Medical Xpress

How do Tourette's patients react to visual stimulation with their own self-image?

November 28 2014

Tourette's syndrome is characterised by tics caused in many by premonitory urges; sensations which give patients compulsion to act to relieve discomfort. Habit reversal therapy conditions patients into heightened awareness of premonitory urges and forced counteraction of the tic.

New research in Cognitive Neuroscience examines the effect on Tourette's sufferers when exposed to their own image for a prolonged period. Could introduction of patients' self-image reduce tics due to heightened self-awareness and subsequent self-imposed tic control? Or might watching themselves increase inclination to tic? Will making the patient perceive tics induce actual tics? Two studies were undertaken to observe outcomes and findings are hoped to have positive implications for future behavioural interventions in Tourette's syndrome patients.

Study 1 observed 12 patients, firstly alone in a room, then alone in front of a mirror. Study 2 duplicated this process with 16 patients, with the addition of them watching a video of themselves in a constant tic-free state. They were rated for tic frequency, how many times tics were immediately repeated and how many different tics occurred. In both studies tic frequency was higher with a mirror than without. Extraordinarily tic frequency was greatly reduced in patients observing the video of their tic-free selves. Use of a mirror clearly caused more frequent ticcing in patients. Was this due to increased tic-awareness or heightened self-awareness? This question may be answered by the video control.

Patients paid attention to the self but tic rate decreased; the authors note, "A higher tic frequency in association with visual feedback may be the result of anticipated sensory effects of a tic, especially in association with the relief of premonitory urges". They advise further observations of patients shown a video of themselves ticcing, to establish whether the decrease was due to general focus away from tics or specific attention focused on the non-ticcing self.

More information: www.tandfonline.com/doi/full/1 … 17588928.2014.954990

Provided by Taylor & Francis