

CONNALLY'S WRIST WOUND:  
An Analysis:

A CRITIQUE

Robert R. Artwohl, MD

The following paper will critique "CONNALLY'S WRIST WOUND: An Analysis". The central claim of the analysis is that a bullet entered the dorsal aspect of the Governor's distal forearm, hit the radius bone, fragmented, and did not exit. The author uses the various testimonies of Drs. Gregory and Shaw. Dr. Charles Gregory was the orthopedic surgeon who operated on Governor Connally's wrist, and Dr. Robert Shaw was the thoracic surgeon who operated on Governor Connally's chest. In addition, the author uses his own impressions and understanding of forensic pathology pertaining to gun shot wounds.

Paragraph #4 in the Introduction succinctly states the conclusion of the author's analysis.

*A careful examination of all the evidence relating to the Connally wrist wound raises real doubts as to whether a bullet passed through the wrist, and indicates instead a far greater likelihood that a missile struck the dorsal surface of the wrist, then fragmented in the process of producing the comminuted fracture. The broken bullet never passed through the wrist or emerged from the volar surface, but shattered into fragments. One of these fragments probably entered Connally's left thigh.*

In this one conclusion, the author has made claims that are totally contradicted by only one piece of irrefutable evidence: the pre-operative X-rays of Connally's forearm.

Connally's preoperative forearm x-rays show a comminuted fracture of the distal radius. The point of impact is near the radial edge of the radius bone. (*In referring to the sides of the forearm, to avoid confusion, the edge of the forearm adjacent to the radius bone is called the radial side, and the edge of the forearm adjacent to the ulna is called the ulnar side.*) From there the fracture extends toward the ulnar side of the radius bone.

Also visible on the preoperative X-rays are **three tiny slivers** of bullet fragments, which when viewed on the AP film measure a few millimeters across. When viewed on the

lateral film, these fragments are extremely thin, no more than a millimeter thick. Thus the amount of metal left behind is extremely small. To suggest that a 6.5 mm x 3 cm bullet, (or any other rifle bullet, for that matter) could break up and "never [pass] through the wrist or [emerge] from the volar surface" defies credulity. The bullet fragments left behind are much too small to account for even a significant portion of ANY bullet.

This one finding alone is proof that the overwhelming portion of the bullet passed through the wrist.

Findings at operation indicated that the bullet first struck an intermediate target, then passed through the wrist intact. Although Governor Connally's wrist fracture was a comminuted fracture, it was not particularly serious. Only one operation was required in which neither intraoperative reduction or internal fixation was performed. The operative note makes no mention of any reduction, and in the post operative films, the relation of the large fractured segments are unchanged, and there are no internal fixation devices present in the forearm. A simple cast was applied. Thus without any orthopedic manipulation, other than to remove bullet fragments and a few small loose bone fragments and cleaning of the wound, Governor Connally recovered from this fracture uneventfully. Thus, it seems most likely that whatever missile hit Governor Connally's forearm, was traveling at a relatively low velocity. A rifle bullet striking the wrist at an unreduced velocity would be expected to do much more damage.

There was ONE entrance wound and ONE exit wound. While Dr. Gregory does give conflicting sizes of the exit wound, his most often pronounced assessment of a 5 mm exit wound seems the most likely. Dr. Gregory called the wound a "small laceration" and a "transverse laceration that did not gape," that "lay in the skin crease," and was "a very innocent looking thing". Also it wasn't until after he probed the wound that he realized that this wound was related to the gunshot wound. Certainly, he would have not been all that surprised over a 1.5 cm exit wound that was only 5 mm smaller than the entrance wound. All these descriptions support a smaller wound. No matter what the size of the wound, however, does the author seriously contend that a rifle bullet hit a bone in the wrist, fragmented into several pieces, and virtually all the fragments marched out of the forearm single file through one exit wound?

Dr. Gregory determined that a exit wound was smaller than the entrance wound. The dorsal entrance wound was 2 cm and the volar exit wound was (most likely) 5 mm. All the bony fragments that were displaced were located volar to the radius.

Thus, taking into account the X-rays and the findings at operation, the most reasonable forensic analysis of Governor Connally's wrist wound indicate that a tumbling projectile passed through the wound at a relatively low velocity, remained intact except for the shearing off a few tiny pieces of metal, created one entrance wound and one exit wound, with the entrance wound being the larger.

It should be noted that ballistic experimentation has been done with respect to the deformity of CE 399 (the so-called "magic" or "pristine" bullet) and the amount of lead left behind in Connally's wrist.

Lattimer, et al, inserted a WC 6.5 mm Carcano bullet, the same bullet as CE 399, into a vise and deformed it along its long axis to the same extent CE 399. 2.1 grains of metal extruded from its base. They were able to cut this small amount of lead from the bullet's base and divide it into four fragments that matched the size of the lead fragments seen in Governor Connally's preoperative X-rays of his forearm and thigh. (see enclosed article)

Col. Martin L. Fackler, MD FACS, past head of the Army Wound Ballistics Laboratory at the Edgewood Arsenal, fired WC 6.5 bullets through cadaver wrists after reduce loading them. At muzzle velocities of 1300 fps and 1100 fps, the bullet broke the radius bone, and was recovered completely non-deformed. The only markings on the bullet were those of rifling. Dr. Fackler's estimated velocity of the bullet traveling through Connally's wrist, after passing through JFK's neck, Connally's chest, was 900 fps. (personal communication)

A comment on the experience of many of the surgeons treating President Kennedy: Most, if not all, rifle wounds seen in American trauma centers in the 1960's were from hunting rifles. Most hunting rifles fire soft pointed bullets, which are designed to deform on impact, rapidly decelerate. If they leave the body, they do so with at a greatly reduced velocity, without much penetrating power. Unlike hunting bullets, the WC 6.5 mm Carcano bullet is an extremely dense, with a very thick full metal jacket designed not to deform, and had enormous penetrating power. The 6.5 bullet has penetrated 46 inches of laminated pine (equivalent to the widths of four men, without deformation) and 36 inches of solid elm wood with out deformation. Thus, contrary to Dr. Gregory's doubts that a bullet could have gone through both men (see paragraph labeled #7, page 4), the WC 6.5 Mannlicher-Carcano bullet (the only bullet ever found in connection with the assassination) clearly possessed the penetrating power to go through both men. (Figure 1)

The conclusion that "one of these fragments probably entered Connally's left thigh" is also absurd, and

contradicts the conclusion of both surgeons that the tiny fragment in the thigh (about 1-2 mm) was too small to cause a 1 cm entrance wound.

By the way, the author should revise his statements in item #4 to read more clearly. One statement seems to claim that "The broken bullet never passed through the wrist or emerged from the volar surface, but shattered into fragments." Then in the very next statement, the author makes the seemingly contradictory claim that "One of these fragments probably entered Connally's left thigh."

There are numerous other errors made by the author or the Dallas physicians, some of which will be discussed below:

Page 2: Dr. Gregory's first Warren Commission testimony.

2. Dr. Gregory's impression and the author's conclusion that a small slit-like laceration is incompatible with an exit wound is simply wrong. Exit wounds can assume all kinds of shapes, including slits. I have included two photographs of slit-like exit wounds from Vincent J.M. DiMaio's book, Gunshot Wounds: Practical Aspects of Firearms, Ballistics, and Forensic Techniques. (Figures 2 & 3)

4. Dr. Gregory's statement that "an irregular missile can carry debris into a wound and such debris was carried into the wound of the wrist," and thus the bullet which had caused the wound "was probably distorted," is, again, simply wrong. Non-deformed bullets, especially those that tumble through clothing can also carry debris into the wound. Ones that create a relatively large entrance wound are even more likely to carry debris into the wound.

5. I have no idea what Dr. Gregory meant by "a tumbling bullet would have left organic matter behind in Connally's chest and that this "'missile behaved as if it had never struck anything else' before it hit the Governor." (Analysis, page 2, paragraph labeled #5) The most logical and consistent explanation of an elliptical 3 cm long wound in Governor Connally's back is that the bullet was tumbling before it hit him in the back. The 6.5 Mannlicher-Carbon bullet is almost exactly three cm long. A bullet passing through President Kennedy's neck, tumbling upon exit, then hitting Governor Connally's back broadside is the most logical explanation for this wound. There has been ballistic experimentation done to support this. (figure 4)

On the matter of Dr. Shaw's testimonies and subsequent recollections, they are so muddled, so contradictory, so changing, that I do not feel his accounts, other than his operative note which was dictated immediately after surgery,

should be given any probative value at all. For instance, in his operative note and in his testimony before the Warren Commission, Dr. Shaw stated that Governor Connally's back wound was an oblong 3 cm wound. Shortly before his death, however, he was saying the wound was a small round wound.

However, a few forensic opinions he made deserve comment. (page 3, paragraph labeled #3). His "opinion that if the missile and not a fragment had actually exited the wound through the volar surface, it would have carried more pieces of bone with it, and not left so much behind in the wound" is simply a confabulation. There is no forensic, ballistic, or orthopedic requirement for this. Millions of whole bullets have passed through extremities, shattering bones, leaving larger exit wounds, without carrying any bone out with them. His opinion that "he would have expected much more damage to the tendons and arteries on the volar side, if the entire bullet had passed through," is another confabulation. The bullet entered the radial side of the wrist, judging from the radiographs, which show small comminuted fragments on the radial side of the bone. Other fractures can be seen extending from this area. There was injury to the dorsal sensory branch to the radius nerve, which also lies over the radial aspect of the radius (figure 5). The operative scar on the dorsum of the wrist, according to forensic pathologist, Dr. Michael Baden, showed "the gunshot wound of entrance shows the gunshot wound of the entrance to be incorporated into a well healed surgical scar on the **lateral** aspect of the distal forearm slightly dorsally and extending into the wrist". Judging from the appearance of the fracture, the dorsal structures damaged, and the location of the scar, it seems clear that the bullet entered the distal forearm on near the radial side. In going through this side of the radius, the bullet could have passed clear of the flexor tendons of the hand which lie to the ulnar side of the radius. After hitting and passing through the radius, the bullet could then have been deflected toward the midline, where it could have hit the palmaris longus tendon, a superficial tendon of the forearm (figure 6). Even if a bullet had passed dead center through the wrist, however, it could have passed through without causing any nerve or tendon damage whatsoever. If the author's contention is true, that the bullet fragment broke up inside the wrist, nerve damage would have been **more** likely to occur from the formation of many secondary missiles.

The Coat and Shirt. (page 5, paragraph #2, under HSCA and Connally's Wrist Wound)

The author presents the dimensions of the coat collar and French cuffs. The holes on "dorsal aspect" of French cuffs measured 16 x 9 mm and 18 x 5 mm, outer and inner

respectively. He claims that these holes are smaller than the entrance wound. I do not know what the author means to imply by this. Gunshot wounds of skin that lies close to a hard bony surface (like the skin over the dorsum of the radius) can be quite irregular and the lacerations caused by the bullet can be extended by a temporary pressure cavity under the skin caused by the rapid deceleration of the bullet hitting bone. Besides, the difference between the length of the entrance wound and the inner cuff was only 2 mm. This the same discrepancy between the length of the tear between the inner and outer cuffs. Nothing about this difference in sizes of the shirt cuff wounds and skin wounds are incompatible.

The difference in sizes between the "volar" aspect is greater: 1.9 x 1.3 (inner) and 2.0 x 1.5 cm (outer). This is more problematic, but only to the uninformed. Exit wounds can be very tricky, especially, exit wounds at low velocity going through thin skin. Skin, unlike cloth French cuffs, is elastic and will stretch. Stretching of skin as the bullet exits often causes exit wounds smaller than the bullet's diameter. Cloth tears, especially when a bullet is passing through it a low velocity. If the bullet was changing in attitude as it was exiting the wrist, the bullet could have hit the cloth more obliquely after passing out of the skin. Furthermore, it is also possible that as the bullet passed out of the wrist and hit the cuff, it pushed the cuff out first and then tore through it. All of the above mechanisms would cause the exit wound through the cuff to be larger than the exit wound through the skin.

The holes, do however, raise problems for the "multiple fragment" theory. Again the author must conclude that if the bullet broke up inside the wrist, then not only did the fragments march through the skin wound in single file, they also passed through the shirt cuff the same way. Bullets that break up and pass through the body characteristically form huge exit wounds, or multiple exit wounds through the skin and clothing worn by the victim.

Dr. Baden's Description of the Wound (page 6, top paragraph, labeled #3)

Dr. Baden's examination of Governor Connally's wrist wound showed "the gunshot wound of entrance [to be] incorporated into a well healed surgical scar on the lateral aspect of the distal forearm slightly dorsal and extending into the wrist" and "well healed fine surgical scars on the ventral [volar] aspect of the wrist." The author's claim that this suggestive that gunshot exit wound did not exist on the wrist is simply ludicrous. As noted, the wrist exit wound was linear. Baden's description of the healed wound is perfectly compatible with a linear exit wound.

There are many other errors of logic and fact in "CONNALLY'S WRIST WOUND: An Analysis". Time and patience preclude a complete analysis, but the more important ones have been commented on.

This critique will conclude with analysis the author's final summation beginning on page 7:

1. This conclusion is a total fabrication. As noted before, the amount of metal visible in Connally's pre-operative forearm X-rays **precludes** any significant portion of **any** bullet being left behind.

2. Dr. Gregory is wrong in his opinion that a deformed or irregular missile would be required to sever tendons. He is correct that a bullet can push nerves and tendons aside in going through an arm, and this does occur quite frequently. However, given the dorsal lateral entrance wound, this was probably not necessary to spare the ulnar artery, median nerve, and flexor tendons. The one tendon identified as being lacerated, the palmaris longus, is a volar midline structure, but is a subcutaneous structure, external and volar to the compartment in which the flexor tendons and median nerve are located. This tendon could have been lacerated by a bullet if the bullet had been deflected ulnarward, or if it had traveled in a radial to ulnar direction as it passed through the radius without entering the deeper compartments of the wrist that contain the flexor tendons or median nerve. By the way, the palmaris longus tendon is an unimportant structure. In fact, it is absent in 15% of the population. This tendon is often harvested by surgeons to perform tendon grafts.

3. As can be seen in the enclosed photographs, bullet exit wounds can be slit-like, resembling lacerations. Furthermore, the claim that "the decision to call it a 'wound of exit' AFTER the original report was dictated," is clearly fallacious. In the fourth line up from the bottom of the enclosed op note, Dr. Gregory clearly refers to a "wound of exit." (figure 7) This phrase appears to have been typed during the original transcription of his dictation--there is no evidence of correction in this area of the operative report. Nothing Dr. Gregory describes by any stretch of forensic imagination precludes an intact bullet passing through the wrist, shredding off a few tiny pieces of metal. In fact, the pre-operative X-rays and the findings at operation make it almost impossible to conclude anything else but that a bullet passed through the wrist WITHOUT breaking up.

4. Dr., Shaw's claims are not supported. A bullet passing through JFK's neck and Connally's chest and wrist would lose much velocity. The only fragment found in Connally's thigh

was a time 1 or 2 mm fragment. There is no way this tiny fragment moving at reduced velocity could have caused a one cm entrance wound. His opinion that bone fragments should have been carried out through the wrist is simply a notion that is not borne out by common clinical experience.

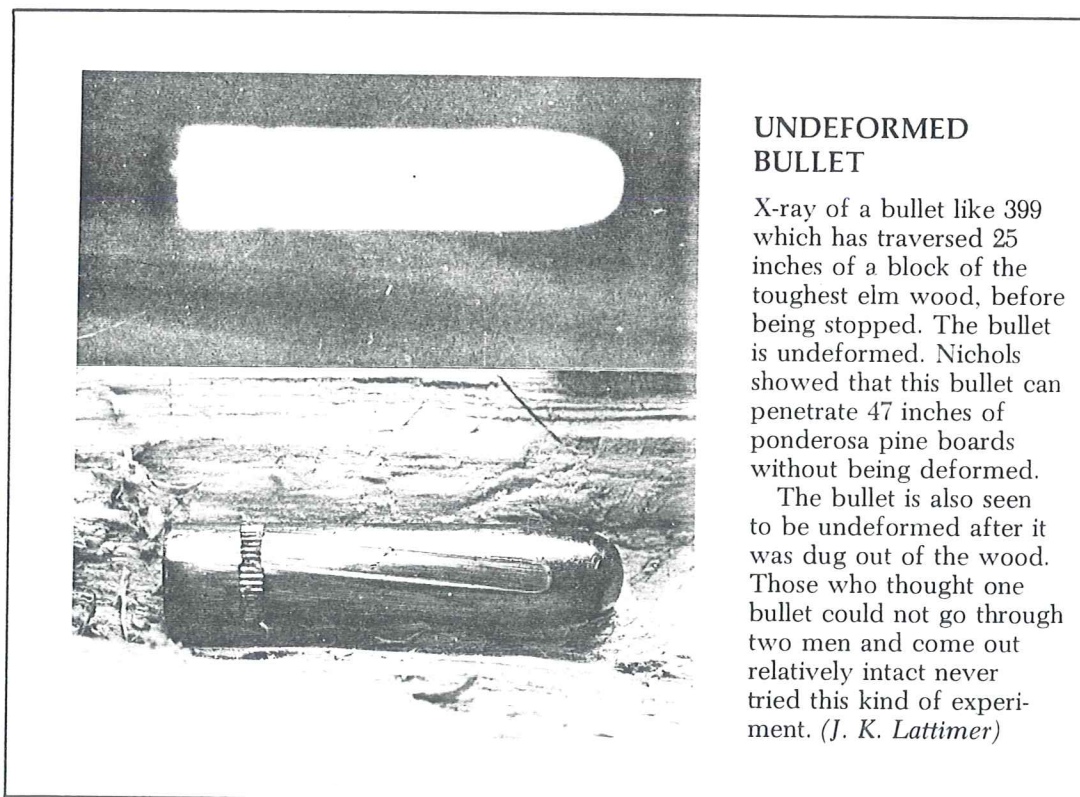
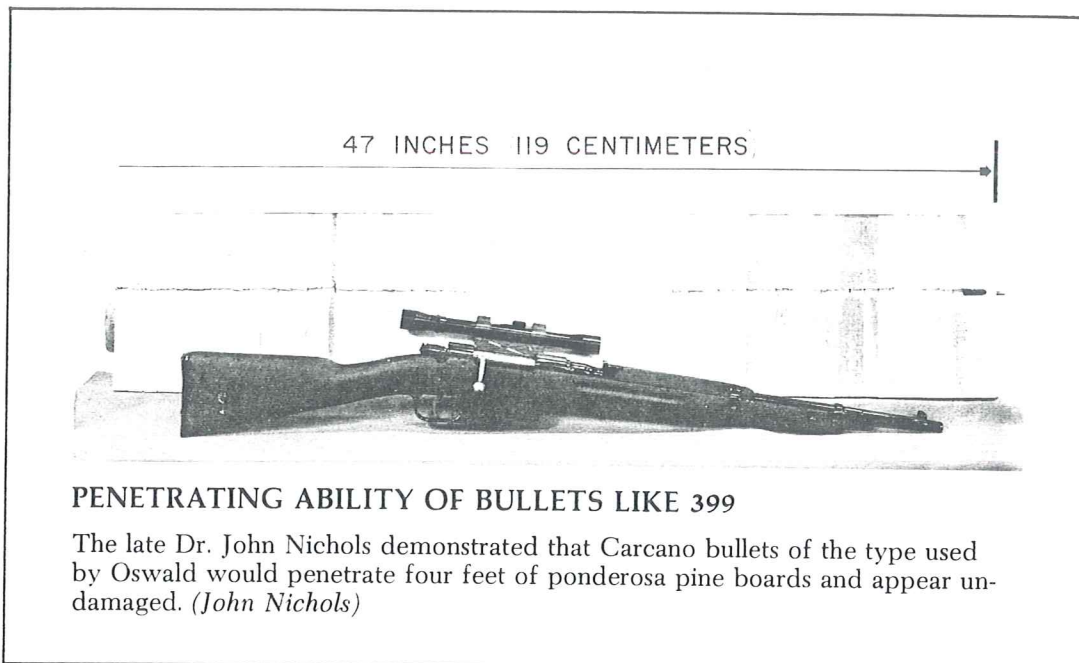
5. It is not difficult for those with sufficient forensic knowledge to "see how an intact 6.5 mm bullet, traveling backward or tumbling, could have emerged through a 0.5 mm or 1.5 mm slit without leaving some gaping skin tissue behind". A slit-like laceration oriented transversely across the volar aspect of the wound in a skin crease, travels along the Relaxed Skin Tension Lines. (RSTL) This is the direction plastic surgeons routinely use to create incision that do not gape widely, and that can be closed under little tension. This promotes the formation of fine surgical scars. Similarly, when hand surgeons need to create long incisions that travel over joints, they zig-zag the incision so the incisions pass as transversely as possible over the flexion crease. This creates a finer scar, and helps to prevent scar contracture over the joint. Thus, one should expect very little gaping of a small wound located transversely on the wrist. One would also expect that the wound and its extension performed at operation, would heal in a fine line. It is, however, difficult for those with sufficient forensic knowledge to imagine a rifle bullet breaking up inside a wrist into separate fragments, each of which would exit the wrist through a single small exit wound.

6. The misplacement of the shirt and coat was an unfortunate error committed by those associates close to Connally. It is amusing to see the author claiming on one hand that the "coat was 'misplaced' and eventually laundered, destroying much of the evidentiary value," then in the very next sentence, use this same evidence (incorrectly, however) to support this analysis.

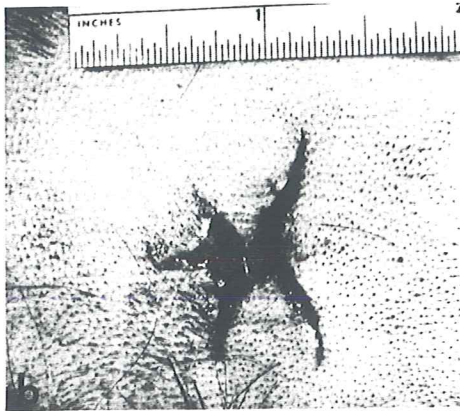
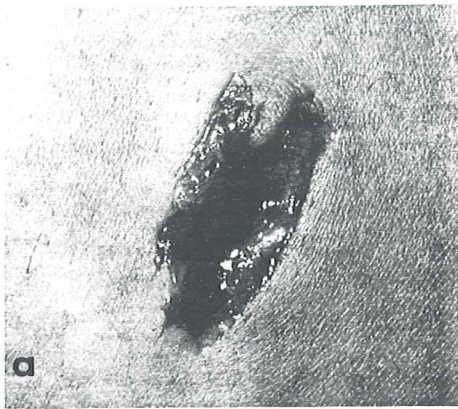
7. In the final analysis, it is clear that the author of CONNALLY'S WRIST WOUND: An Analysis, lacks sufficient anatomic, forensic, surgical, ballistic, radiological, knowledge to form any competent conclusion about the evidence he has meticulously been examining for many years. He uses the incorrect assertions of surgeons without proper forensic or surgical training or experience to evaluate them. In addition, the author makes major errors of his own to make his claims. The preponderance of the evidence supports the very claim the author tries to refute: one tumbling bullet entered the dorsal aspect of the wrist at reduced velocity, created a comminuted but not especially serious fracture of Governor Connally's distal forearm, spared the significant neurovascular structures therein, and then exited intact from the volar aspect the forearm, creating a small exit wound.



# FIGURE 1

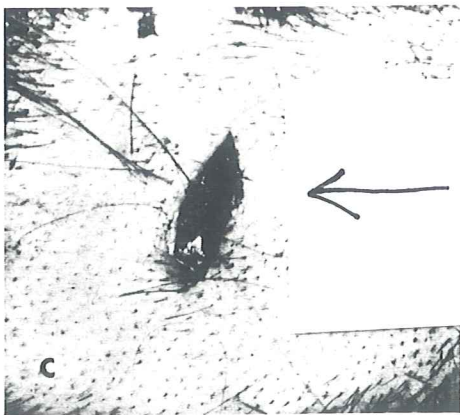


From: Kennedy and Lincoln: Medical Comparisons of Their Assassinations, by Dr. John K. Lattimer.  
Published by Harcourt Brace Javanovich. 1980



## FIGURE 2

These are  
All exit  
wounds.



This wound is slit-like. A small slit located transversely in the volar aspect of the wrist wound not gape much.

From: DIMAIO, VINCENT J.M. GUNSHOT WOUNDS:  
PRACTICAL ASPECTS OF FIREARMS, BALLISTICS,  
AND FORENSIC TECHNIQUES

raw." Shored exit wounds, such as girdle clothing.

Occasionally, a bullet forward velocity such create an exit wound, a overlying garment or a the bullet from exiting edges due to impactior exiting.

Fresh shored wounds of the material overlyir of the wound. Shored v when dry may simulat

The size and the sha degree on the location small and slit-shaped. across a bony surface— more irregular, often v

Although exit wound possible for an exit to b diameter than the bul nature of the skin. Any ing exit wounds is tha with the type of bullet

Figure 4-22 Shored exit.





es direction of bullet.

exit will have abrasion of only a sion at the exit points the way the sion of the entrance, the way the

et has passed through one part of part. Most commonly, this occurs l enters the thorax. The reentry rside, irregular abrasion ring and a dges are ragged (Figure 4-26). sed by missiles that have passed typical appearance. Such wounds thin or even absent abrasion ring semble a wound of exit rather than tiated from an exit wound if con-

f the thorax may be shoring of the occurs when the arm was against ted the arm and entered the chest. lar abrasions may also be present d (Figure 4-28). These shored en- to skin around the reentry site gainst the chest.

**FIGURE 3** →

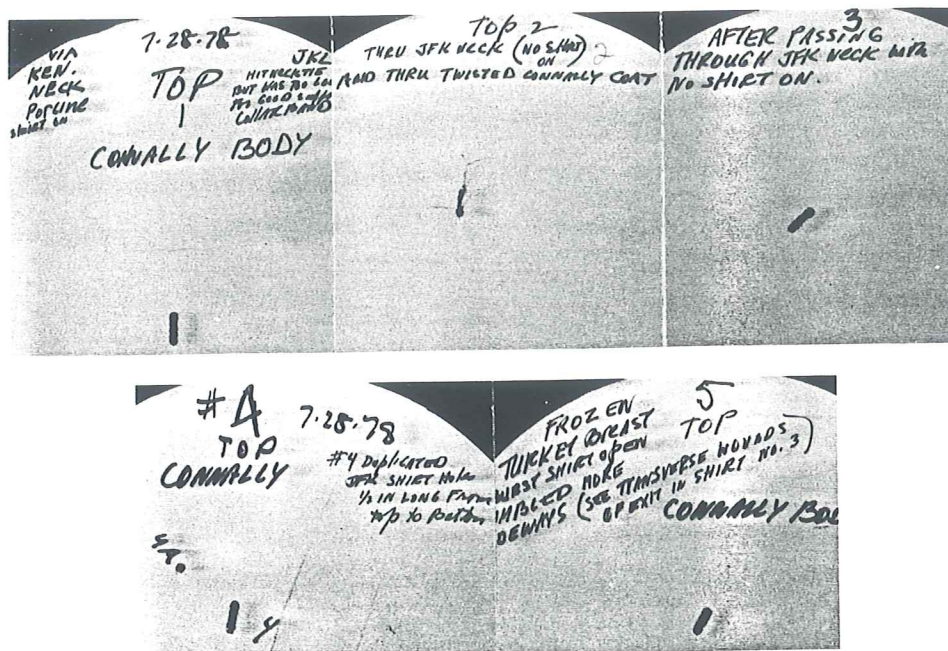
Another slit-like wound.



EXIT WOUND.

From: DIMAIO, VINCENT J.M. GUNSHOT WOUNDS: PRACTICAL ASPECTS OF FIREARMS, BALLISTICS, AND FORENSIC TECHNIQUES

# FIGURE 4



CARGANO BULLETS TUMBLED END OVER END AFTER PASSING THRU JFK NECKS AND STRUCK THE GOV. CONNALLY SIMULATIONS GOING ALMOST SIDWAYS. 4 TUMBLED VERTICALLY, 1 HORIZONTALLY. ONLY ONE (4A) DID NOT TUMBLE. MOST OF THE BULLETS WERE DEFLECTED A BIT DOWNWARD.

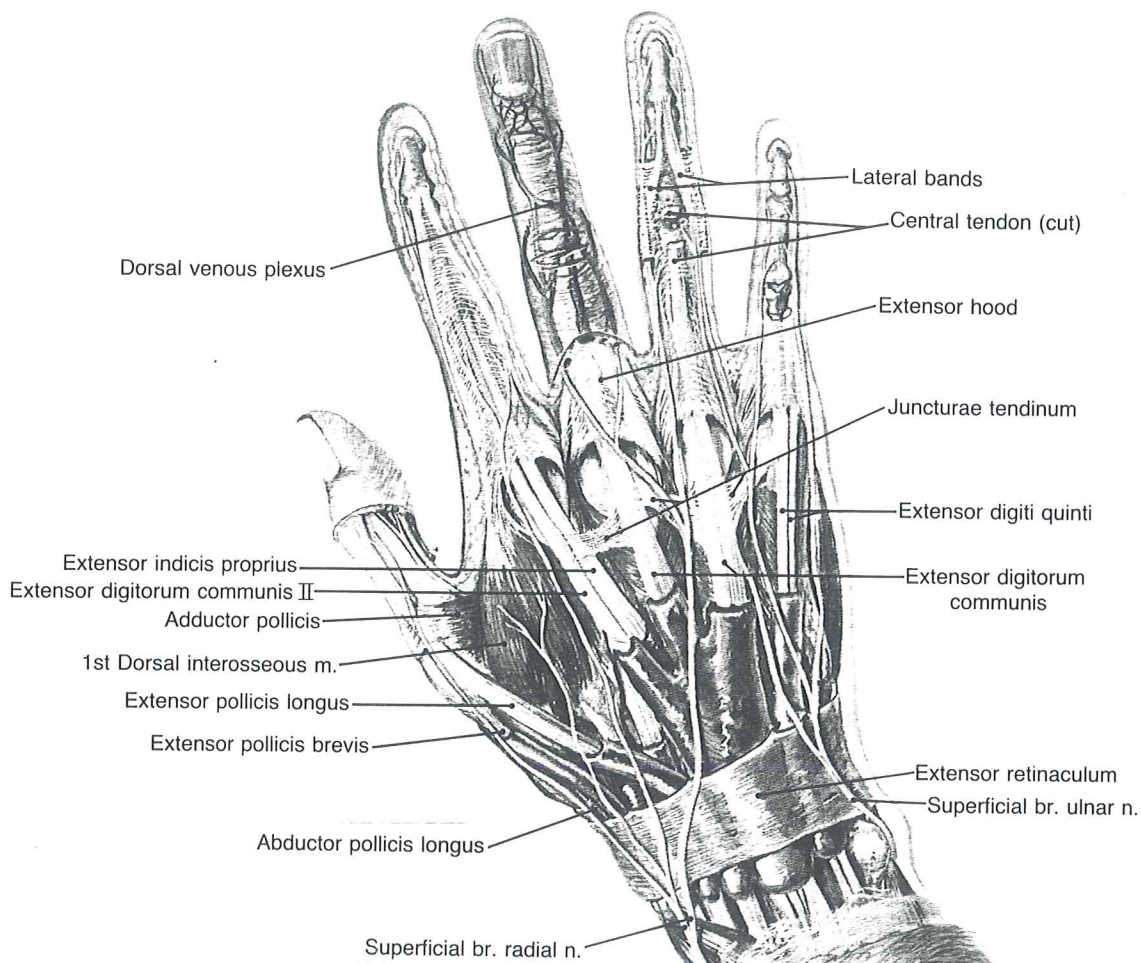
## TUMBLING OF CARCANO BULLETS AFTER STRIKING NECKS

Five cardboard skins simulating Connally were placed the same distance from Kennedy's neck as Connally was seated in the automobile in front of the President. The Carcano bullets that made the holes in these targets had passed through a simulation of Kennedy's neck, striking only soft tissues. Five of the six bullets tumbled end over end after leaving the neck and struck Connally's skin traveling almost sideways. Only one bullet failed to tumble (4A). The level of this bullet in Connally's skin marks the level at which all of the bullets would have struck the Governor had they not been deflected by passing through Kennedy's neck. Note that four of the six were deflected downward to a moderate degree, whereas numbers 2 and 4A were not. Four of the bullets tumbled in a vertical plane, whereas number 3 tumbled in an almost horizontal plane. The presence or absence of a shirt collar and necktie made no difference in the amount of deflection or tumbling. Bullet number 4, which caused a near duplicate of Kennedy's neck and collar wound, was deflected downward about two inches and tumbled vertically. These results confirmed our previous observations that these bullets almost always tumbled after passing through a neck. (J. K. Lattimer)

From: Kennedy and Lincoln: Medical Comparisons of Their Assassinations, by Dr. John K. Lattimer.  
Published by Harcourt Brace Javanovich. 1980

# FIGURE 5

From: Common Hand Injuries and Infections: A Practical Approach to Early Treatment, by Peter R. Carter, MD. Published by Saunders, 1983.



Because of the appearance of the radius, and the fact that the superficial branch of the radius nerve was injured, and that entry wound scar was lateral, this is the most likely area of wound entry.

PLATE 4. Dorsal aspect of hand.

s: A  
Peter R.

s

endon (cut)

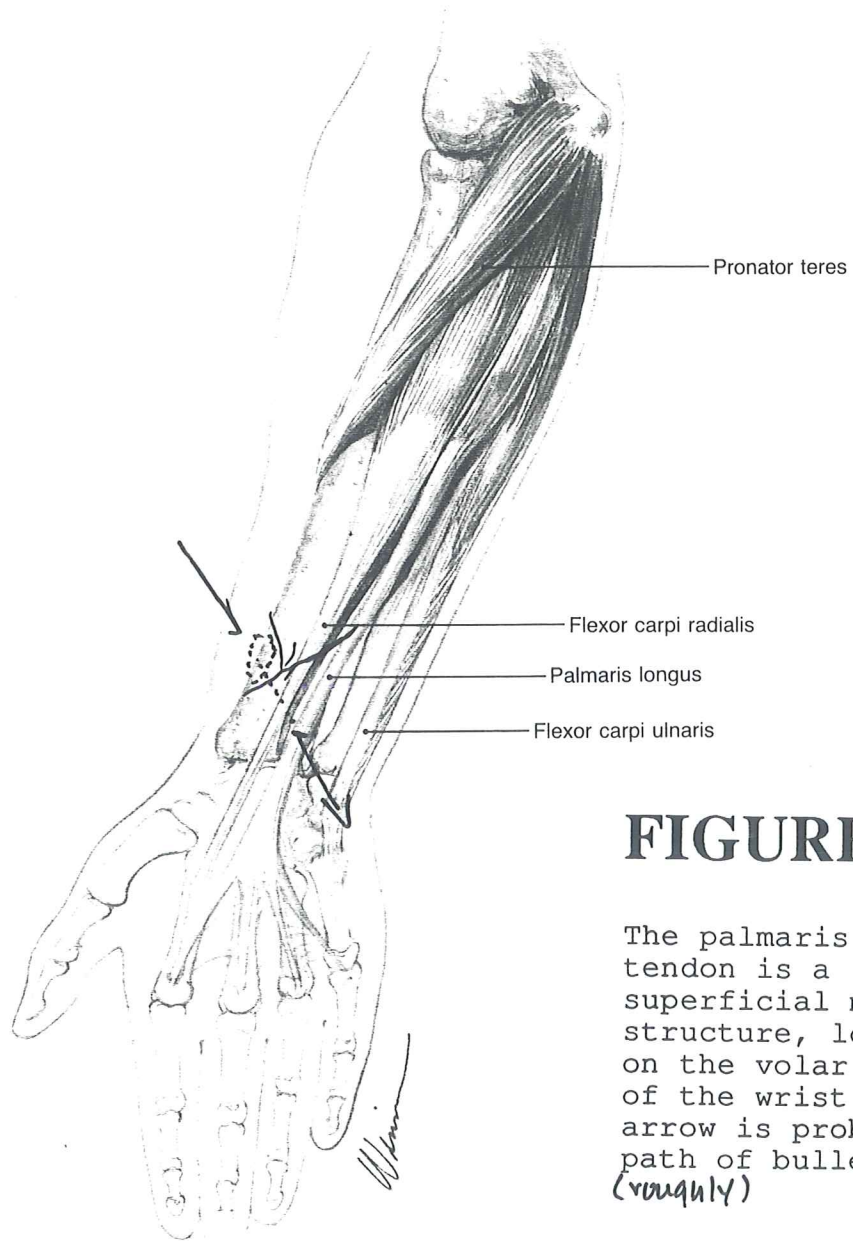
hood

e tendinum

or digiti quinti

or digitorum  
mmunis

isor retinaculum  
erficial br. ulnar n.



## FIGURE 6

The palmaris longus tendon is a superficial midline structure, located on the volar aspect of the wrist. Thick arrow is probable path of bullet.  
(roughly)

PLATE 5. Anterior aspect of forearm (supinated), superficial layer.

# FIGURE 7

PARKLAND MEMORIAL HOSPITAL		ROOM: 220	STATUS: Pvt.
OPERATIVE RECORD		NAME: Governor John Connally	
DATE: 11-22-63	Ortho	UNIT # 26 36 99	AGE: W/M RACE:
PRE-OPERATIVE DIAGNOSIS: <u>Commuted fracture of the right distal radius, open secondary to gunshot wound</u>			
POST-OPERATIVE DIAGNOSIS: <u>Bone</u>			
OPERATION: <u>Debridement of gunshot wound of right wrist, reduction of fracture of the radius</u> BEGAN: <u>1600</u> ENDED: <u>1650</u>			
ANESTHETIC: <u>General</u> BEGAN: <u>1300</u> ANESTHESIOLOGIST: <u>Giassecka</u>			
SURGEON: <u>Dr. Charles Gregory</u> DRAINS:			
ASSISTANTS: <u>Dr. Osborne and Parker</u> APPLIANCES:			
SCRUB NURSE: <u>Rutherford</u> CIRC. NURSE: <u>Schroeder</u> CASTS/SPLINTS:			
SPONGE COUNTS: 1ST _____ DRUGS _____ I.V. FLUIDS AND BLOOD _____			
2ND _____			
COMPLICATIONS: <u>None</u>			
CONDITION OF PATIENT: <u>Fair</u>			
Clinical Evaluation: <u>While still under general anesthesia and following a thoracotomy and</u> <u>pair of the chest injury by Dr. Robert Shaw, the right upper extremity was thoroughly</u> <u>prepped in the routine fashion after shaving. He was draped in the routine fashion using</u> <u>stockinette, the only addition was the use of a debridement pan. The wound of entry on the</u> <u>dorsal aspect of the right wrist over the junction of the distal fourth of the radius and</u> <u>shaft was approximately two cm in length and rather oblique with the loss of tissue with</u> <u>some considerable contusion at the margins of it. There was a wound of exit along the volar</u> <u>surface of the wrist about two cm above the flexion crease of the wrist and in the midline.</u> <u>The wound of entrance was carefully excised and developed through the muscles and tendons</u> <u>from the radial side of that bone to the bone itself where the fracture was encountered.</u> <u>It was noted that the tendon of the abductor pollicis longus was transected, only two small</u> <u>fragments of bone were removed, one approximately one cm in length and consisted of lateral</u> <u>cortex which lay free in the wound and had no soft tissue connections, another such smaller</u> <u>fragment perhaps 3 mm in length was subsequently removed. Small bits of metal were en-</u> <u>countered at various levels throughout the wound and these were wherever they were identi-</u> <u>fied and could be picked up were picked up and have been submitted to the Pathology de-</u> <u>partment for identification and examination. Throughout the wound <del>at various</del> and especially</u> <u>in the superficial layers and to some extent in the tendon and tendon sheaths on the rad-</u> <u>ial side of the arm small fine bits of cloth consistent with fine bits of Mohair. It is</u> <u>our understanding that the patient was wearing a Mohair suit at the time of the injury and</u> <u>this accounts for the deposition of such organic material within the wound. After a careful</u> <u>and complete a debridement as could be carried out and with an apparent integrity of the</u> <u>flexor tendons and the median nerve in the volar side, and after thorough irrigation the</u> <u>wound of exit on the volar surface of the wrist was closed primarily with wire sutures</u> <u>while the wound of entrance on the radial side of the forearm was only partially closed,</u> <u>being left open for the purpose of drainage should any make spontaneous appearance.</u>			
OS:hl (continued)			

*Dr. Ext. Pol. Injuries*

*also a partial transection of the superficial tendons*

*Charles Gregory, M.D. 11/7/63*

-Continued

This phrase was typed in the original transcription, indicating that the wound was identified as an exit wound at operation.