

HEALTH

Children make 'gains' in hyperbaric chamber.

Preliminary results of study suggest oxygen treatment has potential to help youngsters with neurological disorders.

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Children involved in an experimental study looking at the effects of the hyperbaric oxygen therapy on youngsters with cognitive disorders such as cerebral palsy have shown "significant gains," a researcher said Thursday.

Dawn Good, a clinic psychologist and Brock University professor, delivered her preliminary findings at a Rotary club of St Catharines lunch.

"I've been incredibly impressed," said Good. "I went in quite skeptical because it was a huge expense for families."

Treatment for a child with cerebral palsy can cost between \$3,000 and \$ 5,000, she said.

Through her work with Ontario Brain Injury Association, Good became aware of the interest in hyperbaric chambers.

The association was getting so many calls from parents inquiring about the treatment it asked Good if she knew of any research being done on the controversial devices.

The co-director of Brock's neuroscience degree program found research on children and hyperbaric oxygen therapy was scant and decided to find out more.

Good is now working with John Gleddie on the study which last fall. The St. Catharines chiropractor offered his two low-pressure hyperbaric oxygen chambers. The chambers, less controversial than the high-pressure devices, allow patients to receive oxygen in a pressurized environ-

ment. Gleddie mostly treats professional athletes with the therapy.

Receiving more oxygen seems to help in the body's recovery process.

"This is the only place that research is being done with cognitive disorders," said the chiropractor. Currently there are eight children under the age of five with neurological disorders in the study.

The children are first tested at the university to determine their ability to understand and perform simple tasks, before they start hyperbaric oxygen therapy. Eight graduate students are helping Good with study.

The treatment is spread over eight weeks and consists of about 40 hours in the chamber. Children are accompanied by their parents when they receive three to five one hour treatments a week.

Two children have completed the study, which includes an initial assessment and follow-up six months after treatments is completed.

"The two kids have demonstrated significant gains," said Good.

One of the girls, 3-1/2 years old with cerebral palsy-a spastic paralysis caused by brain damage-is showing marked improvement.

She can vocalize more and eat small quantities of food instead of relying only on tube feeding, said Good.

So far our findings are positive," said Gleddie

The next step will be to find more subjects so a more comprehensive scientific study can be done. "This is very experimental at this point" said Good.

Gleddie and the Brock professor are not currently receiving funding for the study.

A comprehensive pilot project looking at the effects of hyperbaric oxygen therapy on children with cerebral palsy was recently conducted in Montreal.