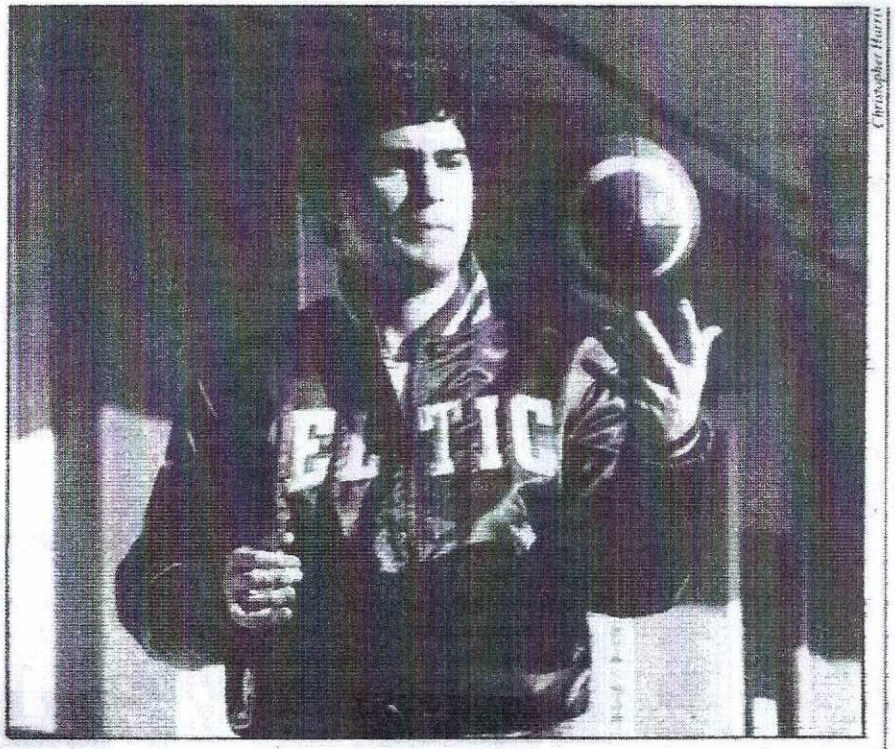
What we can learn from the trauma of others

How Doctors Treat Severe Head Injury

Jon Kanfer, 19, injured three years ago—a story of steady recovery.



Christopher Harris

RIDING IN A CAR, WITH seat belt buckled, a passenger is thrust violently forward and back when the driver brakes suddenly at high speed.

A small child's angry mother grabs his shoulders and shakes him, jostling his head sharply and repeatedly.

A bicyclist hurtles onto the roadway, striking her head on a curb. Unconscious and bleeding, she is treated for multiple injuries at a hospital and remains comatose for a week.

These stories have one thing in common. Only the bicyclist's head actually was struck, but in each case, brain damage was sustained when the delicate brain forcefully hit against the walls of the skull. *Outward signs of injury: None. Blows to the head: None. Observed condition: Normal.*

Brain damage is so hard to diagnose that it is called "the silent epidemic." It leaves victims baffled by its symptoms. These might include dizziness, fatigue, seizures, blurred vision, poor coordination, memory loss, irritability, personality changes and difficulties with oral and written communication.

Certainly, some of these symptoms beset Jon Kanfer of Weston, Mass., after an auto accident drastically altered and nearly ended his life at age 16. He was left in a coma for 11 days with multiple injuries. They included brain damage.

Learning to walk and talk again was only the beginning of his struggles. "I can't react the way I used to," he says. "My whole thought process is different."

Before the accident, Kanfer had been a B student, president of his class, a ball boy for the Boston Celtics, a school athlete and team captain. After the accident, Kanfer became quite introverted for a time. A period of intensive therapy followed. Now 19, Kanfer is a handsome freshman at Tulane University in New Orleans. He looks "normal," except for a slight limp and weakness on his right side, and is progressing well. He is developing new friends and is dating, two gains of which he is particularly proud. But he is not—and never will be—the person he was before the

accident. Like many head-injury victims, Kanfer *remembers* the way he used to be. This, especially at first, sometimes intensified his frustration.

Because brain-injured patients can seem overly upset when they find that formerly easy tasks are difficult, their reactions are often mistaken for psychiatric problems. Sometimes seeing a red light and a "walk" sign at the same busy intersection can throw them. "It takes very little to create confusion," says Dr. Lance Trexler, director of the Center for Neuropsychological Rehabilitation at the Community Hospital of Indianapolis. "Give instructions too quickly, overload them in some way, and that response occurs."

"A brain injury—whether minor or severe—creates a short-circuiting of memories stored," says Dr. Sheldon Berrol, chief of Rehabilitation Medicine at San Francisco General Hospital. "There's a disruption of signals from one part of the brain to the other."

Says psychologist Richard Friswell, former director of the National Head Injury Foundation in Framingham, Mass.: "Since head injury is a selective disability where only certain parts of the brain get knocked out, the challenge is to find the parts of the brain that are still strong and to create ways of coping which use the still-functioning parts."

Auto accidents, sports, assaults and gunshot wounds are the leading sources of brain injury, and most victims are 30 and younger. Seat belts and helmets offer some protection and should be used. Prevention is preferable to cure, and total cure is not yet achievable.

Because the most significant gains occur within the first six months after injury, *early* medical attention and psychological treatment is advised. Still, most physicians choose to wait and see.

A victim's emotional outbursts or complaints of forgetfulness often are viewed as psychosomatic, even by doctors. Patients are released from emergency rooms and—because they appear to be "normal"—are told incorrectly that their injuries are inconsequential.

"They go back to their workplace and just don't fit in," says Rebecca Rimel, assistant professor of neurosurgery at the University of Virginia in Charlottesville. "The patient with a broken leg gets the sympathy of co-workers and families," she notes, "but these people generally don't." She has studied more than 400 persons with minor head injuries who required hospitalization of two days or less and whose neurological examinations registered "normal." Her research revealed that, three months later, most needed medical help.

When brain injury is suspected, the CAT scan—computerized axial tomography—is the physician's primary diagnostic tool. Sometimes nerve damage is too subtle to be diagnosed immediately by this test. The same is also true of subdural hematoma—bleeding beneath the skull. (Perhaps a slow seepage of blood from damaged tissues is so gradual as to go unnoticed but so steady that the accumulation of blood puts pressure on the brain.) Other tests may help, but a patient's symptoms give the best clues.

A combination of physical, occupational and speech therapies, psychotherapy and drugs used to treat depression or anxiety is often productive. Showing promise is the use of videotape and microcomputer techniques to retrain nondamaged areas of the central nervous system. But such programs are time-consuming, costly and still experimental.

Support groups are often good medicine. The nonprofit National Head Injury Foundation serves as a clearinghouse for resources and acts as an advocate for the head-injured and their families throughout the country. Members help the head-injured patient to adjust to a new personality and its limitations, and help the family to cope. Says Joan Ligon of the foundation: "A few years ago, there were only 14 places in the U.S. that offered aggressive therapies. Now we have more than 200 listings of programs that deal with head injury."

For more information, write the National Head Injury Foundation, Dept. P, 18A Vernon St., Framingham, Mass. 01701. (Enclose 40 cents for postage and your return address.)

BY KAREN FELD