The Kennedy Wound

Fatal Shot Struck Base of His Skull,
Causing Immediate Unconsciousness

By HOWARD A. RUSK M.D.

The world is still numb. stunned, and in a state of continuing shock as it grieves over the tragic death of President Kennedy.

We who mourn can be grateful for the fact that he felt pain, that unconsciousness was instantaneous and death was swift and certain.

The high-velocity bullet that

entered through the neck and exited through the base of the skull tore away the bone and brain tissue, striking the vital areas of the brain, the pons and medulla that control and regulate the vital functions of respiration and circulation.

After such a devastating wound from a high-powered rifle, what chance is there for life and what does life hold if one is saved?

Such wounds are common in war. In World War I, even though a bullet missed the vital areas of the brain controlling the basic functions of the heart and respiration and if the great blood vessels of the brain were

spared recovery was very rare because of secondary infection producing meningitis, abscesses and even injection in the blood stream itself.

In World War II, if one sur-vived the initial insult, the chances for recovery were much greater, for neurosurgical teams operated directly behind the

front lines, where immediate emergency surgery was done. The patient was then evac-uated to a base hospital and then by air to specialized cen-ters in the United States.

This emergency surgery plus antibiotics to control infection, and a better knowledge of the use of plasma and blood, saved many lives.

Effects of Injury Varied

The status and future of the survivor then were dependent upon the areas of the brain that had been damaged or destroyed.

If the bullet went through the silent area of the frontal lobe and damage was minimal, sometimes there was little change in the individual.

Some wounds in the frontal lobe, however, could produce the same symptoms as a thera-

peutic lobotomy.
This is a surgical procedure, sometimes performed in cases of severe and uncontrollable psychoses, in which a portion of the frontal lobe is deliberately removed. After such a procedure, the individual usually changes from a dynamic, driving, manic type to a passive,

muet, lethargic personality.

If too much of the frontal tobe is destroyed, these patients may revert to a vegatative ex-

If the main damage is in the temporal lobe of the brain the patient is left paralyzed on the opposite side, possibly with loss of sensation, and aphasia. Frustrating Disability

Aphasia is one of the most frustrating disabilities. We all know the frustration when we are unable to remember an old friend's name.

Multiply this frustration by infinity and that is the way the aphasic patient feels. Usually much can be accomplished by patient, long-term training. But

the process is tedious, irratrating, and sometimes heartbreaking.

If the injury is in the posterior portion of the brain, the

area where the bullet that killed 24 the President made its exit, the cerebellum is damaged.

Then the individual is left with ataxia, evidenced by severe intention type of tremors that occur when one tries to perform a basic act or grasp an object. Damage to the cerebellum is also usually accompanied by a

loss of equilibrium.

If the base of the brain is damaged, as was the case of the President's wound, the pons and medulla are injured. Then unconsciousness is instantaneous and death occurs usually in a matter of minutes because these centers control the vital body functions of circulation and respiration.

Surgeon Issuies Report

This was substantiated in a medical report issued by Dr. Tom Shires, chief surgeon at Parkland Hospital and professor of surgery at the University of Texas Southwest Medical Texas Southwes School He stated:

"Medically, it was apparent the President was not alive when he was brought in. There was no spontaneous respiration. He had dilated, fixed pupils, It was obvious he had a lethal

head wound. "Technically, however, by using vigorous resuscitation, in-travenous tubes and all the usual supportive measures, we were able to raise a semblance

of heartbeat.
"I am absolutely sure he never knew what hit him."

If a patient recovers from severe brain damage, he may have any one of these specific disabilities or a combination of

all of them. ... is often another devasting condition that comes after severe brain dam-age. These are epileptiform convulsions due not only to the damage itself but also to adhesions that are part of the healing process.

World of Anxiety

These convulsive seizures can

usually be mere or less con-trolled with modern drugs. However, even if the convul-sions are rare, the sword of Damocles hangs over the in-jured head of the individual, for he knows not when a convulsion will strike and therefore lives in a world of continuing

fear and anxiety. The most tragic coming to rehabilitation cen-ters are those with severe brain damage. They are always depressed, at times confused with problems in locomotion and hand function and often unsteady in gait. In some, in-telligence has been spared but. the means of communication has been lost.

The road back to some kind of life limited by disability is a tough, frustrating, and difficult road. Even with all of the modern facilities and oppor-tunities in rehabilitation and with courage in depth on the part of the patient, a satisfying. productive, dignified life is often not attainable.

We must be grateful that our President suffered no pain or anguish. For us, and for his loved ones left behind, there is at least the consolation that he was spared any suffering and the future did not present the insurmountable odds that often the bravest cannot conquer.