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Case No. 17 - Brain Abscess and Meningitis Following a Dental Abscess in 38 year old Woman

New York Law School

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BRAIN ABSCESS AND MENINGITIS FOLLOWING A DENTAL ABSCESS IN 38 YEAR OLD ADULT

On August 30, 1996, Angela and Gregory Reed had been happily married and raising four children, ages 17, 14, 3 and 1. Angela was 38-years-of-age and fully occupied running the Reed Home and looking after their four children.

Angela had been active and in good health and the only "medical" problem that Angela had that summer was a dental abscess.

Angela was personally unaware that a dental abscess was a known source for bacteria to seed into the bloodstream and that one area of the body that was known to be vulnerable to that kind of bacterial seeding was the brain.

Angela was unaware that if such bacteria does seed into the brain, it may focus as a brain abscess which can herald its presence by producing severe headaches.

On August 30, Angela began to experience what she described as the "worst headaches that she had ever had in my whole life". In spite of the fact that she took standard over-the-counter pain relief medications her headaches became worse, so she presented four days later, on September 2, 1996, to Dr. Elliot who was a family practitioner/internist.

Dr. Elliot prescribed pain relief medication and advised the patient to go for a CAT Scan the following day, which was performed and was described as "negative."

Dr. Elliot concluded that the patient did not have anything serious and believed that the patient most likely was experiencing migraine headaches. Angela had no history of migraine headaches.

Migraine headaches, are generally considered benign, rarely present for the first time at age 38 and usually resolve on their own by 72-hours.

Mrs. Reed continued to receive the anti-pain medications through September 8, when she was referred by Dr. Elliot to the

Central Hospital for a "shot of Demerol" to try to break her pain cycle.

On admission a white blood count was within normal limits and Mrs. Reed had still not manifested an elevated temperature. Dr. Elliot believed that he excluded meningitis because Mrs. Reed was not feverish and her white count was normal.

Yet, if a meningitis or brain abscess remains focal it might not in early stages produce a fever or an abnormal white blood count.

A history of a dental abscess was given by Mrs. Reed on admission.

Dr. Elliot believed that his patient might have a noninfectious inflammatory process called temporal arthritis, so he prescribed steroids as an anti-inflammatory agent to try to alleviate such symptoms.

Dr. Elliot also obtained a consult with a neurologist, Dr. Stevens, who proceeded to perform a "work-up" to see if there was the presence of arthritis or some other noninfectious inflammatory cause for the persistent headaches.

Dr. Stevens believed that it was not necessary to do a spinal tap for such a noninfectious work-up and did not consider meningitis or brain abscess as a possible cause because the patient was not febrile.

Dr. Stevens' work-up was entirely negative. Mrs. Reed felt somewhat better on the steroids.

Dr. Jordan, from the Hospital's Psychiatry Department, was assigned to make an evaluation of Mrs. Reed. Dr. Jordan noted that based on past history Mrs. Reed did not fit any psychological profile for any anxiety disorder that might account for stress-related headaches.

On September 13, 1996, Mrs. Reed was discharged from the hospital with a final diagnosis of severe headaches due to an anxiety neurosis, though no anxiety neurosis had been identified or diagnosed.

On the day of discharge, the nurses' notes describe that Mrs. Reed was now "spiking" a temperature, her temperature was

rising above normal and then returning to normal and then rising again above normal. Also, the white blood count results were now clearly elevated.

Yet none of the three physicians were aware of the spiking temperature or elevated white count.

Following discharge, Mrs. Reed's severe headaches persisted and, ultimately, on September 18, 1996, the headaches were so severe that Mr. Reed took her to the emergency room of a different hospital.

In the Emergency Room her temperature was normal at that moment but the Emergency Room doctor listed a history of dental abscess and the emergency physician's differential diagnosis was meningitis or hemorrhage from an aneurysm. The emergency room physician performed a spinal tap, which was positive for meningitis. A follow-up Cat Scan revealed that what had previously been a negative on September 3, 1996 now showed evidence of a brain abscess distorting the brain stem.

Brain surgery was done to alleviate the affects of the brain abscess. Mrs. Reed, remained partially paralyzed, lost substantial degrees of vision and hearing and lost an ability to speak clearly. Mrs. Reed is unable to care for her children.