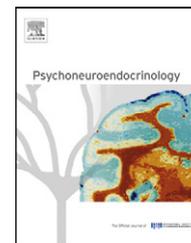




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SHORT COMMUNICATION

Oxytocin as a moderator of hypnotizability

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Summary Since hypnosis was popularly recognized in the nineteenth century, the phenomenon of hypnotizability has remained poorly understood. The capacity to increase hypnotizability has important implications because it may increase the number of people who can benefit from hypnotic interventions for psychological and medical conditions. Current theories emphasize that rapport between hypnotist and subject is pivotal to motivate the respondent to engage in strategies that allows them to suspend reality and respond to suggestions. The neuropeptide oxytocin is implicated in social bonding, and enhances a range of social behaviors in animals and humans. This study tested the proposal that oxytocin administration, which enhances social bonding in humans, may enhance hypnotic responding by administering intranasal spray of oxytocin or placebo prior to hypnosis in 40 low hypnotizable male subjects. When low hypnotizable individuals were administered oxytocin via nasal spray, their level of hypnotic responding increased significantly compared to hypnotic responding levels prior to oxytocin administration. This is the first demonstration of a neurochemical basis for hypnotic responding, and points to a potential neural mechanism to explain hypnotizability.

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Hypnotized people can experience and behave in ways that defy normal experience, including amnesia, rigidity of the body, regression to one's childhood, and anesthesia. Hypnotizability (i.e., one's capacity to respond to hypnotic suggestion) is normally distributed in the population, with approximately 15% being low hypnotizable, 70% being medium hypnotizable, and 15% being high hypnotizable (Woody et al., 2005). One's capacity for hypnotic responding is very stable across time, with evidence that it remains consistent over 25 years ($r = 0.71$) (Piccione et al., 1989).

Rapport between hypnotist and subject is pivotal to hypnotizability (Sheehan and McConkey, 1982), arguably because it motivates the respondent to engage in strategies that allow them to suspend reality. Supporting this view, hypnotic responding is modulated by increasing motivation to respond and altering the respondent's expectations (Lynn et al., 2008). Further, hypnotic responding is enhanced by facilitating rapport by altering the hypnotist's behavior (Sheehan, 1980).

The neuropeptide oxytocin plays an important role in social affiliation. Oxytocin is thought to regulate behavior by acting as a neurotransmitter/neuromodulator. Administering oxytocin enhances a range of social behaviors in animals, including maternal nurturing behaviors, pair-bonding, while antagonists of oxytocin impair bonding (Bartz and

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