

Brain Network Perturbations in Motor Presentations of Functional Neurological Disorder: Where are These Leading?

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Learning Objectives

General Objective

- To elucidate the overlapping and complex brain network circuitry perturbations in the motor manifestations of Functional Neurological Disorders (FMD).

Specific Objectives

- To differentiate the various motor manifestations of Functional Neurological Disorders (FMD);
- To critically review the current neurophysiological evidence pertaining to FMD;
- To identify and characterize the alterations in brain circuitry that contribute to the development of FMD;
- To propose physiology-centered research directions in the study of FMD and to highlight the potential clinical implications of neuroimaging findings.

Key Messages

- An integrated approach that synthesizes psychological and neurobiological perspectives is essential for optimizing patient care in Functional Motor Disorders.
- Specific historical and clinical features can aid in differentiating organic from functional motor presentations.
- Advances in neuroimaging have provided converging evidence of alterations in brain circuitry among individuals with Functional Motor Disorder.
- Cultural, psychological, genetic, and environmental factors are implicated in shaping these neural alterations.
- Future research should prioritize the identification of preventive strategies targeting these contributory variables to mitigate the development of maladaptive brain circuitry changes.

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