PHYSIOLOGY

Tumor Found Innocent

By Patricia McBroom

➤ THE TUMOR discovered in Charles Whitman's brain was an "incidental" finding and could not have caused the young man's murderous rampage, SCIENCE SERVICE was told.

Dr. Coloman de Chenar, the Austin physician and specialist in neuropathology who found the pecan-sized tumor also said it was physically unrelated to Whitman's headaches.

There has been much speculation that severe headache pain caused by the small growth drove the 25-year-old college student to shoot down dozens of people from a high tower on the University of Texas campus.

However, Dr. de Chenar said the tumor was so located that it would neither have prompted Whitman to rage nor probably have caused him any pain.

The man's sniping spree must, therefore, have been psychological in origin, said Dr. de Chenar. He observed that Whitman had "very well concealed extreme hostility" which finally "matured to the point where he felt he had to act it out."

His ability to hide his hatred was not so unusual, Dr. de Chenar noted. "Many psychopaths understand very well how to play the role of a fine person," he said.

Some confusion about the role of the tumor may have arisen because of its location in the diencephalon, a brain structure which, if injured, may produce what scientists call "sham rage." It is the diencephalon that makes people sweat and turn pale in anger. From there also comes the emotional impetus for great physical effort when an individual is suddenly frightened.

However, Dr. de Chenar said Whitman's tumor was located below this sham-rage area and was actually in an area of motor and sensory pathways. But even here, the benign tumor had not yet damaged the pathways.

Such "silent" tumors as this are found quite frequently in autopsies, said Dr. de Chenar. The brain itself does not have nerve endings which sense injury to one of its parts. So the tumors go unsuspected until they grow large enough to produce an observable effect on behavior. By that time, the growth —as big as a fist or larger—leads rapidly to death.

PSYCHIATRY

Brain Affects Crime

➤ THE CRIMES of theft and murder have been distinguished on the basis of brain disorder.

Of 100 charged felons referred for psychiatric evaluation in Indiana, theft was the predominant crime among those who had a lifelong history of brain disorder. The serious crimes of assault, murder and sexual violence were linked to late onset of a brain dysfunction.

Crimes of violence were also high among those offenders who showed no sign whatever of a nervous system disorder.

Despite the obvious implications of this new-found organic aspect of crime, the Indiana study emphasized the need of follow-up studies before its usefulness can be established.

There was no correlation between the traditional psychiatric diagnosis of a felon and his crime. Nor was there any link between abnormal brain waves and type of offense.

One-third of the 100 felons had unusual brain wave tracings (EEG's) indicating seizures and other diseases. However, this rate is no higher than that found among noncriminal psychiatric patients. EEG abnormality, in itself, apparently gives no clue to the degree of criminal violence.

The term "brain disorder" or "central nervous system (CNS) disorder" covers a formidable range of symptoms, from disorientation to retardation. But the usual indications of a severe disorder are defects in mental efficiency (such as the inability to plan), orientation, memory and sometimes emotional stability. In such cases the EEG may or may not be abnormal.

Those people who had had such a disorder all their lives, perhaps from an early head injury, were "much less apt to display dangerous aggressive tendencies," said the study. Those with mild forms of CNS disorder were also low in the violence column.

The individuals who developed a severe disorder later in life, possibly as a result of alcoholism, plus those with no organic symptoms at all, accounted for the most serious crimes.

Of the two types of disorders—early and late—drug abuse was associated with the first and alcoholism with the second.

The study, conducted by Dr. Joyce G. Small of the Indiana University School of Medicine and the Larue D. Carter Memorial Hospital in Indianapolis, was published in General Psychiatry, 15:82, 1966.