

Anatomy of a concussion

Here is what happens to the brain to cause a concussion:

Helmet

Skull

Initial glancing blow

2 The force from the impact causes the brain to rotate inside the skull.

Experts believe off-center blows are more likely to cause a concussion than straight-on hits.

BRAIN

1

3

The brain swells. In a severe injury, the swelling puts pressure on the brain stem, which controls breathing and other basic life functions.

Cerebrum

Cerebellum

Spine

SKULL

Spinal cord

Sources: Dr. Joy Rosenberg of Kaiser Permanente Medical Care Neurology; American Academy of Neurology; The Human Body Graphic: Mark Nowlin, Seattle Times/TNS