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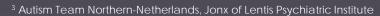
The effects of oxytocin in autism



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Objective

A randomized controlled crossover trial with oxytocin nasal spray (one dose of 24 EU) was conducted to investigate effects of oxytocin in young adult males with autism. Autism Spectrum Disorder is ...

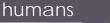
- A lifelong developmental disorder
- Characterized by deficits in social interaction and communication, and restricted interests and behavior patterns
- Associated with altered social cognition and emotion processing

Organ of smell Brain stem Nasal cavity

Oxytocin is ...

- Produced in the hypothalamus
 - A hormone influencing a.o. digestion and sex organs
- A neurotransmitter influencing social cognition and emotion processing
- Involved in calm, healing and love

Picture viewing task



scenes

neutral



positive





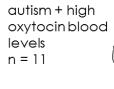
negative

Brain responses (EEG) to emotions in humans

placebo

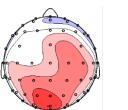


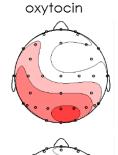


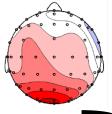


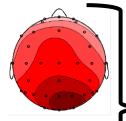
autism + high sensitivity to distress of others n = 16



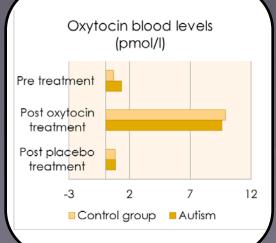












Sensitivity to distress of others, example items from the IRI:
"I sometimes feel helpless when I am in the middle of a very emotional situation"
"When I see someone who

"When I see someone who badly needs help in an emergency, I go to pieces"

Oxytocin enhances brain responses to positive emotions in humans in males with autism having:

- high sensitivity to distress of others
- ✓ high pre treatment oxytocin blood levels

Oxytocin nasal spray improves affective empathy in a select group of males with autism

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