

NEUROIMAGING STUDIES IN BULIMIA NERVOSA: CURRENT AND FUTURE RESEARCH MAPS

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Introduction: Bulimia nervosa is one the main subtypes of eating disorders. Recent neurobiological research is greatly contributing to the understanding of eating disorders.

Objectives: To review and discuss current topics under investigation with neuroimaging studies in bulimia nervosa, as well as future interesting lines of research in this area.

Aim: To analyze the state of the art of neuroimaging research in bulimia nervosa.

Methods: MEDLINE and PubMed databases were searched for peer-reviewed studies, published between 2000 and 2012, by using combinations of the Medline Subject Heading terms neuroimaging and bulimia nervosa. A selection of relevant articles to the study aim was carried out. An analysis of the reviewed studies including current topics of research and future suggestions was also done.

Results: Articles reviewed encompassed functional and structural neuroimaging or clinical reviews, connectivity and neurotransmitter studies, as well as debate or opinion articles. The main topics addressed were cerebral activation secondary to food stimuli, neuropsychological paradigms, diagnosis and classification of eating disorders based on neurobiological findings, neurobiology of eating disorders, and disordered eating mechanisms. The main future research avenues proposed were development of eating disorder psychopathology-related fMRI paradigms, as well as connectivity-based and molecular imaging studies.

Conclusions: The neurobiology of eating disorders is a growing exciting field of research. Neurobiological studies, namely neuroimaging studies in bulimia nervosa, may provide an important research framework for a better knowledge of psychopathological mechanisms of eating disorders.