

Closing the Case in *JAMA* on the John F. Kennedy Autopsy

On May 27, 1992, *JAMA* published detailed and objective recollections of J. T. Boswell, MD, and James J. Humes, MD, the principal pathologists who performed the autopsy on President John Fitzgerald Kennedy, and several Dallas physicians who cared for the President.^{1,2} This report by Dennis L. Breo, which generally supported the findings of the Warren Commission, received worldwide media coverage and drew an enormous response.

See also pp 1681 and 1748.

I am pleased that a great deal of the reaction strongly supported the pathologists' findings and the *JAMA* report, which has withstood an onslaught of criticism from numerous conspiracy theorists.

Three legitimate questions remain:

1. Why did the third autopsy pathologist (and wound ballistics expert) Pierre Finck, MD, not participate in the interview, and what would have been his response?
2. Was there really a 29-year silence on the part of these physicians that was first broken by *JAMA* in this interview?
3. What was the actual status of President Kennedy's adrenal glands at autopsy and what other medical evidence is there to support or refute the long-time allegation that he suffered from Addison's disease?

The Silence of Dr Finck

Although we described and pictured three autopsy pathologists, we interviewed only two (Dr Finck remained in Switzerland). This raised the suspicions of some critics who charged that it was part of a coverup or conspiracy. Fortunately, we have rectified that omission. Subsequent to the May 27 *JAMA*, Dr Finck agreed to be interviewed. Mr Breo interviewed Dr Finck in Geneva, Switzerland, on August 19, 1992, and reports their conversation in full in this issue.³

How Long Was the Silence of Drs Humes and Boswell?

Following our best information, Mr Breo reported that Drs Humes and Boswell had not discussed their findings with reporters (outside of the Warren Commission and congressional hearings, of course) in 29 years. We are indebted to Leslie Midgley of Hartsdale, NY, for calling to our attention that a 5-minute interview of Dr Humes was telecast by CBS

in June 1967. The full transcription of that interview, as provided by Mr Midgley, appears below:

CRONKITE: Since the x-rays and films were turned over to the Archives, Captain Humes has reexamined them. And tonight, for the first time, he discusses with Dan Rather what is contained in them.

RATHER: Commander—now Captain Humes, have you had a look at the pictures and x-rays from the autopsy since the time that you submitted them to the Warren Commission?

HUMES: Yes, Mr Rather, we have.

RATHER: And do you have any different conclusion, any different ideas, any different thoughts now, after seeing them again, than you had at that time?

HUMES: No, we think they bear up very well, and very closely, our testimony before the Warren Commission.

RATHER: How many wounds in the President's body?

HUMES: There were two wounds of entrance, and two of exit.

RATHER: And the two wounds of entry were where?

HUMES: Posteriorly, one low in the right posterior scalp, and one in the base of the neck, on the right.

RATHER: Let's talk about those two wounds, Captain. Both of these are blowups from the Warren Commission report, these sets of drawings. Now, there are people who think they see discrepancies in these two drawings from the Warren Commission report, in that this drawing shows the—what you called an entry wound at the base of the neck of the President—shows it to be, or seems to show it to be, in the upper back, near the shoulder blade considerably below the base of the neck. Further, this drawing does show the entry wound to be at the base of the neck. Now could you talk about these, and reconcile that?

HUMES: Yes, sir. This first drawing is a sketch that—in which the outlines of the figure are already prepared. These are on sheets of paper present in the room in which the examination is conducted and are routinely used to mark in general where certain marks or scars or wounds may be in conducting a postmortem examination. They are never meant to be accurate or precisely to scale.

RATHER: This is a routine in—in preparing autopsy reports, to use this kind of drawing, and at this stage for them not to be prepared precisely?

HUMES: No. No precise measurements are made. They are used as an aide-mémoire, if you will, to the pathologist as he later writes his report. More importantly, we feel that the measurements which are noted here at the margins of the drawing are the precise measurements which we took. One states that—we draw two lines, points of reference—from bony points of reference. We note that there were—the wound was fourteen centimeters from the tip of the right acromion, and fourteen centimeters below the tip of the right mastoid. Now the acromion is the extreme outermost portion of the shoulder. The tip of the mastoid is the bony prominence just behind the ear. And where these two lines intersect was, in actuality, where this wound was situated. And if we would try and draw that to scale, which we weren't trying to do as this mark was made, this, I think, would appear a little bit higher.

RATHER: Now, you examined this whole area of the back?

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HUMES: Yes, sir.

RATHER: Were there any other wounds except one at the base of the neck and one up in the skull?

HUMES: No, sir, there were not. Now the second drawing, which you mentioned, was prepared as we were preparing to testify before the Warren Commission, to rather schematically and as accurately as we possibly could depict the story for the members of the Warren Commission.

RATHER: In this drawing you were trying to be precise?

HUMES: Yes, sir, we were. We were trying to be precise, and refer back to our measurements that we had made and noted in the margins of the other drawing. Also, of course, since this time we have had opportunity to review the photographs which we made at that time. And these photographs show very clearly that the wound was exactly where we stated it to be in our testimony before the Warren Commission, and as it is shown in this drawing.

RATHER: Your reexamination of the photographs verify that the wounds were as shown here?

HUMES: Yes, sir, they do.

RATHER: About the—the head wound . . .

HUMES: Yes, sir.

RATHER: . . . there was only one?

HUMES: There was only one entrance wound in the head, yes, sir.

RATHER: And that was where?

HUMES: That was posterior, about two and a half centimeters to the right of the midline, posteriorly.

RATHER: And the exit wound?

HUMES: And the exit wound was a large irregular wound to the front and side—right side of the President's head.

RATHER: Now, can you be absolutely certain that the wound you described as the entry wound was, in fact, that?

HUMES: Yes, indeed, we can—very precisely and incontrovertibly. The missile traversed the skin, and then traversed the bony skull. And as it passed through the skull, it produced a characteristic coning, or beveling effect on the inner aspect of the skull—which is scientific evidence that the wound was made from behind and passed forward through the President's skull.

RATHER: This is very important. You say the scientific evidence—is it conclusive scientific evidence?

HUMES: Yes, sir, it is.

RATHER: How many autopsies have you performed?

HUMES: I—I would estimate approximately one thousand.

RATHER: Is there any doubt that the wound at the back of the President's head was the entry wound?

HUMES: There is absolutely no doubt, sir.

We regret our omission of this reference. We should have reported 25 years of silence instead of 29 years. But the text of that 1967 interview is wholly consonant with the 1992 *JAMA* interview and serves as further validation of the autopsy findings. We reprint the entire interview so that it will be available to historians, the medical literature being much easier to access than old television files.

Solving the Puzzle of Kennedy's Adrenals

Based on published and verified clinical information^{4,13} and verified autopsy findings, we may now make a firm diagnosis of chronic Addison's disease, probably idiopathic, in John Fitzgerald Kennedy.

Much has been written by newspaper columnists, biographers, and others about myriad medical problems experienced by John F. Kennedy from his childhood to his presidency. Diphtheria, scarlet fever, appendicitis, anemia, chronic indigestion, allergies, jaundice, a ruptured disk from football in college, back injuries on *PT-109* during enemy action in the South Pacific that resulted in constant back pain, and possible

malaria, among others.^{8,9,14}

But no illness has puzzled more people than the rumor of adrenal insufficiency or even frank Addison's disease. Innumerable references were made to such during and after political campaigns. But biographers generally stop short of confirming this diagnosis.

Shortly after the Warren Commission reported in 1964, *JAMA* published the official autopsy report¹⁵ without comment. Letters followed from three physicians decrying the absence of any findings about Kennedy's adrenals and were promptly published.^{4,5} The *JAMA* editors then tried to obtain the autopsy findings, first from "officials" and then from Rear Admiral E. C. Kenney, Chief, Bureau of Medicine and Surgery, US Navy, who forwarded the request to Rear Admiral George G. Burkley, MC, USN, the White House physician. *JAMA* received no reply.

Two years later, John Nichols, MD, of Kansas, deduced circumstantially that a 37-year-old man with a 7-year history of well-documented and therapeutically controlled Addison's disease who underwent major back surgery on October 21, 1954, at the Hospital for Special Surgery in New York, NY, was John F. Kennedy.^{7,13} Reports in the *New York Times* of October 11 and 21, 1954, and February 26, 1955, were offered as additional evidence but Nichols stopped short of confirmation, calling the diagnosis "strongly presumed."

On August 26, 1992, *JAMA* confirmed with hospital officials, and on September 10, 1992, with lead author J. A. Nicholas, MD, on the record, that case No. 3 reported in a 1955 *AMA Archives of Surgery* article describing the management of adrenal cortical insufficiency during surgery is that of John Fitzgerald Kennedy.⁶⁽⁹⁷³⁹⁾ This patient was firmly stated by the authors to have suffered from Addison's disease for 7 years and required constant steroid replacement prior to, during, and following surgery.

Any description of the adrenal glands was strangely missing from the autopsy report for the Warren Commission,¹⁵ and I have found no subsequent reviewing group that has diagnosed the adrenals postmortem. Drs Humes and Boswell¹ and now Dr Finck³ had, since 1963, consistently declined to describe the adrenals, never explaining why.

The claim in a recent book¹⁶ that at autopsy the pathologists could not find the adrenals grossly, despite careful serial sections of the perirenal fat, has been independently corroborated, on the record, by Robert F. Karnei, MD, of Maryland. Dr Karnei, a retired navy captain and pathologist and immediate past director of the Armed Forces Institute of Pathology at the Walter Reed Army Medical Center in Washington, DC, was a pathology resident at the Naval Hospital in Bethesda, Md, in November 1963. He observed firsthand many aspects of the Kennedy autopsy and verifies that no adrenal tissue could be found grossly on routine dissection.

On August 31, 1992, Dr Boswell confirmed, on the record, that serial sections of the perirenal fat pads demonstrated no gross evidence of adrenal cortex or medulla. Microscopically, Dr Boswell found a few individual adrenal cortical cells immersed in a sea of fat. There was no scarring, inflammation, or granuloma formation. This observation, along with the clinical evidence reported above, is diagnostic of severe Addison's disease, probably idiopathic, almost certainly *not* of tuberculous origin.

The Nixon vs Kennedy presidential election of 1960 was extremely close; a scant 0.17% (114 673) of voters separated