

6 December 1963

From: Commanding Officer, U. S. Naval Medical School  
To: The White House Physician  
Via: Commanding Officer, National Naval Medical Center  
Subj: Supplementary report of Naval Medical School autopsy No. A63-272,  
John F. Kennedy; forwarding of

1. All copies of the above subject final supplementary report are forwarded herewith.

J. H. STOVER, JR. *JAS*

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6 December 1963

FIRST ENDORSEMENT

From: Commanding Officer, National Naval Medical Center  
To: The White House Physician

1. Forwarded.

C. B. GALLOWAY

SUPPLEMENTARY REPORT OF AUTOPSY NUMBER A63-272  
PRESIDENT JOHN F. KENNEDY

12/6/63

PATHOLOGICAL EXAMINATION REPORT

No. A63-272

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## 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 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:

- a. From the margin of the laceration in the right parietal lobe.
- b. From the margin of the laceration in the corpus callosum.
- c. From the anterior portion of the laceration in the right frontal lobe.
- d. From the contused left fronto-parietal cortex.
- e. From the line of transection of the spinal cord.
- f. From the right cerebellar cortex.
- g. From the superficial laceration of the basilar aspect of the left temporal lobe.

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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 EXAMINATION:****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.

*J. J. Humes*  
J. J. HUMES  
CDR, MC, USN, 497831