Post-traumatic headache in veterans of the Afghanistan and Iraq wars following deployment-related traumatic brain injury: long term follow-up and relation to PTSD and depression

Traumatic brain injury (TBI) occurred in 15-20% of soldiers deployed to Afghanistan (OEF) or Iraq (OIF) wars (DTBI) with headache reported the most common post-TBI problem. In our study including 179 diffuse traumatic brain injury (DTBI) and 155 controls (deployed soldiers without DTBI [CS]), chronic daily headache (CDH) occurred in 50% of DTBI and only in 9% of CS. Of those with CDH, 80% had chronic migraine (CM). In a subset of 94 DTBI and 70 CS, using the PTSD civ questionnaire, 50% of DTBI and 17% of CS had Post-traumatic stress disorder (PTSD), and using the Beck Depression Inventory 2 (BDI 2), 48% of DTBI and 9% of CS had severe depression (BDI score ≥29 [SDep]). Further analysis of these clinical data demonstrated that PTSD was seen in DTBI with and without CM at a rate of 64-74%. However, for SDep, this was seen in 63% of DTBI with CM, in 27% of DTBI with HA ≤9/month and 9% of CS. This suggests that PTSD relates to the TBI itself, but within the syndrome of post-traumatic headache, there is a sub-syndrome of CM with a strong representation of SDep. Whether SDep is a factor in conversion of headache to CM or the reverse requires further investigation. The second component of our work was to evaluate serum of the DTBI and CS with mass spectrometry (MS) to determine if there are significant and specific differences in the MS profiles between DTBI and CS; and between DTBI with and without CM. Results will be reviewed in the presentation.

Biography

James R Couch received his MD and PhD (Physiology) degrees from Baylor Medical School (Houston), Internship and Residency in Neurology at Washington University (St. Louis) and Fellowship in Neuropharmacology at the National Institute of Mental Health. He subsequently served on the faculties of University of Kansas and Southern Illinois University Medical School. He was chair of Neurology at University of Oklahoma Medical School from 1992-2006 and currently is Professor there. He has been interested in Headache for many years and was President of the American Headache Society (1998-2000). His current research deals with Post-traumatic Headache in war Veterans.

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