Oxytocin and Anorexia Nervosa

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Aims and Objectives

To test the predictions from the model. What are the effects of a single dose of oxytocin on aspects of the psychopathology of eating disorders in particular attentional processes to food and social and eating behaviour?

Background

Anorexia nervosa (AN) has a lifetime prevalence of 1% and has a profound effect on the physical and psychosocial health of individuals and families, including the highest rate of mortality (from starvation and suicide) of all psychiatric illnesses. The average duration of the illness is typically 6 years and around one in four patients remain chronically ill, for approximately15 years, by which time the likelihood of recovery is low. Family based treatment provided early on can lead to a good outcome but this and other treatments are less effective if starvation is prolonged probably because of secondary deficits in brain function. We have developed a theoretical model to explain how anorexia nervosa can become chronic and resistant to conventional treatments. Starvation (an inevitable consequence of the symptoms of AN) impacts on brain function and accentuates traits that may have been present before the onset of illness. Hence social functioning (submission stress) and anxiety become problematic. This has two follow-on effects, it decreases trust and the patient disconnects and disengages from carers. It also makes it more difficult to manage the fears associated with food and eating. A vicious circle of anxiety and avoidance or conflict associated with meals and with carers and close others begins. The emerging evidence in relation to low oxytocin levels a possible feature of starvation and chronic submission stress has led to the hypothesis that administration of intranasal oxytocin will ameliorate some of the secondary maintaining factors.

Method

Participants. Patients with anorexia nervosa and age, gender and IQ matched controls.

Procedure. Oxytocin and the placebo are administered intranasally at a 1-week interval. Each participant is randomized in a double-blind manner to either receive oxytocin or the placebo first (neither the researcher nor the participant knew the group assignment). The participants then underwent neurocognitive tasks and afterwards were offered a drink. The assessment procedure includes dot probe measures of attention to food and social stimuli and a test drink.

Execution

November 2013 - November 2015

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