year. Each participant will have two scans; one following hydrocortisone and one following placebo. The data will be combined with data from the same protocol carried out in at the University of Cardiff.

Briefly describe how successful you were in achieving the stated objective(s). If the objective(s) was not achieved, explain why that is the case and describe what you did manage to achieve.

Although recruitment was slower than anticipated over the course of this project, with the help of extensions from CMRF, the data collection phase of the project is now complete. Eleven patients with PTSD were recruited into the study, and two withdrew following consent, leaving a remainder of 9 patients who completed all study procedures. Nine age- and gender-matched healthy controls also completed the study, all of whom experienced the Canterbury earthquakes but did not develop significant anxiety as a result.

In terms of the study procedures, no changes were made over the course of the study, and thus, the original protocol submitted to CMRF remains accurate in describing the study.

From this point, we plan to analyse the brain imaging data with the help of Dr Tracy Melzer and researchers at the University of Cardiff who originally invited collaboration on this project. Findings will be prepared for publication in a scientific journal and presented at relevant scientific conferences by study investigators.

Briefly describe any interesting outcomes which might not have been considered in your original objectives (if any).

Analysis of study data will begin shortly, so at this point we cannot report any potential unexpected outcomes.