

Commentary by

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Delayed Treatment for Pellet Wound to Head

After being shot in the head with an air pellet gun, a 22-year-old California woman was driven in a private vehicle to the defendant hospital. On arrival at the ED, the patient was awake and alert. As no beds were available, the triage nurse placed her in a chair so a nurse could monitor her. A skull radiograph was ordered about 35 minutes later. The radiograph was taken about an hour after the patient's arrival, and at that time the technician noted that the patient looked lethargic. Within 15 minutes, the technician brought the radiograph to the ED and stated that the patient had a pellet in her brain. The emergency physician then ordered calls to be made for transfer to a nearby hospital with a neurosurgeon and also ordered that the police be contacted. The patient was then placed in a bed. She was in a stupor at that time.

The physician also noted that the patient had a 7-mm puncture wound near the right temple and swelling above the right eye. A CT scan was ordered but could not be performed because the CT technician was not at the hospital. Nearly 2 hours after the patient's arrival, intravenous succinylcholine, lorazepam, and mannitol were administered and the patient was intubated and placed on a ventilator. The CT technician was called to the hospital and the CT scan was completed about 3.5 hours after the patient's arrival. An air ambulance was called while the CT scan was being performed, and the patient was transported about 50 minutes after completion of the CT scan.

When the patient arrived at the receiving hospital, her right pupil was noted to be fixed and dilated. The right pupil was 3 mm and the left pupil was pinpoint. She was sent for a CT scan, then underwent an exam by a neurosurgeon. Surgery was begun less than 2 hours after her arrival. The patient was found to have a bleeding cortical blood vessel at the site of the entry wound and severe brain swelling, which had caused a mid-brain herniation. The bleeding was stopped

and part of the skull was removed to relieve pressure. The patient did not wake up after surgery and has remained in a vegetative state since. She has been removed from a ventilator and breathes on her own but is expected to be in a vegetative state for the remainder of her life and requires a gastrostomy tube for feeding.

The plaintiff claimed that the defendants failed to properly assess the patient's condition, maintaining that she had actually arrived about an hour before she was triaged. The plaintiff claimed that she should have been assessed as emergent due to the possibility of a penetrating brain injury. The plaintiff also faulted delays regarding the radiograph, the hospital transfer, and the CT scan. The plaintiff maintained that the delay in treatment allowed the bleeding to continue and cause pressure on the brain, leading to damage to deeper structures in the middle of the brain. The plaintiff acknowledged that earlier treatment might not have made future employment possible but argued that it would have made it possible for her to live independently. The defendants claimed that the initial injury caused more damage than the plaintiff contended and that the plaintiff would have had the same outcome even if surgery had been performed 2.5 hours earlier. The defendants also maintained that the initial classification was proper as gunshot victims generally do not walk into the ED. The hospital contended that all actions were performed in a timely manner.

Outcome

According to a published account, a \$12,017,970 verdict was returned against the hospital.

Comment

Often, if an emergency department doesn't get triage right nothing else matters. This is especially important in hospitals that do not have certain services available, such as neurosurgery or advanced imaging. An even more aggressive approach to early evaluation is critical when a transfer may be necessary. **NF**

Use of Vecuronium Blamed for Respiratory Distress and Death

The plaintiffs' decedent, age 63, presented to the defendant hospital in Texas in November 2007 with a dislocated shoulder. She was treated by the defendant physician, who administered the anesthetic vecuronium. The patient went into respiratory distress and died. The plaintiffs claimed that the administration of vecuronium depressed the decedent's breathing and led to her death. The plaintiffs also maintained that vecuronium should be used only when a patient is already connected to a respirator. The defendant contended that the patient's death was from unrelated causes.

Outcome

According to a published account, a confidential settlement was reached with the hospital. The defendant physician then settled for \$200,000.

Comment

The use of a neuromuscular blocking agent alone to facilitate a procedure cannot be recommended under any circumstances. Administration of procedural sedation and analgesia is a skill required of all emergency physicians. Commonly used agents include morphine, fentanyl, and midazolam. Anesthetic agents that have proven useful include etomidate, methohexital, ketamine, and propofol. Appropriate agent selection depends on the individual patient, the procedure, and the experience of the emergency physician. Monitoring equipment (eg, cardiac monitor, pulse oximeter) must be used, and rescue airway equipment and reversal agents should be immediately available. **FLC**

Patient Dies Hours After Chest Pain Evaluation, Discharge

A 57-year-old man presented to a Massachusetts ED in April 2005 with substernal chest pain that he had been having for several hours. His medical history included hypertension and a pack-a-day smoking habit. An ECG performed by the defendant emergency physician was inter-

preted as having no abnormalities. The man was treated with atropine/hyoscyamine/phenobarbital/scopolamine, lidocaine, aluminum hydroxide/magnesium hydroxide, and ranitidine without success. When morphine was administered, the patient began to experience lightheadedness and nausea. He became pale and diaphoretic, and his blood pressure fell precipitously low.

A repeat ECG was interpreted as borderline and showed normal sinus rhythm compared to the previous one. After 4 hours in the ED, the patient continued to have mild discomfort but was much improved. The man was discharged while still having chest pains. The discharge diagnosis was atypical chest pain and GERD. He was given a prescription for pantoprazole and advised to keep well hydrated with clear liquids and to eat frequent small meals. Within 7 hours of his discharge, the man was found unresponsive by his wife. He was transported by ambulance back to the ED, where he was pronounced dead. The death certificate listed the cause of death as cardiac arrhythmia due to cardiac ischemia secondary to coronary artery disease.

The plaintiff claimed that the first ECG was abnormal and that the defendant should have performed serial enzyme testing, continued cardiac monitoring, administered aspirin or heparin, and ordered in-hospital cardiac evaluation and testing. The defendant argued that nothing he did or failed to do caused the patient's death.

Outcome

According to a published account, a \$750,000 settlement was reached.

Comment

Chest pain is an extremely common complaint in the ED, accounting for approximately 5% of all ED visits. This case illustrates the fact that the initial ECG can frequently be normal in a patient with an acute coronary syndrome. Appropriate evaluation includes risk stratification, which does not appear to have been done in this case. When evaluating patients with chest pain, it is

best to employ a systematic approach, which may include serial cardiac enzyme testing, observation, and some sort of provocative testing, depending on your risk stratification method. Remember also not to rely on relief of pain with morphine or a GI cocktail to exclude the diagnosis of acute coronary syndrome. **FLC**

No Urology Consult for Man With Painful Erections

A 44-year-old man presented to an ED with complaints of pain in his penis and waking up every 30 minutes with painful erections. He was examined by the defendant physician, who gave him lorazepam and told him to follow up with his primary care physician or return to the ED if the condition worsened. The plaintiff claimed that he was suffering from stuttering priapism and that the defendant should have consulted a urologist or offered proper treatment. The plaintiff claimed that the priapism recurred, resulting in permanent damage to his penis. The plaintiff maintained that he also developed erectile dysfunction and impotence as a result. The

defendant contended that the treatment provided was appropriate and that the plaintiff did not have a true priapism or have an erection while he was in the ED. The defendant also claimed that the plaintiff did not seek timely medical care as recommended when his condition worsened. Additionally, the defendant argued that treatment of priapism has unknown and unproven efficacy.

Outcome

According to a published account, a defense verdict was returned.

Comment

Evaluation of the patient with a complaint of priapism requires a good history (ie, presence of trauma, history of sickle cell disease) with specific questions about medication use (eg, sildenafil, cocaine, psychotropics). If the history suggests that the patient did experience priapism but there is no evidence of priapism on physical exam, you should instruct the patient to seek medical attention immediately for an erection lasting longer than 4 hours and document your instructions in the chart. **FLC**

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