

May 12, 2000 Minutes
Lightning Data Center
Centura-Health St. Anthony Hospital

Quote of the Month: (On a controversial subject that we have discussed here many times since 1993).

"Burying cable for health reasons is sheer folly...While soil will block electric fields, it does not top magnetic ones...Burying cables may be worse than nothing, because if a cable is strung overhead, it is at least twenty two feet off the ground and that's the closest you can get to it. If it's buried, it may be as little as two feet under the surface of the soil, and that's how close you will get to it."

Michael Fumento, Science under Siege 1993

1. Meeting began at 11:30 am and adjourned at 1:15 pm.

2. Members present: Bourg, Cherington, Collier, Foley, Fitch, Hawkes, Hildebrand, Hislop, Hodge, Keen, Langford, Larson, McDonough, Sellon, Smith, Swanson, Yarnell.

3. I brought the following articles from the literature (abstracted in part here):

a. Houtkooper JM, Schienle A, Stark R, Vaitl D. Geophysical variables and behavior: Atmospheric electromagnetism: The possible disturbing influence of natural ferics on ESP. Perceptual and Motor Skills 1999;89:1179-92. "Sferics are electromagnetic impulses generated by electrical discharges during thunderstorms (lightning)...Sferics have been shown to affect biological responses such as pain syndromes, reaction times, and power in the alpha band of the EEG. In the present study, in which 100 subjects took part, sferics have been studied in their relation to performance on ..extrasensory perception (ESP) task and to several secondary variables. The general finding is a negative correlation between ESP performance and sferics activity around the time of the session.

b. Collacott EA, Zimmerman JT, White DW, Rindone JP. Bipolar permanent magnets for the treatment of chronic low back pain. JAMA 2000;283:1322-25.

"Application of 1 variety of permanent magnet had no effect on our small group of subjects with chronic low back pain."

4. Phil Yarnell brought two of his patients to the meeting to present their lightning-related injuries. Both patients were aware of the eclectic composition of our group (physicians, nurses, meteorologists, climatologists, photographers, engineers, etc.) and the group was reminded to respect patient confidentiality. Their entire medical history and exam cannot be detailed here. Here is a brief statement about some of the medical problems that were presented by the patients and Dr. Yarnell.

The first patient was a correctional officer who was struck while indoors. He was opening a gymnasium door when the lightning struck. His wife reported that experts have told her that there were 570 lightning strikes with 10 miles of the prison during the hour (8am to 9 am) of this event. He has many symptoms (including heat intolerance) and on neurological exam he has a hemiparetic gait and a dystonic disorder affecting his left hand. MR I of the head and neck were normal.

The second patient was seated in an airplane that was struck by lightning 12 minutes after take off. He experienced a generalized tingling. The patient has had many symptoms since then. A witness on the plane saw a "golden ball of light" and noted that he "lit up like The 4th of July with

sparkles." Several passengers commented that there was an odor of ozone on the airplane.

5. During the discussion period several general comments were made. Rick Smith informed us that PET (Positron emission tomography) scan technology was now available in the Denver metropolitan area. Ron Larson asked why, since an airplane is a Faraday cage, electric current caused problem inside an airplane. He, Rich Collier and Mike Foley discussed coronal discharge, St. Elmo's fire, and induced current as possible mechanisms.

6. These minutes reflect the comments of members present and do not represent official positions of LDC.

7. Next meeting will be on Friday, June 9, 2000 at 11:30 am in the Main Auditorium of St. Anthony Central Hospital.

Our speaker will be Russ Fitch. He will speak about the investigation of the 1963 airplane-lightning tragedy in Maryland.

Respectfully submitted,

Michael Cherington, MD