

Closed Head Injury

Car accident



Matthew was in a vegetative state: Static Anoxic Encephalopathy, Ventilator Dependent with Infections, Since Receiving Hyperbaric Oxygen Therapy, He has been successfully weaned off the ventilator and no longer carries this diagnosis. He now is able to communicate with blinking yes and no. He is tracking and is able to follow verbal commands. He is currently continuing Hyperbaric Oxygen Therapy. We hope to have more positive updates in the near future from Matthew's Father and Totally Kids.

Since receiving HBOT, the following changes have occurred:

Matthew will continue with HBOT now is off the ventilator, no infections and is able to communicate with blinking yes and no. It must be noticed that this patient has made all of these improvements when Hyperbarics was implemented combined with the care under Dr Van Stralen and his staff at Totally Kids. We are gratefully To Dr. Van Stralen and his staff of professionals for allowing continued Hyperbaric Oxygen Therapy for Matthew and the other children that we treat from Totally Kids. This is an outstanding Specialty Healthcare Center. We highly recommend, this Health Center, Dr Van Stalin, Totally Kids, Specialty Healthcare.

Rapid Recovery Hyperbarics

The Following is a letter from Matthew's treating Physician:

Totally Kids
Specialty Healthcare
Lic.#240000217

Loma Linda CA

Nov. 2001

Re: Matthew XXX

To Whom It May Concern:

It has been my pleasure to provide Medical care to Matthew XXX since his admission to Totally Kids Specialty HealthCare on Sept. 1999 I have provided routine medical case as one of the three attending physician, mechanical ventilation management as a consulting specialist, and as Medical Director for the facility.

Matthew XXX can to use with the diagnosis of Static Anoxic Encephalopathy (persistent Vegetative State) and was dependent on Mechanical Ventilator for life. He also needed a tracheotomy and gastrostomy tube for care. He had blood clots in three major veins of his right leg, which required medication to keep the clot from growing. He also came with colonized with the bacteria Pseudomonas would be life threatening and require transfer to a university medical center where high-risk antibiotics could be employed.

After, Hyperbaric Oxygen Therapy, He is doing quite well and is receiving Maintenance care. He had been successfully weaned off the ventilator. He is no longer colonized with Pseudomonas. He no longer carries the diagnosis of Static Anoxic Encephalopathy (persistent Vegetative State) He takes classes using assistive technology.

He has received some innovative care at Totally Kids Specialty HealthCare. Consequently, I recommend consideration of the following medical therapies:

- Vest pulmonary treatment for pulmonary hygiene and removal of secretions.
- Hyperbaric Oxygen Therapy for central nervous system treatment, anecdotal evidence in his case shows it may have had a positive effect.
- Regular consultation with an Infectious Disease Specialists and collaborating physician's

Cordially,

Dr. Van Stralen MD
Medical Director

1455 North Waterman Ave
San Bernardino, CA. 92404
1-909-889-0517
1-909-889-7626

Rapid Recovery Hyperbarics

Your Honor,

Re: Matthew XXX

June 13, 2001 Matthew XXX began Hyperbaric Oxygen Therapy. During this time Matthew XXX to date has received 64 one-hour treatments with the following improvements in both Medical and Neurological benefits.

1. Matthew is completely weaned off mechanical ventilation therapy. Matthew is no longer ventilation dependent.
2. Prior to starting Hyperbaric Oxygen Therapy, Matthew was only able to sprint off the ventilation for 1 to 2 hours at the maximum.
3. Presently, Matthew is experiencing no on going infections or bacteria lung involvement and secretions are white and normal in appearance.
4. Prior to starting Hyperbaric Oxygen therapy, Secretions were cultured with many bacteria growth requiring antibiotic prescriptions monthly. (On going infections)
5. Matthew's Immune system appears to have greatly improved with normalized functions.
6. Neurological functions: Matthew's greatest improvement appears to be gaining greater mental function with learning capabilities and higher purposeful thought functions.
7. Matthew has improved cognitive functions including head, eye control, bilateral tracking and completely purposeful Facial expressions.
8. When requested, Matthew will recognize his name and will turn his head and neck to respond.
9. Matthew will make great attempt a communication and with the aid of Passy-Muir Valve attempt to speak.
10. Matthew has shown purposeful movements making noises on command.
11. Matthew very recently will answer questions by blinking "Yes and No"
12. Matthew has a 50%- 70% improvement in spastic movements with out stiffness in all extremities.
13. Much improved circulation in lower and upper extremities (legs, knees, arms and hands)
14. Matthew will appear to laugh and seems in less pain.
15. Matthew will show emotion when his family leaves and at times becomes tearful.
16. Matthew will respond to painful stimuli with Facial expressions, movement and becomes vocal.
17. When requested, Matthew will swallow, cough, smile and blink.
18. Matthew is very aware of his surroundings including bowel functions becoming vocal when soiled.
19. Improvements in swallowing are apparent where as a swallowing test is ordered in the near future. Indicating much improved motor functions.
20. Matthew is able to breathe out of his mouth, (orally) using the Passy- Muir valve, which enables him to exhale orally, where as prior to Hyperbaric Oxygen therapy he was unable to inhale and exhale only by trachea tube and unable neurologically to use the Passy- Muir valve.
21. Matthew is able when asked, to lift his head completely up.

Although, brain injuries of this type do require many treatments we are hopeful that Matthew will make great improvements in the future.

Rational of use of Hyperbaric Oxygen in Neurological Disorders:

- Relief of hypoxia
- Improvement of microcirculation
- Relief of cerebral edema by vasoconstrictive effect
- Preservation of partially damaged tissue and prevention of further progression of secondary effects of cerebral lesions
- Improvement of cerebral metabolism

Reduce edema and swelling

In our accumulating experience, repetitive Hyperbaric Oxygen appears to be stimulatory to brain repair and some cases require as much as 200 treatments, this combined with other modalities.

To date, Matthew has had only 64 one-hour treatments and has made many noticeable improvements both in health and neurological, motor and conjunctive higher mental functions.

Respectfully,

Dr Donald Underwood DO, MPH JD
Medical Director Susan Rodriguez
CHT Patrick Rodriguez CHT, EMT,
DMT

Ref :

The effect of hyperbaric oxygen in prolonged Coma: Dr Richard Neubauer MD. 1st International Symposium on Cerebral Palsy and The Brain Injured Child –July 1999 2nd International Symposium on Cerebral Palsy and The Brain Injured Child- July 2000 3rd International Symposium on Cerebral Palsy and The Brain Injured Child- July **2001** The Use of Hyperbaric Oxygen in Treating Neurological Disorders, Chapter 16 The Text Book of Hyperbaric Medicine, Vol. 1,2,and 3 Dr. K.K. Jain MD Hyperbaric Oxygen Therapy in Global Cerebral Ischemia/ Anoxia and Coma: Chapter 18 Dr Paul Harch M.D. and Richard Neubauer. Hyperbaric Oxygen Medicine: Dr Richard Neubauer MD UHMS committee report on Hyperbaric Oxygen and Brain Injury 1999 D.A.N. Hyperbaric Oxygen Medicine: Dr Eric Kindwall MD Hyperbaric Oxygen Therapy in Infections, Oxygen as an Antibiotic Chapter 13 The Text Book of Hyperbaric Medicine, K.K. Jain MD Hyperbaric Oxygen Therapy in Hematology and Immunology Chapter 23 The Text Book of Hyperbaric Medicine, Vol 3, K.K. Jain MD

