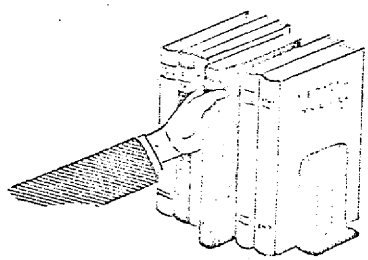
Journ Amer Med Assoc. 3/21/64
Vol 187, No 12



From Other Pages

Trauma Room 1 at Parkland, Nov 22, 1963

When President John F. Kennedy in a moribund condition entered Parkland [Memorial Hospital, Dallas] . . . there was never opportunity for medical history taking. Such a history, had it been taken, would have shown that the patient "had survived several illnesses, the dangers of war, the rigor of exposure in icy waters, and . . . had waged grueling electoral campaigns in spite of a serious and painful back injury."

Parkland records show that the President arrived at the emergency room sometime after 12:30 p.m. (There is conflict as to the exact moment.) At 1 p.m. Dr. William Kemp Clark, associate professor and chairman of the Division of Neurosurgery of the University of Texas Southwestern Medical School, declared him dead. During the interim of less than 30 minutes, continuous resuscitative efforts were made.

Later that day, several attending physicians filed reports. The following identifies these physicians and gives the gist of their reports:

Charles J. Carrico.—. . . a resident in surgery at Parkland. [He was the first physician to see the President.]

He reported that when the patient entered the emergency room on an ambulance carriage he had slow agonal respiratory efforts and occasional cardiac beats detectable by auscultation. Two external wounds were noted; one a small wound of the anterior neck in the lower one third. The other wound had caused avulsion of the occipitoparietal calvarium and shredded brain tissue was present with profuse oozing. No pulse or blood pressure were present. Pupils were bilaterally dilated and fixed. A cuffed endotracheal tube was inserted through the laryngoscope. A ragged wound of the trachea was seen immediately below the larynx. The tube was advanced past the laceration and the cuff inflated. Respiration was instituted using a respirator assistor on automatic cycling. Concurrently, an intravenous infusion of lactated Ringer's solution was begun via catheter placed in the right leg. Blood was drawn for typing and crossmatching. Type O Rh negative blood was obtained immediately.

In view of the tracheal injury and diminished breath sounds in the right chest, tracheostomy was performed by Dr. Malcolm O. Perry and bilateral chest tubes inserted. A second intravenous infusion was begun in the left arm. In addition, Dr. M. T. Jenkins began respiration with the anesthesia machine, cardiac monitor and stimulator attached. Solu-Cortef (300 mg.) was given intravenously. Despite those measures, blood pressure never returned. Only brief electrocardiographic evidence of cardiac activity was obtained.

Malcolm O. Perry.—. . . assistant professor of surgery at Southwestern Medical School. . . .

At the time of initial examination of the President, Dr. Perry has stated, the patient was noted to be nonresponsive. His eyes were deviated and the pupils dilated. A considerable quantity of blood was noted on the patient, the carriage, and the floor. A small wound was noted in the midline of the neck, in the lower third anteriorly. It was exuding blood slowly. A large wound of the right posterior cranium was noted, exposing severely lacerated brain. Brain tissue was noted in the blood at the head of the carriage.

Pulse or heart beat were not detectable, but slow spasmodic respiration was noted. An endotracheal tube was in place and respiration was being controlled. An intravenous infusion was being placed in the leg. While additional venesections were done to administer fluids and blood, a tracheostomy was effected. A right lateral injury to the trachea was noted. The cuffed tracheostomy tube was put in place as the endotracheal tube was withdrawn and respirations continued. Closed chest cardiac massage was instituted after placement of sealed-drainage chest tubes, but without benefit. When electrocardiogram evaluation revealed that no detectable electrical activity existed in the heart, resuscitative attempts were abandoned. The team of physicians determined that the patient had expired.

Charles R. Baxter.—. . . assistant professor of surgery at Southwestern Medical School. . . .

Recalling his attendance to President Kennedy, he says he learned at approximately 12:35 that the President was on the way to the emergency room and that he had been shot. When Dr. Baxter arrived in the emergency room, he found an endotracheal tube in place and respirations being assisted. A left chest tube was being inserted and cutdowns were functioning in one leg and in the left arm. The President had a wound in the midline of the neck. On first observation of the other wounds, portions of the right temporal and occipital bones were missing and some of the brain was lying on the table. The rest of the brain was extensively macerated and contused. The pupils were fixed and deviated laterally and were dilated. No pulse was detectable and ineffectual respirations were being assisted. A tracheostomy was performed by Dr. Perry and Dr. Baxter and a chest tube was inserted into the right chest (second interspace anteriorly). Meanwhile one pint of O negative blood was administered without response. When all of these measures were complete, no heart beat could be detected. Closed chest massage was performed until a cardioscope could be attached. Brief cardiac activity was obtained followed by no activity. Due to the extensive and irreparable brain damage which existed and since there were no signs of life, no further attempts were made at resuscitation.

Robert N. McClelland.—. . . assistant professor of surgery at Southwestern Medical School. . . .

Dr. McClelland says that at approximately 12:35 p.m. he was called from the second floor of the hospital to the emergency room. When he arrived, President Kennedy was being attended by Drs. Perry, Baxter, Carrico, and Ronald Jones, chief resident in surgery. The President was at that time comatose from a massive gunshot wound of the head with a fragment wound of the trachea. An endotracheal tube had been placed and assisted respiration started by Dr. Carrico who was on duty in the emergency room when the President arrived. Drs. Perry, Baxter, and McClelland per-

formed a tracheostomy for respiratory distress and tracheal injury. Dr. Jones and Dr. Paul Peters, assistant professor of surgery, inserted bilateral anterior chest tubes for pneumothoraces secondary to the tracheomediastinal injury. Dr. Jones and assistants had started three cutdowns, giving blood and fluids immediately. In spite of this, the President was pronounced dead at 1:00 p.m. by Dr. Clark, the neurosurgeon, who arrived immediately after Dr. McClelland. The cause of death, according to Dr. McClelland was the massive head and brain injury from a gunshot wound of the right side of the head. The President was pronounced dead after external cardiac massage failed and electrocardiographic activity was gone.

Fouad A. Bashour.—. . . associate professor of medicine in cardiology at Southwestern Medical School. . . .

At 12:50 p.m. Dr. Bashour was called from the first floor of the hospital and told that President Kennedy had been shot. He and Dr. Donald Seldin, professor and chairman of the Department of Internal Medicine, went to the emergency room. Upon examination, they found that the President had no pulsations, no heart beats, no blood pressure. The oscilloscope showed a complete standstill. The President was declared dead at 1:00 p.m.

William Kemp Clark.—Dr. Clark is associate professor and chairman of the Division of Neurosurgery at Southwestern Medical School. . . .

He reports this account of the President's treatment:

The President arrived at the emergency room entrance in the back seat of his limousine. Governor Connally of Texas was also in this car. The first physician to see the President was Dr. Carrico.

Dr. Carrico noted the President to have slow, agonal respiratory efforts. He could hear a heart beat but found no pulse or blood pressure. Two external wounds, one in the lower third of the anterior neck, the other in the occipital region of the skull, were noted. Through the head wound, blood and brain were extruding. Dr. Carrico inserted a cuffed endotracheal tube and while doing so, he noted a ragged wound of the trachea immediately below the larynx.

At this time, Drs. Perry, Baxter, and Jones arrived. Immediately thereafter, Dr. Jenkins and Drs. A. H. Giesecke, Jr., and Jackie H. Hunt, two other staff anesthesiologists, arrived. The endotracheal tube had been connected to a respirator to assist the President's breathing. An anesthesia machine was substituted for this by Dr. Jenkins. Only 100 per cent oxygen was administered.

A cutdown was performed in the right ankle, and a polyethylene catheter inserted in the vein. An infusion of lactated Ringer's solution was begun. Blood was drawn for typing and crossmatching, but unmatched type O Rh negative blood was immediately obtained and begun. Hydrocortisone (300 mg.) was added to the intravenous fluids.

Dr. McClelland arrived to help in the President's care. Drs. Perry, Baxter, and McClelland did a tracheostomy. Considerable quantities of blood were present in the President's oral pharynx. At this time, Dr. Peters and Dr. Clark arrived.

Dr. Clark noted that the President had bled profusely from the back of the head. There was a large (3 by 3 cm.) amount of cerebral tissue present on the cart. There was a smaller amount of cerebellar tissue present also.

The tracheostomy was completed and the endotracheal tube was withdrawn. Suction was used to remove blood in the oral pharynx. A nasogastric tube was passed into the stomach. Because of the likelihood of mediastinal injury, anterior chest tubes were placed in both pleural spaces.

These were connected to sealed underwater drainage.

Neurological examination revealed the President's pupils to be widely dilated and fixed to light. His eyes were divergent, being deviated outward; a skew deviation from the horizontal was present. No deep tendon reflexes or spontaneous movements were found.

When Dr. Clark noted that there was no carotid pulse, he began closed chest massage. A pulse was obtained at the carotid and femoral levels.

Dr. Perry then took over the cardiac massage so that Dr. Clark could evaluate the head wound.

There was a large wound beginning in the right occiput extending into the parietal region. Much of the right posterior skull, at brief examination, appeared gone. The previously described extruding brain was present. Profuse bleeding had occurred and 1500 cc. of blood was estimated to be on the drapes and floor of the emergency operating room. Both cerebral and cerebellar tissue were extruding from the wound.

By this time an electrocardiograph was hooked up. There was brief electrical activity of the heart which soon stopped.

The president was pronounced dead at 1:00 p.m. by Dr. Clark.

M. T. Jenkins.—. . . professor and chairman of the Department of Anesthesiology at Southwestern Medical School. . . .

When Dr. Jenkins was notified that the President was being brought to the emergency room at Parkland, he dispatched Drs. Giesecke and Hunt with an anesthesia machine and resuscitative equipment to the major surgical emergency room area. He ran downstairs to find upon his arrival in the emergency operating room that Dr. Carrico had begun resuscitative efforts by introducing an orotracheal tube, connecting it for controlled ventilation to a Bennett intermittent positive pressure breathing apparatus. Drs. Baxter, Perry, and McClelland arrived at the same time and began a tracheostomy and started the insertion of a right chest tube, since there was also obvious tracheal and chest damage. Drs. Peters and Clark arrived simultaneously and immediately thereafter assisted respectively with the insertion of the right chest tube and with manual closed chest cardiac compression to assure circulation. Dr. Jenkins believes it evidence of the clear thinking of the resuscitative team that the patient received 300 mg. hydrocortisone intravenously in the first few minutes.

For better control of artificial ventilation, Dr. Jenkins exchanged the intermittent positive pressure breathing apparatus for an anesthesia machine and continued artificial ventilation. Dr. Gene Akin, a resident in anesthesiology, and Dr. Giesecke connected a cardioscope to determine cardiac activity.

During the progress of these activities, the emergency room cart was elevated at the feet in order to provide a Trendelenburg position, a venous cutdown was performed on the right saphenous vein, and additional fluids were begun in a vein in the left forearm while blood was ordered from the blood bank. All of these activities were completed by approximately 12:50 at which time external cardiac massage was still being carried out effectively by Dr. Clark as judged by a palpable peripheral pulse. Despite these measures there was only brief electrocardiographic evidence of cardiac activity.

These described resuscitative activities were indicated as of first importance, and after they were carried out, attention was turned to other evidences of injury. There was a great laceration on the right side of the head (temporal and occipital), causing a great defect in the skull plate so that

there was herniation and laceration of great areas of the brain, even to the extent that part of the right cerebellum had protruded from the wound. There were also fragmented sections of brain on the drapes of the emergency room cart. With the institution of adequate cardiac compression, there was a great flow of blood from the cranial cavity, indicating that there was much vascular damage as well as brain tissue damage. President Kennedy was pronounced dead at 1 p.m.

It is Dr. Jenkins' personal feeling that all methods of resuscitation were instituted expeditiously and efficiently. However, he says, the cranial and intracranial damage was of such magnitude as to cause irreversible damage. Three Patients at Parkland, General News, *Texas J Med* 60:61-65 (Jan) 1964.

Since none of the wounds of the head were traced in any scientific fashion at the autopsy one can only conjecture as to the course of the various missiles. There was no bullet that entered the back and exited from the neck that is certain.

It is my conjecture that the President was out of his ordinary position, perhaps loss of balance from the first bullet, that his head was thrown back and at that moment was struck from in front the bullet entering the neck going upward and then the tracked and exiting at the base of the skull. One must speculate as to the position the body was in at the time each bullet struck.

It would be interesting to know if the X-ray films taken at autopsy were before or after the bullet was removed from the shoulder