

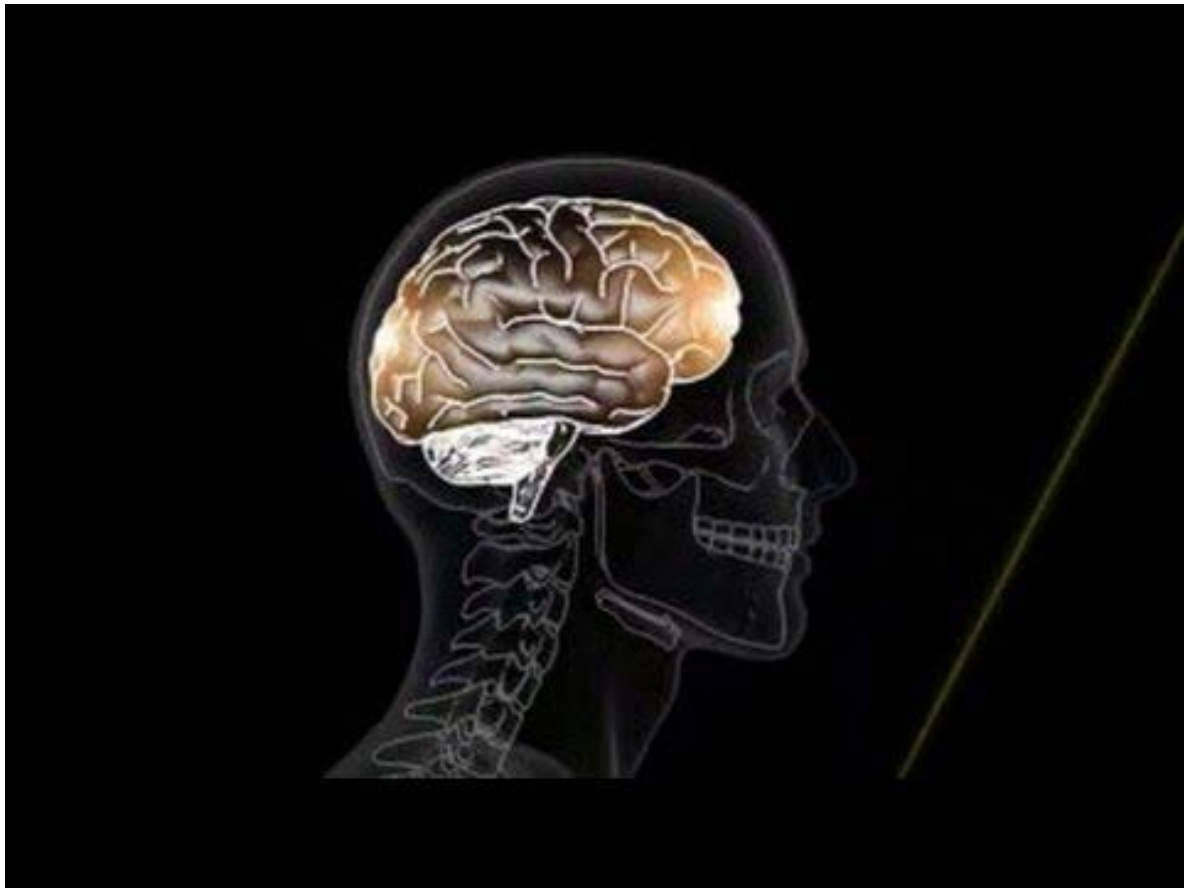
Concussion

What it a concussion

How it may relate to Multiple sclerosis

Treatment

Prevention



What is a concussion?

A Concussion or mild traumatic brain injury can occur after Trauma to the head.
(Direct impact or non-impact) Not just a collision/sport injury

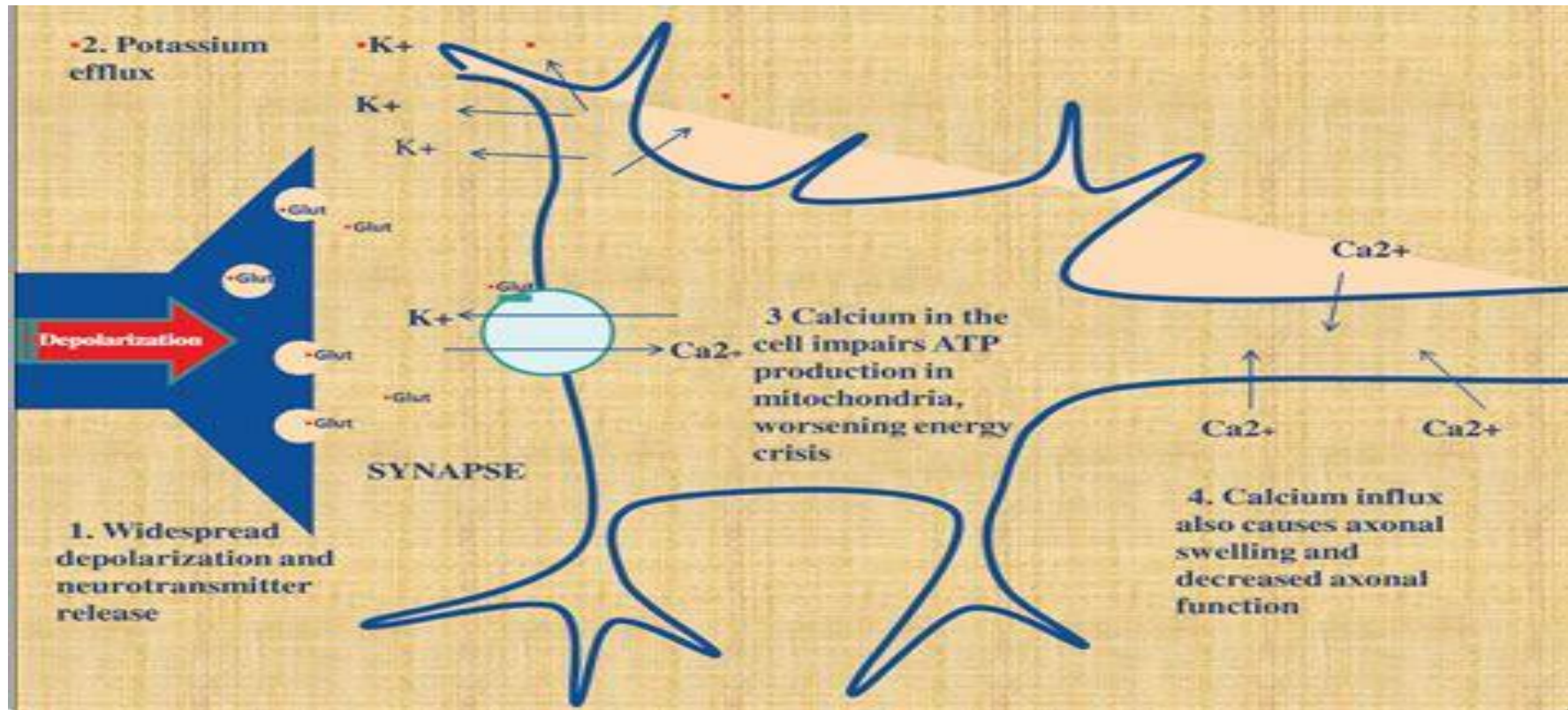
Annual incident of TBI cause: **#1** 29% Falls **#2** 20% Motor vehicle **#3** 19% struck by or against

It Can be with or without a Loss of consciousness and Imaging of the brain often does not show evidence of the injury.

Symptoms of a concussion occur due to chemical and energy changes in the brain. The Axonal injury can disrupt connections.

Not a structural injury. It's a functional injury

Pathophysiology



What does this mean?

Information to brain cells is Disrupted or over stimulated

Body is working hard to restore Charge across the cell and restore balance

This requires a lot of energy

Signs and symptoms of a concussion

Physical symptoms reported

- Headache or “pressure” in the head
- imbalance/difficulty walking/dizziness
- Nausea/vomiting
- Fatigue (feeling foggy, groggy)
- Difficulty sleeping (too much or too little)
- Double or blurred vision
- Sensitivity to light and sound

Symptoms continued

Emotional symptoms

- Irritability
- Restlessness
- Anxiety
- Depression
- Mood swings
- Aggression or decreased tolerance to stress

Symptoms continued

Cognitive symptoms

- Short or long term memory loss
- Confusion
- Slowed processing
- Fogginess
- Difficulty concentrating

What to do if you have a concussion

- Allow the brain to rest and time to heal
- Limit physical activities (sports and social activities)
- Limit cognitive demand (School, phone, TV and work activities)
- Eat well balanced diet and maintain scheduled sleep time
- Increase activities and participation as symptoms begin to Decrease
- Slowly return to normal activities as long as there is no significant increase in symptoms

UCH Concussion assessment Center (CAC)

Goals of our UCH Concussion assessment Center (CAC)

- 1) Diagnosis of concussion early and accurately: non-motorized concussion assessed within 48-72 hours of onset (ie. Falls, Assault, sports)
- 2) Provide PCP with brief summary of impairments/accommodations/recommendations
- 3) Educate patients and family on Concussion Treatment, prognosis and recovery

UCH system in southern Colorado has referral system through the Emergency Department

Acutely in the Emergency department at UCH Memorial North and UCH Memorial central (Level 1 and Level 2) : Physician and PT's identify pt's appropriate for Referral to UCH Concussion Center and identify the most symptomatic areas for Outpatient CAC follow-up.

Acutely in the Emergency department we initiate educate to patients and family on resources, healing and symptom management

Concussion Clinic located at Printers Parkway location with appointment available within 48-72 hours at various UCH Outpatient clinics in our area with Physician referral

Multiple Sclerosis symptoms



You can see how a concussion could Aggravate or exacerbate your current symptoms and delay recovery

Important to contact your Doctor or seek medical attention

Preventing falls

Energy conservation: Task analysis to rid of unnecessary work and steps, Plan rest periods throughout to day to avoid Increased pain and fatigue.

Use adaptive equipment: Assistive devices for amb safety and efficiency.

Bathroom equipment to improve safety and prevent falls

Clear the clutter, use night lights, stair safety

Take your time: work smarter not harder

Avoid stress, excessive fatigue, & extreme heat.

Resources

[HTTP://www.Neuropt.org/concussion](http://www.Neuropt.org/concussion)

Mymsaa.org (multiple sclerosis association of America)

The essential Brain injury guide. Edition 4.0 Brian Injury Association of America

[HTTP://concussionfoundation.org/PCS-resources](http://concussionfoundation.org/PCS-resources)

[HTTP://CDC.gov/traumaticbraininjury/symptoms.html](http://CDC.gov/traumaticbraininjury/symptoms.html)

[HTTP://Nationalmultiplesclerosisociety-symptommanagement](http://Nationalmultiplesclerosisociety-symptommanagement)