

### → PROFILE

Children with autism make meaningful progress with help from Oxygen Oasis Hyperbaric Wellness Center in Langhorne.



# SOLVING THE PUZZLE, One Piece at a Time

by BILL DONAHUE | photography by JODY ROBINSON

#### Jake had been developing "just fine" until age two. Then everything changed.

His mother, Laura, remembers him "losing his words, losing eye contact." She then had to watch her son slowly forfeit nearly all of the developmental progress he had made in his young life, to the point where he became little more than "a poseable doll," as she puts it. The diagnosis: autism spectrum disorder.

Laura and her family have been fighting to "get him back" ever since. In fact, they have crisscrossed the country in pursuit of groundbreaking medical treatments for Jake, now nine years old, from neurosensory remedies at healthcare facilities in Boston, Orlando, and Austin, Texas, to mesenchymal stem-cell therapy in Cherry Hill N I

One of these promising therapies is little more than an hour's drive from her family's front door: hyperbaric oxygen therapy, or HBOT, provided by Oxygen Oasis Hyperbaric Wellness Center in Langhorne. After 40 HBOT treatments, or "dives,"

Laura suggests Jake has experienced "a new level of awareness," among other signs of forward progress.

"HBOT is a good way to clear the body of inflammation," says Laura, whose family lives in Union County, N.J. "We wanted to reduce as much inflammation in Jake's gut and brain before having the stem cells done. We've seen some other positive changes in him after the treatment; we saw improvement with his sleep, he's more connected and social, and he's even a little 'fresh,' but in a good way."

For those who are unfamiliar with this treatment, HBOT delivers 100 percent pure oxygen to a patient in a pressurized hyperbaric chamber. Medical-grade HBOT is considered a noninvasive form of wound healing that has been used to treat everything from multiple sclerosis and Parkinson's disease to sports injuries and post-traumatic stress. The treatment is painless, though patients may feel as though their ears are plugged from the increased pressure, which is similar to that of flying in an airplane or diving to the bottom of a pool, and the sensation is easily remedied by the same methods as clearing one's ears during takeoff or after swimming.

Oxygen Oasis offers HBOT in two distinct options: monoplace, a smaller chamber that can accommodate either a single patient or a parent and child together; or multiplace, a significantly larger chamber that accommodates multiple patients simultaneously. Both chambers provide video entertainment, such as HBO, Netflix, and Hulu, to keep patients engaged for the duration of treatment.

Each dive typically lasts one hour, during which recipients are immersed in 100 percent oxygen at one and a half to three times the normal atmospheric pressure. The environment increases oxygen concentration in the body at 15 to 20 times greater than normal at the cellular level, thereby accelerating the body's ability to heal, according to Victoria Bliss-Calkins, president and CEO of Oxygen Oasis.

"When we're working with an autistic child, a parent or caretaker is also treating with the patient," she says. "We see all different types of children, and some are more excitable than others. We try to time appointments during the calmer hours, when not a lot of things are going on, so the children and their parents are able to be as comfortable as possible."

#### 'Huge Gains'

HBOT has the ability to reduce neuro-inflammation, which, in turn, helps poorly functioning brain cells function more effectively. As a result, children with autism tend to experience significant improvements in overall functioning, including receptive language, social interaction, and eye contact. Also, because the therapy improves blood flow and oxygen delivery throughout the body, it can address other conditions common among individuals with autism, including disorders of the skin and digestive system.

Jason Friel, Oxygen Oasis' safety director, suggests patients tend to start experiencing noticeable improvements at the 20-treatment mark, though others see results even sooner. These results may include greater awareness of one's environmental surroundings, deeper engagement with the people around them, diminished agitation, and improved sleep patterns. In addition, those who have a condition known as "toe walking"—walking on the tiptoes rather than the soles of the feet—often begin to walk properly.

"Families are not just doing HBOT; they're doing it in combination with speech and

behavioral therapies, and it often helps to expedite those other therapies," says Bliss-Calkins. "One of the biggest changes we see [after treatment] is in the way that children interact with their families. We hear a lot from mothers and fathers of autistic children who say they feel more like caretakers than parents. After these children undergo HBOT treatment, they tend to show more outward signs of affection."

The Oxygen Oasis website, www.o2oasis.com, has a library of evidence-based studies and reviews of hyperbaric medicine. Patients generally receive treatment once a day, for up to 90 minutes per session, with most regimens requiring 20 to 40 sessions. All patients undergo a full medical evaluation prior to treatment at the Joint Commission-certified facility,

and each treatment is performed under the careful supervision of a physician and hyperbaric technicians to ensure the patient's safety.

As for Jake, Laura says her son has been making extraordinary progress in terms of awareness, interaction, and communication. She expects to take him back to Oxygen Oasis—"an awesome place," as she calls it—

later this year for another round of treatment to maintain the momentum. He may be a "handful" at times, but she would much rather him "rile things up wherever he goes" than have him regress.

"He's so happy right now," she says. "I always have to remember where we were, where we are now, and where we're going. I'll tell him all the time: 'Your story's not over. Someday you'll write a book about what you've been through.' ... We will stop traveling and treatments when Jake is completely Jake again—the way God intended for him to be. With the love and support of his family behind him, he will move that mountain sooner rather than later. He is a fighter and never gives up. Jake is a miracle and always brings a smile to the many amazing people we have had the pleasure of working with over the years.

"When he can tell me, 'I'm OK' and he can come up with the words on his own, we'll know he's in a good place," she continues. "It will be a few more years until that happens, but he's made huge gains in the past few years. Right now he's hitting it out of the park."

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—LAURA, THE MOTHER OF JAKE, A NINE-YEAR-BOY WITH AUTISM WHO HAS RECEIVED HBOT AT OXYGEN OASIS





Oxygen Oasis offers medical-grade HBOT therapy in monoplace and multiplace chambers. Here, a patient prepares to be treated in a monoplace chamber.



#### OXYGEN OASIS HYPERBARIC WELLNESS CENTER

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