

## Warren Commission Gives Autopsy Findings, Full Medical Story of Kennedy Assassination



Members of the Warren Commission are (l. to r.) Reps. Gerald Ford and Hale Boggs, Sen. Richard Russell, Chief Justice Earl Warren, Sen. John S. Cooper, John J. McCloy, Allen W. Dul-

les, and J. Lee Rankin, commission counsel. Photograph of investigating group, empaneled by President Johnson seven days after assassination, was taken at their meeting room in Washington.

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were recovered and turned over to the FBI." These fragments were from the bullet that apparently caused the President's death.

Another wound, near the base of the back of President Kennedy's neck, slightly to the right of his spine, was caused by the bullet that emerged from the front portion of the neck.

The autopsy, in typically cryptic language, attributed the cause of death simply to "gunshot wound, head." However, it gave this summary:

"The fatal missile entered the skull above and to the right of the external occipital protuberance. A portion of the projectile transversed the cranial cavity in a posterior-anterior direction, depositing minute particles along its path. A portion of the projectile made its exit through the parietal bone on the right carrying with it portions of cerebrum, skull, and scalp. The two wounds of the skull combined with the force of the missile produced extensive fragmentation of the skull, laceration of the superior sagittal sinus, and of the right cerebral hemisphere.

### Path of Other Bullet

"The other missile entered the right superior posterior thorax above the scapula and traversed the soft tissues of the supra-scapular and the supra-clavicular portions of the base of the right side of the neck. This missile produced contusions of the right apical parietal pleura and of the apical portion of the right upper lobe of the lung. The missile contused the strap muscles of the right side of the neck, damaged the trachea, and made its exit

through the anterior surface of the neck. As far as can be ascertained, this missile struck no bony structures in its path through the body.

"In addition, it is our opinion that the wound of the skull produced such extensive damage to the brain as to preclude the possibility of the deceased surviving this injury."

The report was signed by Navy Commander J. J. Humes, MC; Navy Commander J. Thornton Boswell, MC; and Army Lt. Col. Pierre A. Finck, MC.

The Warren Commission report also includes photostats and other medical details on the sequence of events and treatment of the President from the time of the shooting through his treatment at Parkland Hospital, Dallas. Dr. Kemp Clark, director of the service of neurological surgery at Parkland, gave this summary of the events:

"The President arrived at the Emergency Room at 12:43 P.M., the 22nd of November, 1963. He was 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. James Carrico, a Resident in General Surgery.

"Dr. Carrico noted the President to have slow, agonal respiratory efforts. He could hear a heartbeat but found no pulse or blood pressure to be present. 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. While doing so, he noted a ragged wound of the trachea immediately below the larynx.

divergent, being deviated outward; a slow deviation from the horizontal was present. No deep tendon reflexes or spontaneous movements were found.

"There was a large wound in the right occipito-parietal region, from which profuse bleeding was occurring. 1500cc. of blood were estimated on the drapes and floor of the Emergency Operating Room. There was considerable loss of scalp and bone tissue. Both cerebral and cerebellar tissue were extruding from the wound.

"Further examination was not possible as cardiac arrest occurred at this point. Closed chest cardiac massage was begun by Dr. Clark. A pulse palpable in both the carotid and femoral arteries was obtained. Dr. Perry relieved on the cardiac massage while a cardiologist was connected. Dr. Fouad Bashour, Attending Physician, arrived as this was being connected. There was electrical silence of the President's heart.

"President Kennedy was pronounced dead at 1300 (1 P.M.) by Dr. Clark."

Since the Dallas physicians directed all their efforts to controlling the massive bleeding caused by the head wound and to reconstructing an airway to the lungs, the President remained on his back throughout the medical treatment at Parkland. The Warren Commission asked Dr. Carrico why he did not turn the President over.

A. This man was in obvious extreme distress and any more thorough inspection would have involved several minutes — well, several — considerable time which at this juncture was not available. A thorough inspection would have involved washing and cleansing the back, and this is not practical in treating an acutely injured patient. You have to determine which things, which are immediately life-threatening and cope with them, before attempting to evaluate the full extent of the injuries.

Q. Did you ever have occasion to look at the President's back?

A. No, sir. Before — well, in trying to treat an acutely injured patient, you have to establish an airway, adequate ventilation, and you have to establish adequate circulation. Before this was accomplished, the President's cardiac activity had ceased and closed cardiac massage was instituted, which made it impossible to inspect his back.

Q. Was any effort made to inspect the President's back after he had expired?

A. No, sir.

Q. And why was no effort made at that time to inspect his back?

A. I suppose nobody really had the heart to do it.

### Catheter Inserted in Vein

"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 type and crossmatch, but unmatched 'O' RH negative blood was immediately obtained and begun. Hydrocortisone 300 mg. was added to the intravenous fluids.

"Dr. Robert McClelland, Attending Surgeon, arrived to help in the President's care. Doctors Perry, Baxter, and McClelland began a tracheostomy, as considerable quantities of blood were present from the President's oral pharynx. At this time, Dr. Paul Peters, Attending Urological Surgeon, and Dr. Kemp Clark, Director of Neurological Surgery, arrived. Because of the lacerated trachea, 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

## Text: Supplementary Report of Autopsy Number A63-272 President John F. Kennedy

### Gross Description of Brain:

Following formalin fixation the brain weighs 1500 gms. The right cerebral hemisphere is found to be markedly disrupted. There is a longitudinal laceration of the right hemisphere which is para-sagittal in position approximately 2.5 cm. to the right of the midline which extends from the tip of the occipital lobe posteriorly to the tip of the frontal lobe anteriorly. The base of the laceration is situated approximately 4.5 cm. below the vertex in the white matter. There is considerable loss of cortical substance above the base of the laceration, particularly in the parietal lobe. The margins of this laceration are at all points jagged and irregular, with additional lacerations extending in varying directions and for varying distances from the main laceration. In addition, there is a laceration of the corpus callosum extending from the genu to the tail. Exposed in this latter laceration are the interiors of the right lateral and third ventricles.

When viewed from the vertex the left cerebral hemisphere is intact. There is marked engorgement of meningeal blood vessels of the left temporal and frontal regions with considerable associated sub-arachnoid hemorrhage. The gyri and sulci over the left hemisphere are of essentially

normal size and distribution. Those on the right are too fragmented and distorted for satisfactory description.

When viewed from the basilar aspect the disruption of the right cortex is again obvious. There is a longitudinal laceration of the mid-brain through the floor of the third ventricle just behind the optic chiasm and the mammillary bodies. This laceration partially communicates with an oblique 1.5 cm. tear through the left cerebral peduncle. There are irregular superficial lacerations over the basilar aspects of the left temporal and frontal lobes.

In the interest of preserving the specimen coronal sections are not made. The following sections are taken for microscopic examination:

- From the margin of the laceration in the right parietal lobe.
  - From the margin of the laceration in the corpus callosum.
  - From the anterior portion of the laceration in the right frontal lobe.
  - From the contused left fronto-parietal cortex.
  - From the line of transection of the spinal cord.
  - From the right cerebellar cortex.
  - From the superficial laceration of the basilar aspect of the left temporal lobe.
- During the course of this examination

seven (7) black and white and six (6) color 4x5 inch negatives are exposed but not developed (the cassettes containing these negatives have been delivered by hand to Rear Admiral George W. Burkley, MC, USN, White House Physician).

### Microscopic Examinations:

**BRAIN:** Multiple sections from representative areas as noted above are examined. All sections are essentially similar and show extensive disruption of brain tissue with associated hemorrhage. In none of the sections examined are there significant abnormalities other than those directly related to the recent trauma.

**HEART:** Sections show a moderate amount of sub-epicardial fat. The coronary arteries, myocardial fibers, and endocardium are unremarkable.

**LUNGS:** Sections through the grossly described area of contusion in the right upper lobe exhibit disruption of alveolar walls and recent hemorrhage into alveoli. Sections are otherwise essentially unremarkable.

**LIVER:** Sections show the normal hepatic architecture to be well preserved. The parenchymal cells exhibit markedly granular cytoplasm indicating high glycogen

content which is characteristic of the "liver biopsy pattern" of sudden death.

**SPLEEN:** Sections show no significant abnormalities.

**KIDNEYS:** Sections show no significant abnormalities aside from dilatation and engorgement of blood vessels of all calibers.

**SKIN WOUNDS:** Sections through the wounds in the occipital and upper right posterior thoracic regions are essentially similar. In each there is loss of continuity of the epidermis with coagulation necrosis of the tissues at the wound margins. The scalp wound exhibits several small fragments of bone at its margins in the subcutaneous tissue.

### Final Summary

This supplementary report covers in more detail the extensive degree of cerebral trauma in this case. However neither this portion of the examination nor the microscopic examinations alter the previously submitted report or add significant details to the cause of death.

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