INPATIENT TREATMENT OF SEVERE MOTOR CONVERSION DISORDER: A CASE-CONTROL STUDY

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Objective
AIMS: To evaluate the characteristics and outcomes of patients with motor conversion disorder admitted to a specialist neuropsychiatry unit.

Method
The study included all (n=33) patients discharged from the Lishman Neuropsychiatry Unit (Maudsley Hospital) between 2007 and 2011 with an ICD-10 diagnosis of dissociative motor disorder following multidisciplinary treatment. Brain injury inpatients (n=33, age-and sex-matched) acted as controls. Data extracted included demographic details, duration of illness prior to admission, length of stay, medical/psychiatric co-morbidity and history, history of abuse, history as a carer or health/social-care professional, and status with regards to employment, mobility, and activities of daily living (ADLs) on admission and discharge.

Results
The mean age of cases was 40.8yrs (s.d. 12.1, range 20-59; not significantly different from controls p=0.299). Both
groups were 78.8\%(n=26) female. Cases had marked levels of functional impairment on admission with 60.6\%(n=20) wheelchair or bedbound, 42.4\%(n=14) dependent for ADLs, and an 87.9\%(n=29) unemployment rate. The mean Modified Rankin Scale (MRS) score for cases was 3.64 (s.d. 0.86, range disability 2 [slight]-5 [severe]), with a median length of illness pre-admission of 48 months (IQR 19-72), and median length of stay 101 days (IQR 84-130). All three values were higher than controls (p=0.003, p<0.001, p=0.03 respectively). Cases were significantly more likely than controls to have a history of all forms of abuse, particularly childhood sexual abuse (p<0.001; n=12/36.4\% of cases), a pre-morbid non-dissociative psychiatric history (p><0.001; n=27/81.8\% of cases), and a history of prior employment as a health/social-care worker (p=0.002; n=15/45.5\% of cases). Regarding outcomes, cases showed a significant improvement in MRS scores (p<0.001), mobility (p><0.001), and ADLs (p=0.049). Degree of dependence for ADLs reduced by 50\% in cases, while the number wheelchair/bed-bound reduced by 70\%. Regression analysis could not identify statistically significant predictors of response to inpatient treatment in conversion patients. Having co-morbid non-epileptic dissociative features predicted an increased length of stay in hospital (p=0.04).

**Conclusion** Even patients with severe, long-standing motor conversion disorder can benefit from an inpatient admission to a specialist neuropsychiatry unit. Our study suggests links between motor conversion disorder, physical/sexual abuse, and prior employment as a health/social-care professional. Previous studies have had similar problems identifying predictors of outcomes in conversion disorder. This study was limited by its retrospective design and observational nature. It is therefore not possible to state what elements of the treatment package brought about improvement. Generalisability is also limited by the inclusion of a particularly morbid subset of motor conversion cases.