NR-604 Onset and Course of Posttraumatic Stress Disorder and Depression in Battle Injured Soldiers

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ABSTRACT

Approximately one month following the injury a battery of standardized screening instruments were administered. Soldiers were again assessed at 3 and 6 months either by telephone interview or upon return to hospital for outpatient treatment. All soldiers had serious injuries requiring hospitalization lasting from weeks to months. The distribution of wounds was: 50% soft tissue injury caused by shrapnel or gunshot wounds, 20% amputations, 41% fractures, 6% closed head trauma, 4% open cranial trauma, 8% chest trauma, 16% ocular injury, and 5% spinal cord injury (an average of over 1.4 injuries per soldier). Following review and approval by the institutional review board, clinical records from the period April 2003 to October 2004 were examined under protocol after all patient identifiers were removed.

The presence or absence of probable PTSD was assessed with the 17-item National Center for PTSD Checklist of the Department of Veterans Affairs (PCL-17). The PCL-17 lists all intrusion, avoidance and arousal symptoms of PTSD outlined in the DSM. Soldiers rated “how much you have been bothered by each problem in the past month.” Subjects were scored as positive for PTSD if they reported at least one intrusion symptom, three avoidance symptoms, and two hyperarousal symptoms, each present at the level of moderate or higher during the past month and received a PCL symptom severity score of 50 or higher. Probable depression was assessed using the Patient Health Questionnaire Depression Scale (PHQ-9). Probable depression was defined as five or more of the nine symptoms had been present at least “more than half the days” in the past two weeks, and one of the symptoms is depression mood or anhedonia. When compared against structured clinical evaluations in primary care settings the PHQ-9 demonstrated 73% sensitivity and 96% specificity and test re-test reliability correlation of 0.84. All analyses were performed using Statistical Software for the Social Sciences (SPSS – version 12.02). Age, rank, education level, marital status, and gender were examined as risk factors for probable PTSD and depression in the cross sectional cohort data using logistic regression. To assess the longitudinal course of probable PTSD and depression, an analysis was performed on the cohort of soldiers who had completed all three assessments (initial, 3, and 6 month).

RESULTS

Six hundred thirteen soldiers received an initial assessment (1 month post injury). Three hundred ninety-five were reassessed 3 months later (72.3% of those eligible) and 301 were reassessed 6 months later (61.1% of those eligible). Two hundred forty-four soldiers received assessments at all three times (49.9% of those eligible). Of soldiers who were contacted, less than 0.01% refused to participate in follow-up assessment. The remainder could not be contacted for follow-up assessment. Demographic data for the initial assessment group and the longitudinal cohort (evaluated at all three time periods) are similar and are provided in Table 1. Rates of PTSD and depression in the cross sectional and cohort groups are presented in Figures 1 and 2.