Institute for Progressive Medicine
4 Hughes #175 Irvine CA 92618
Tel. 949.600.5100
www.iprogressivemed.com

SEIZURES AND MASKING

I was assistant medical director at the Institutes for the Achievement of Human Potential in Philadelphia for 14 years, from 1981-1995. The Institutes was founded over 50 years ago by Glenn Doman and others for the purpose of providing superior rehabilitative services for adults and children with neurological disorders. Over time the children took over, and I rarely saw any adults. The causes of ‘brain injury’ were primarily cerebral palsy, Down syndrome, trauma, near-drowning, encephalitis, and autism.

Many of these children had seizures, and most with a history of seizures arrived taking one or more anticonvulsant medications. The drugs were extremely sedating, and the children were often obtunded or comatose. Nevertheless their doctors at home insisted on the need for these drugs. Many children had seizures despite the drugs. Their extremities were cold, their chests small and their breathing poor.

Recognizing the damaging effects of antiseizure medications, the Institutes tried routinely to take these children off drugs. Drug elimination was slow, usually over 3-6 months and sometimes longer. Effects were remarkable. The children would wake up, start to move, and could engage in their programs much more actively. Progress in the presence of seizure medications was very slow.

The Institutes does not believe that seizures cause brain damage, except for the continuous severe form called status epilepticus, which is uncommon. Natural therapies for seizures include fluid restriction, addition of magnesium, 400-800 mg/day, and vitamin B6, 100-200 mg/day. And masking.

All children, with and without seizures, were treated with masking. The rebreathing of carbon dioxide dilates cerebral arteries and increases blood flow to the brain. The mechanism of masking also develops the respiratory musculature and grows the chest. In general, seizures would become less frequent and less severe, and in many cases would resolve entirely.

The brain grows through use, and antiseizure drugs retard brain development by suppressing consciousness.

Allan Sosin, M.D.
Masking for Children

Masking involves placing a plastic bag with a small tube on one end over a child’s mouth. The borders of the mask lie flush against the child’s face. Carbon dioxide will collect within the bag as the child exhales, and will be inhaled with the next breath. Carbon dioxide is a powerful cerebral vasodilator, and greatly increases blood flow to the brain. It also drives the respiratory center in the brain to cause hyperventilation.

After 20-40 seconds the child will be seen to hyperventilate. Masking should continue another 30 seconds. Then the mask should be removed. The procedure should be repeated every 5-10 minutes throughout the day.

Masking has been used safely in children for many years. It reduces seizures, grows the chest and strengthens respiratory muscles. It reduces the incidence of respiratory infections. It helps the brain develop. It is effective for all children with brain injury of any kind, not just those with seizures.

Masking is contraindicated in children with acute infections, asthma, high fever, and heart disease.

The physician must personally instruct the parents on the masking procedure. The child should never be left alone during masking. Parents should not try to make masks on their own.

Masks may be ordered from the Institutes for the Achievement of Human Potential (www.iahp.org) by the physician. The initial set is free, and will be mailed to the physician’s office for the purpose of instruction. Subsequently parents may order directly from the Institutes. The charge is $3 per mask. There is a small size and a large size. Younger children should use the smaller size.

Allan Sosin, M.D.