BEFORE THE OFFICE OF STATE ADMINISTRATIVE HEARINGS STATE OF GEORGIA

DAVID FREELS, a minor by and through DAVID FREELS, his father,)
Petitioner,) Docket
)
v.)
DEPARTMENT OF COMMUNITY)
HEALTH,)
Respondent.)

locket No.: OSAH-DCH-LOC-0615259-44-Teate

DIRECT EXAMINATION OF MICHAEL USZLER, M.D.

DO YOU SWEAR THAT THE TESTIMONY YOU ARE ABOUT TO GIVE IS THE TRUTH. THE WHOLE TRUTH, AND NOTHING BUT THE TRUTH SO HELP YOU GOD AND UNDER PENALTY OF PERJURY?

DR. MICHAEL USZLER: YES

- Q: Please state your name.
- A: J. Michael Uszler.
- Q: Are you employed?
- A: Yes.
- Q: In what capacity?
- A: I am the Medical Director of Santa Monica Imaging & Therapy Associates and an Attending Staff Physician in the Nuclear Medicine Department at Santa Monica – UCLA Medical Center.
- Q: Is the CV attached as "Exhibit A" a fair and accurate description of your education and professional experience?
- A: Yes.
- Q: Do you hold any Board Certifications?
- A: Yes. I am Board Certified by the American Board of Nuclear Medicine.
- Q: Are you currently licensed to practice medicine?
- A: Yes, in California and Florida.
- Q: Are your licenses in good standing?
- A: Yes.

Q: What is a Spect Scan?

A: Single photon emission computed tomography, brain SPECT, is a recognized, scientifically valid, physiological, evaluative test of brain blood flow and related regional brain cell function. These imaging scans before and after a course of therapy can be used to depict brain regions' response to therapy. Spect is a type of radioisotope imaging that uses intravenously injected amounts of radioactivity that are so small in quantity that they can be used to measure a function in the human body without changing or disturbing the function being measured. Its two primary applications are studies of the heart and of the brain.

Q: For how long have you been interpreting Spect Scan images?

A: 23 years,

Q: How is brain Spect imaging done?

A: An intravenous line is placed in an arm vein and the person is asked to rest quietly in a dimly lit room for 10 minutes. At that point the brain SPECT tracer substance is placed in the intravenous line so that the person is not distressed by a needle stick. (Because the scan is about how the brain has blood flow and function, anything such as reaction to a needle stick could have an effect on the resulting scan.) The person can then move around for about 45 minutes before the scan is done.

When returning for the scan, the person lies on the scan table with his or her head placed in a head-holding device. The scanning camera has two or three large imaging lenses that rotate completely around the person's head, resulting in a three-dimensional volume of data that includes all the blood flow and function information inside of the person's head. After the scan is completed, the person leaves the scan area with no side effects. The brain-imaging data is computer processed in order to derive the brain scan pictures that the doctor reviews to make a evaluation of any blood flow and/or functional abnormality.

Brain SPECT scanning of children, especially those with brain injury, requires additional preparation and handling. Most children under the age of ten cannot remain motionless for the 25-30 minute brain scanning procedure. Those children who cannot remain motionless even with a head restraint system require sedation.

Q: In the context of pediatric CP patients, is there any use for Spect?

A: Yes, and in my 15 years of experience I've seen Spect scans demonstrate improved regional brain function with medical therapies, particularly with HBOT. While the test, itself, does not make a specific diagnosis of a medical condition, it can be and is used for evaluating change of regional brain function before and after a course of therapy.

- Q: If a Spect Scan shows increased tracer uptake in the cells from one scan to the next, what conclusion can be reached regarding regional brain function?
- A: That there is increased regional brain function in the affected area. The tracer travels with the blood and is taken up only by functioning cells. If the tracer in the first scan is not present in the cells, but is present in the cells in the second scan, then there is interval restoration of regional brain function in those cells.

- Q: Based on Spect Scan imaging, can you determine whether the impaired regional brain function is being corrected or ameliorated?
- A: Yes
- Q: How can you make that determination?
- A: Spect is designed to detect regional brain function in the cells of the brain. If the second scan demonstrates increased tracer uptake in an area where there was a previous deficit in function, there is an amelloration of the impaired function of the brain.
- Q: Are you familiar with Jimmy Freels?
- A: Yes.
- Q: How are you familiar with Jimmy Freels?
- A: His father, David Freels, contacted me to request my review of his son's Spect scans. I have been provided with the two Spect scans performed on him in 1999 and the two Spect scans performed on him in 2004.
- Q: Have you reviewed the Spect scan images provided to you.
- A: Yes.
- Q: Was there any change between the two Spect Scan images from 1999?
- A: Yes.
- Q: What was the change between the two Spect Scan images?
- A: The second scan from 1999 showed improved regional brain function from the previous 1999 study.
- Q: Was there any change between the Spect Scan images from April 5, 2004 and April 6, 2004?
- A: Yes.
- Q: What was the change between the two Spect Scan images?
- A: The scan from April 6, 2004 showed improved regional brain function from the April 5, 2004 study.
- Q: Is it likely that the results from the Spect Scans from 1999 or 2004 were merely incidental findings, and not the result of some intervention?
- A: No.
- Q: Why not?
- A: Generally, a pediatric CP patient would not have spontaneous improvement in regional brain function in a condition present for several years.

Q: Based on the Spect Scan images taken of Jimmy Freels from 1999 and 2004, can you reach a conclusion within a reasonable degree of medical certainty as to whether there was at least some correction of the regional brain function in Jimmy Freels' brain?

A: Yes.

Q: What conclusion do you reach?

A: There was a correction in the function of the regional brain function.

Q: Why do you reach this conclusion?

A: You can see it on the scans.

Q: Based on the Spect Scan images taken of Jimmy Freels from 1999 and 2004, can you reach a conclusion within a reasonable degree of medical certainty as to whether there was amelioration of the diminished regional brain function in Jimmy Freels' brain? A: Yes.

Q: What conclusion do you reach?

A: There was amelioration in the condition to extent there was an increase in regional brain function.

Q: Why do you reach this conclusion?

A: You can see it on the scan.

J. Michael Uszler, M.D.