Case report

Minor ozonized autohemotherapy in a 2 year old boy with speech delay and cytomegalovirus infection: a case report

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Abstract

The prevalence of congenital cytomegalovirus (CMV) and various other infections in autism has been reported. While many factors like genetics play a role, prenatal exposure to maternal infections like CMV may influence autism spectrum disorders. A two year old boy was seen in my office with speech delay. He was treated with 8 ozone injections or minor autohemotherapy weekly for a CMV infection and showed clinical improvement in speech. Ozone therapy represents a potentially novel method to treat infections related to autism and speech delay safely...

Keywords

autism, speech delay, ozone, minor autohemotherapy, cytomegalovirus infection.

Suggestion on how to quote this paper:

Background

Autism is a neurodevelopmental disorder characterized by severe communication, social and behavioural abnormalities. In addition to cytomegalovirus infection CMV, various other infections have also been reported on and discussed, including mycoplasma and even tick-borne infections in autism. The immune system is dysregulated in autism, with increased expression of genes that lead to oxidative stress and inflammation.

Ozone has long term anti-inflammatory and immunomodulating effects, including stimulation of internal antioxidants. It has been studied in many conditions including heart disease, lumbar disc disease, muscular dystrophy, rheumatoid arthritis and more. It is antibacterial and antiviral. To date there are no preclinical or clinical studies on the use of ozone in autism spectrum disorders. This case report is the first of its kind to show a beneficial response of ozone in a child with speech delay.

Case Presentation

The patient was a two year old boy diagnosed with speech delay and at risk for autism. Lab testing done at my office found an active infection with CMV. The IGM was elevated at 1.14ng/ml (negative value is <=0.79ng/ml) through medical diagnostics laboratories (www.mdlab.com). It is not clear exactly how long the patient may have had this infection. His parents agreed to come for 8 weekly ozone injections. This consisted of removal of 5 ml of blood intravenously and mixed for 30 s with an equal amount of ozone at a concentration of 15ug/Nml using the Ozonette (sedecal, spain). This was then slowly injected intramuscularly in the gluteal muscle (minor autohemotherapy). During the course of the treatments, the parents noticed a significant improvement in his speech. He was more clear minded, happier and energetic. He was more alert especially on the day of treatment. He had no side effects from this treatment.
Discussion

Autism spectrum disorders is a neurodevelopmental disorder whose pathophysiology is unclear. One possible etiology involves the presence of infections.\textsuperscript{1-3} Two year old boy diagnosed with speech delay and an infection with CMV. He was treated with injections of ozone and autologous blood, weekly. After 8 weeks he had subjective improvement.

Currently there are limited available medical treatment options for autism spectrum disorders. Risperidone and Aripiprazole are the only drugs approved by the FDA for the treatment of behavioural problems in children with autism.\textsuperscript{4} There is plenty of scientific evidence supporting the use of ozone in medicine. Ozone is immunomodulating, anti-inflammatory, antiviral and antibacterial. It stimulates in the body its own production of endogenous antioxidants. It is safe, with minimal side effects.\textsuperscript{5}

In autism, there is immune dysregulation, inflammation, oxidative stress, decreased availability of antioxidants, and also the presence of infections.\textsuperscript{1-3,6-8} Ozone therapy has the potential to address all of these abnormalities.\textsuperscript{5} It can reduce inflammation and oxidative stress.\textsuperscript{9} Ozone can function as an immunomodulator.\textsuperscript{10} In autism, the healing process has gone awry. Minor autohemo therapy (miAHT) has the potential to restore the natural healing process.\textsuperscript{11} Ozone has been shown to improve redox balance.\textsuperscript{12} miAHT has been studied in limb ischemia and Raynaud's syndrome.\textsuperscript{10,13}

Conclusions

This case, of a patient is of particular interest, in that it is the first of its kind demonstrating the possible therapeutic value of ozone, particularly miAHT in the treatment of autism spectrum disorders. It is an invitation to other clinicians and researchers to study ozone in autism.

Competing Interests.

Dr. Karima Hirani declares she has no competing interests.
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References


11. Can the combination of localized “proliferative therapy” with “minor ozonated autohemotherapy” restore the natural healing process? Gracer RI, Bocci V. “Medical Hypothesis” 2005
