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Phantom Shocks as Markers of Underlying PTSD and Depression

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Implantable cardioverter defibrillator recipients sometimes report *phantom shocks*, defined as a patient's report of having experienced a shock without objective evidence of having received one. This mixed-methods study aimed to gain an understanding of the phenomenologic experience of phantom shocks. It was also hypothesized that phantom shocks are related to an increased level of posttraumatic stress disorder (PTSD) symptoms.

Methods: Nine phantom shock participants were recruited and matched on sex and age with participants who had received objective shocks only (n = 8, 100% male). Participants were interviewed and completed measures of PTSD (PTSD Checklist—Civilian Version [PCL-C]), depression and anxiety (Hospital Anxiety and Depression Scale [HADS]), disease-specific distress (Cardiac Anxiety Questionnaire, Florida Patient Acceptance Survey), psychologic vulnerability to trauma (Pain Anxiety

Symptoms Scale [PASS-20]), pain quality ratings (short-form McGill Pain Questionnaire), and social desirability (Socially Desirable Response Set).

Results: Three themes emerged from the qualitative analysis: (1) phantom shocks—a somatic experience, (2) the emotional impact of phantom shocks, (3) searching for meaning. Quantitative analysis showed that both groups exhibited elevated trauma and anxiety levels. Medium-effect size differences, where the phantom shock group showed elevated levels compared with the objective shock group, were found on HADS depression (M = 8.02, SD = 3.87 vs M = 5.50, SD = 3.38, respectively, $\eta^2 = .12$), PCL-C avoidance (M = 4.00, SD = 2.00 vs M = 3.13, SD = 1.89, $\eta^2 = .06$) and numbing (M = 11.31, SD = 5.01 vs M = 9.00, SD = 3.89, $\eta^2 = .07$), and PASS-20 (M = 41.57, SD = 33.11 vs M = 28.28, SD = 23.16, $\eta^2 = .06$). A small effect was seen on the PCL-C re-experiencing subscale (phantom shock group: M = 10.38, SD = 4.63 vs objective shock group: M = 9.63, SD = 4.10, $\eta^2 = .01$).

Conclusion: Phantom shocks are often indistinguishable from objective shock therapy, evoking alarm, frustration, and confusion for the individual. Taken together, the data suggest that for some participants, symptoms of PTSD and depression contribute to the experience of phantom shocks.