



Chronic Traumatic Encephalopathy (CTE)

Concussions result in dementia pugilistica, dementia induced by repeated blows to the head. Using specialized staining, Omalu found large accumulations of tau protein in the brains of professional football players. It affects mood, emotions, and executive functions similar to the way clumps of beta-amyloid protein contribute to Alzheimer's disease.

In my opinion, the chronic inflammation caused by repeated concussions results in diminished blood supply, low oxygen, decreased nutrients, migration of pathogens, and accumulated wastes in the brain with ultimate neurodegeneration. All of which contribute to the formation of tau protein.

Concussion

Dissecting Problem

Stage I

Concussion results in inflammation, which reduces the blood flow and interfere with neuronal connections between nerve cells throughout the injured area. **End result:** decreased removal of the waste products from the damaged cells; reduced nutrients, oxygen neurotransmitters, and lymph flow. In plain english normal brain function is severely affected.

Concussion

Dissecting Problem

Stage II

According to Dr. Sergei Kirov, neuroscientist and Director of the Human Brain Lab at the Medical College of Georgia at Georgia Regents University, the synapses start to die if the blood flow is not restored.

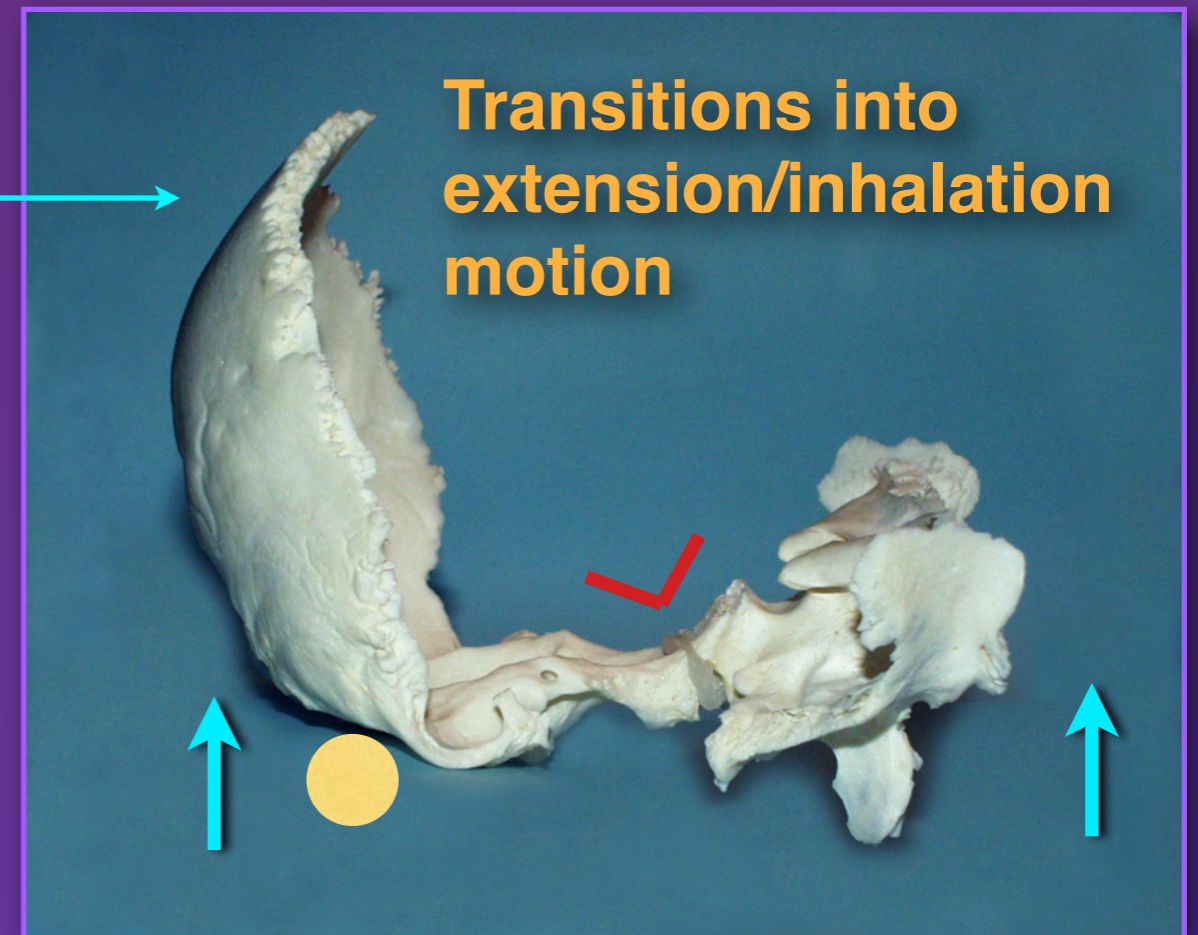
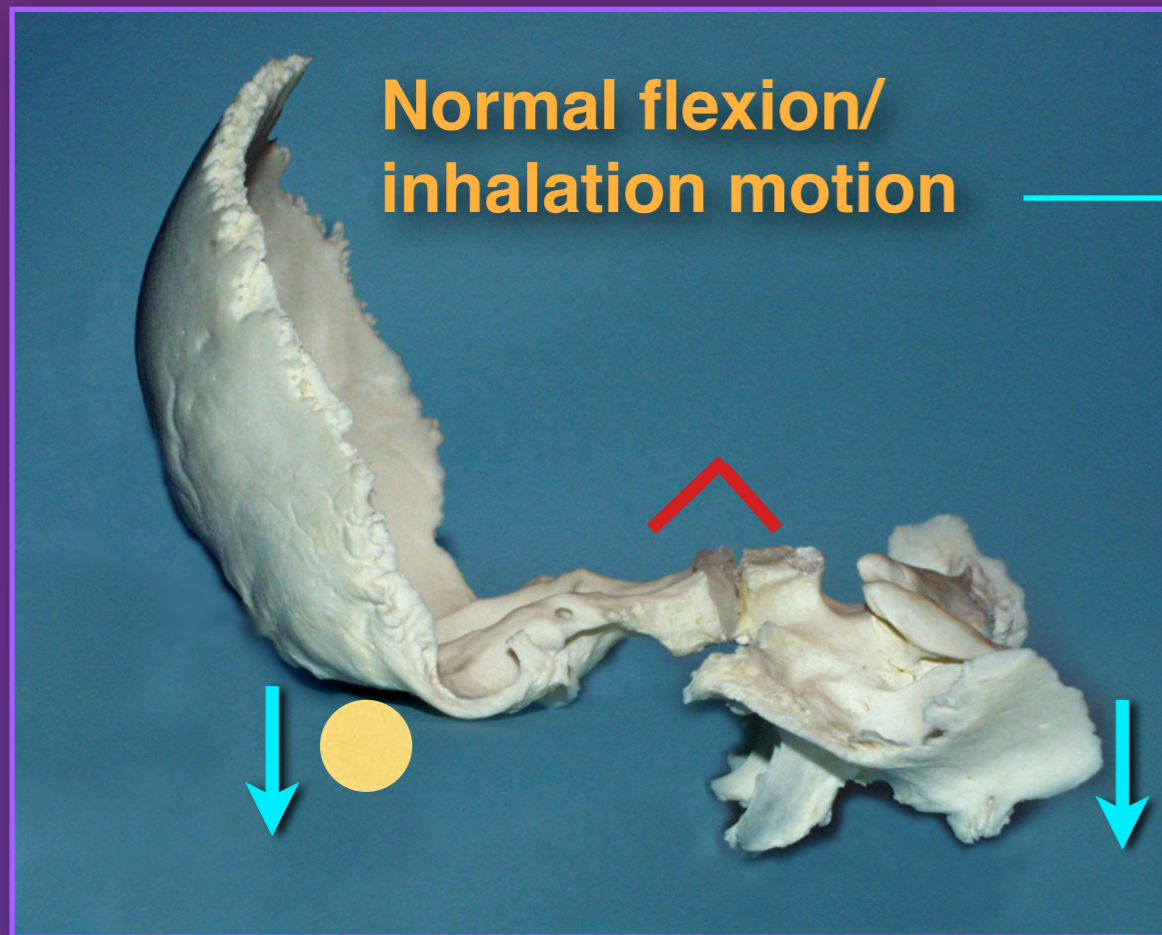
Concussion

Dissecting Problem Stage III

A component of concussion that 99.99% of all physicians **DO NOT KNOW** is that there is a disruption of the normal motion of the base of the skull. This reversed motion disrupts the pumping action of the brain, causes constriction of the blood vessels which in turn reduces normal brain function.

Cranial Indicator

Assessment of sphenobasilar motion in relationship to normal breathing



Disruption of the sphenobasilar motion (SBM) adversely affects cerebrospinal fluid flow in the brain. Traumas from concussion reverse this process. Motor and sensory, pain, migraines insomnia, mental fog, depression, anxiety, and panic attacks result.

Concussion

Dissecting Problem

Stage IV

Failure to restore this normal motion of the skull is a major factor in progressive deterioration of the brain cells and perpetuating the post-concussion symptoms. Unfortunately this disturbance is NOT being addressed and therefore the problem goes untreated.

Concussion

Resolving The problem

Four issues MUST be addressed:

1. **First:** reduce the inflammation with pharmaceutical grade enzymes
2. **Second:** correct the asynchronous motion of the base of the skull
3. **Third:** reduce the free radical components from the injured tissues
4. **Fourth:** heal the brain cells with nutrients and oxygen