

Hyperbaric treatment for autism reports significant clinical improvements

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Hyperbaric treatment for children with autism has reportedly led to improvements in the condition, though previous studies were uncontrolled. Now, a new study published in the open access journal, *BMC Pediatrics*, is the first controlled trial to report clinical improvements.

Hyperbaric therapy traditionally involves inhaling up to 100% oxygen at a pressure greater than 1 atmosphere (atm) in a pressurized chamber. In the first randomized, controlled, double-blind multicenter trial, Dan Rossignol and colleagues, from six centers in the USA, studied 62 [children](#), aged 2-7 years, to assess the efficacy of hyperbaric [treatment](#) in children with [autism](#).

The children were randomly assigned to either 40 hours of hyperbaric treatment at 1.3 atm and 24% oxygen (treatment group) or slightly pressurized room air at 1.03 atm and 21% oxygen (non-treatment group). Clinical outcomes were evaluated by three different scales: the Clinical Global Impression (CGI) scale, the [Aberrant Behavior Checklist](#) (ABC), and the Autism Treatment Evaluation Checklist (ATEC).

The study found that children with autism in the treatment group had significant improvements in overall functioning, [receptive language](#), [social interaction](#), eye contact, and sensory/cognitive awareness compared to children in the non-treatment group.

Rossignol wrote "Hyperbaric treatment is a safe treatment modality at

1.3 atm and ... appears to be a promising treatment for children with autism".

More information: Hyperbaric treatment for children with autism: a multicenter, randomized, double-blind, controlled trial, Daniel A Rossignol, Lanier W Rossignol, Scott Smith, Cindy Schneider, Sally Logerquist, Anju Usman, Jim [Neubrandner](#), Eric M Madren, Gregg Hintz, Barry Grushkin and Elizabeth A Mumper, *BMC Pediatrics* (in press), www.biomedcentral.com/bmcpediatr/

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