

Lessons from the battlefield: Common misunderstandings about brain, nerve and amputation injuries



Ted Scott, MD

Clinical Assistant Professor, Stanford School of Medicine

Attending Physician, VA Palo Alto Polytrauma Rehabilitation Center

Theodore.Scott2@va.gov



Objectives

At the end of the talk, participants will be able to discuss common lay misconceptions about:

- Brain injury
- Amputation
- Nerve injury

I have no financial or other commercial relationships to disclose.

This talk may discuss off-label uses of medications.



Struggling Back From War's Once-Deadly Wounds

By PHOTOCOPY



Mr. ...

... of the ...

... of the ...

... of the ...

THE WOUNDED

... of the ...

THE WOUNDED

... of the ...

... of the ...

... of the ...

Newsweek

March 27, 2008

Casualty of War Damaged brains are emerging as the singular injury of the Iraq conflict. A soldier's story.

By Barbara Steinbock
Special to Newsweek



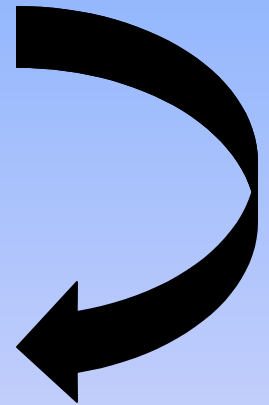
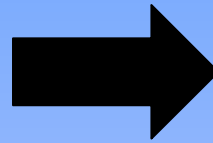
Right: James Lewis at the VA facility in Menlo Park, California, with his hands resting on a table. Photo by [Name] for Newsweek

... of the ...

... of the ...

... of the ...

... of the ...

















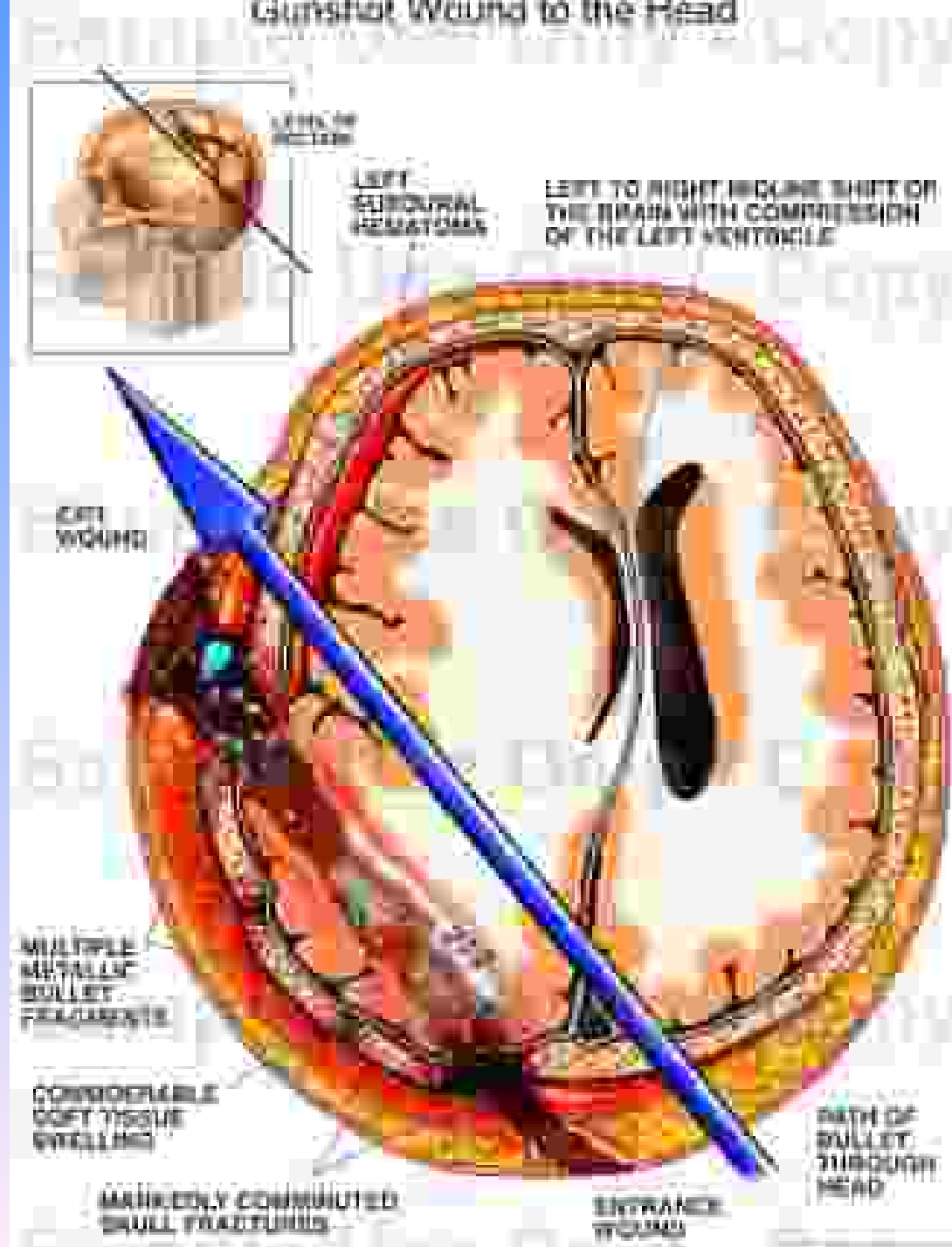


Misunderstanding: The only thing that hurt my brain was the bullet.



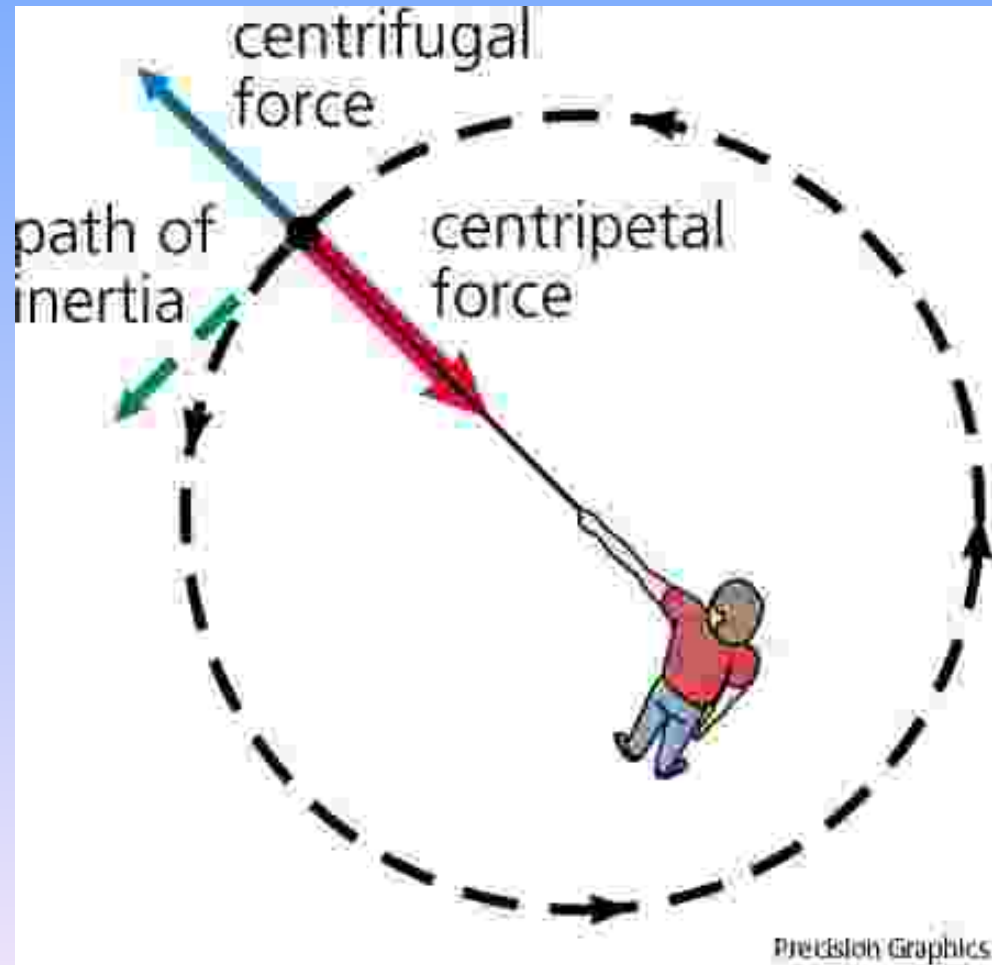
Potential Mechanisms of Injury:

- Bullet destruction



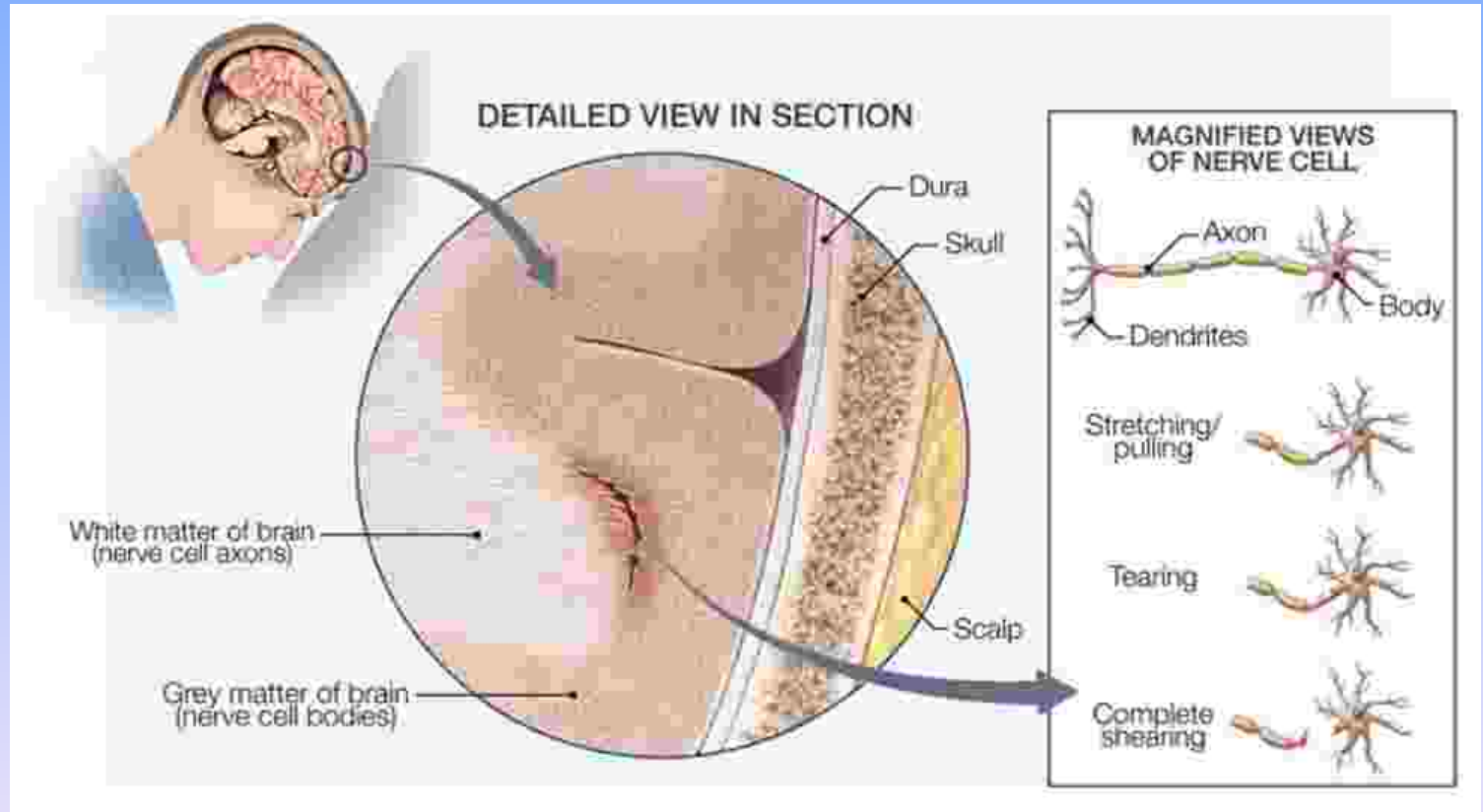
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury



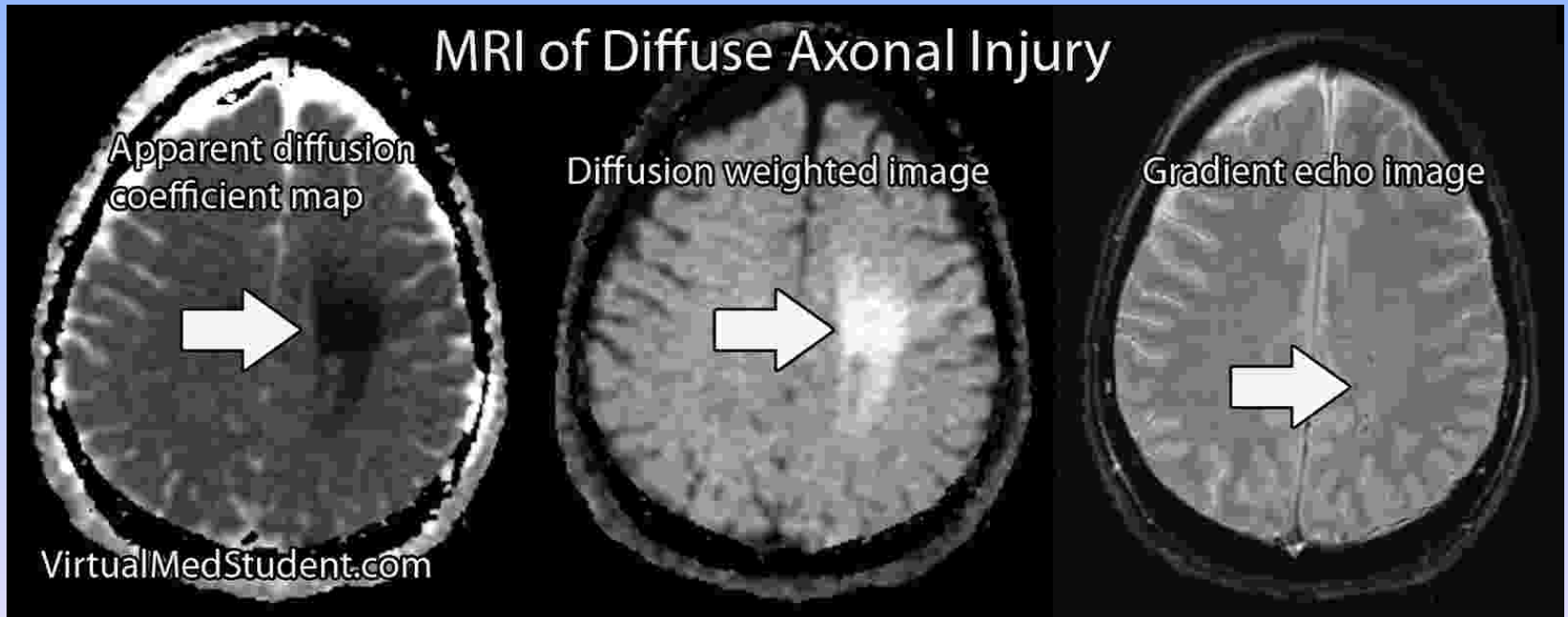
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury



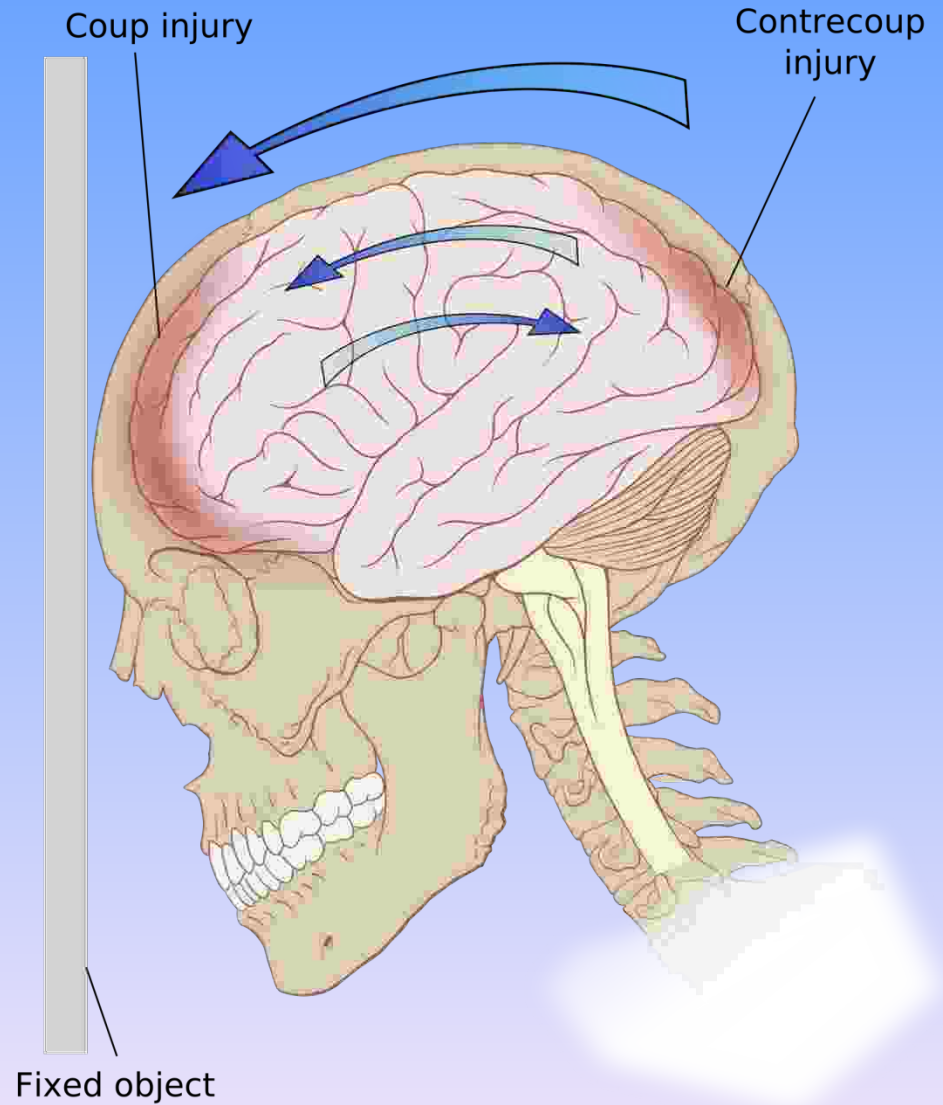
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury



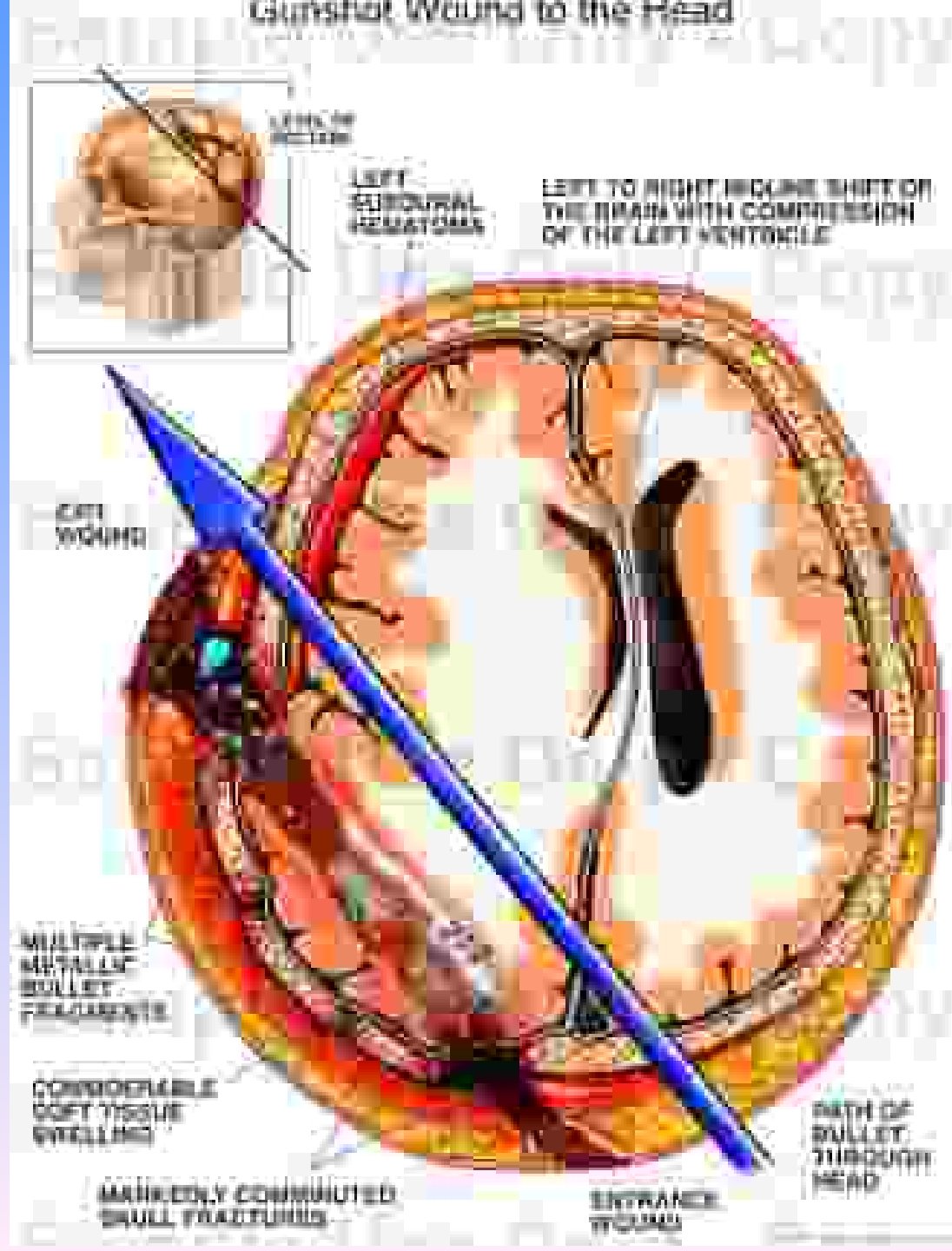
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion



Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion
- Bleed, swelling, compression



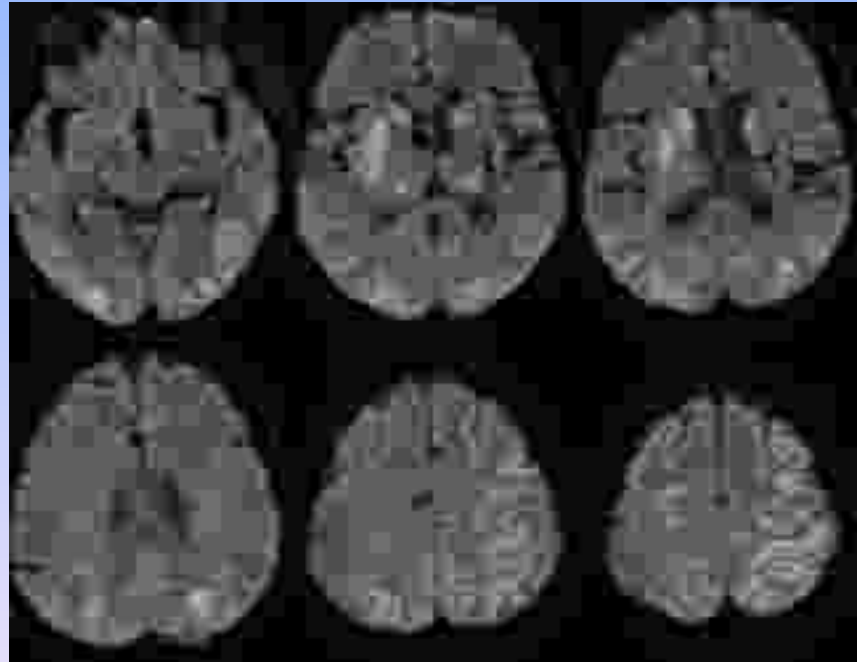
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion
- Bleed, swelling, compression



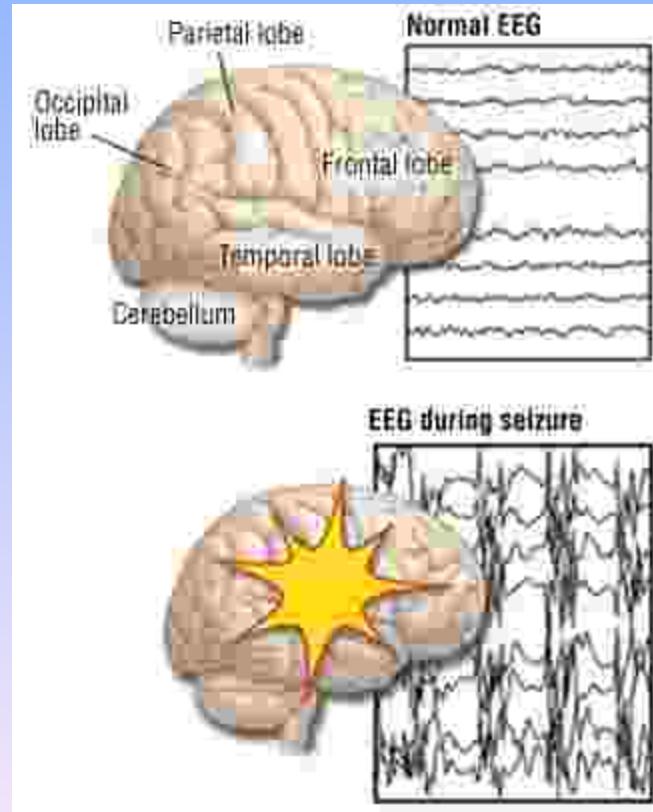
Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion
- Bleed, swelling, compression
- Problems with blood flow to all of the body



Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion
- Bleed, swelling, compression
- Problems with blood flow to all of the body
- Seizure

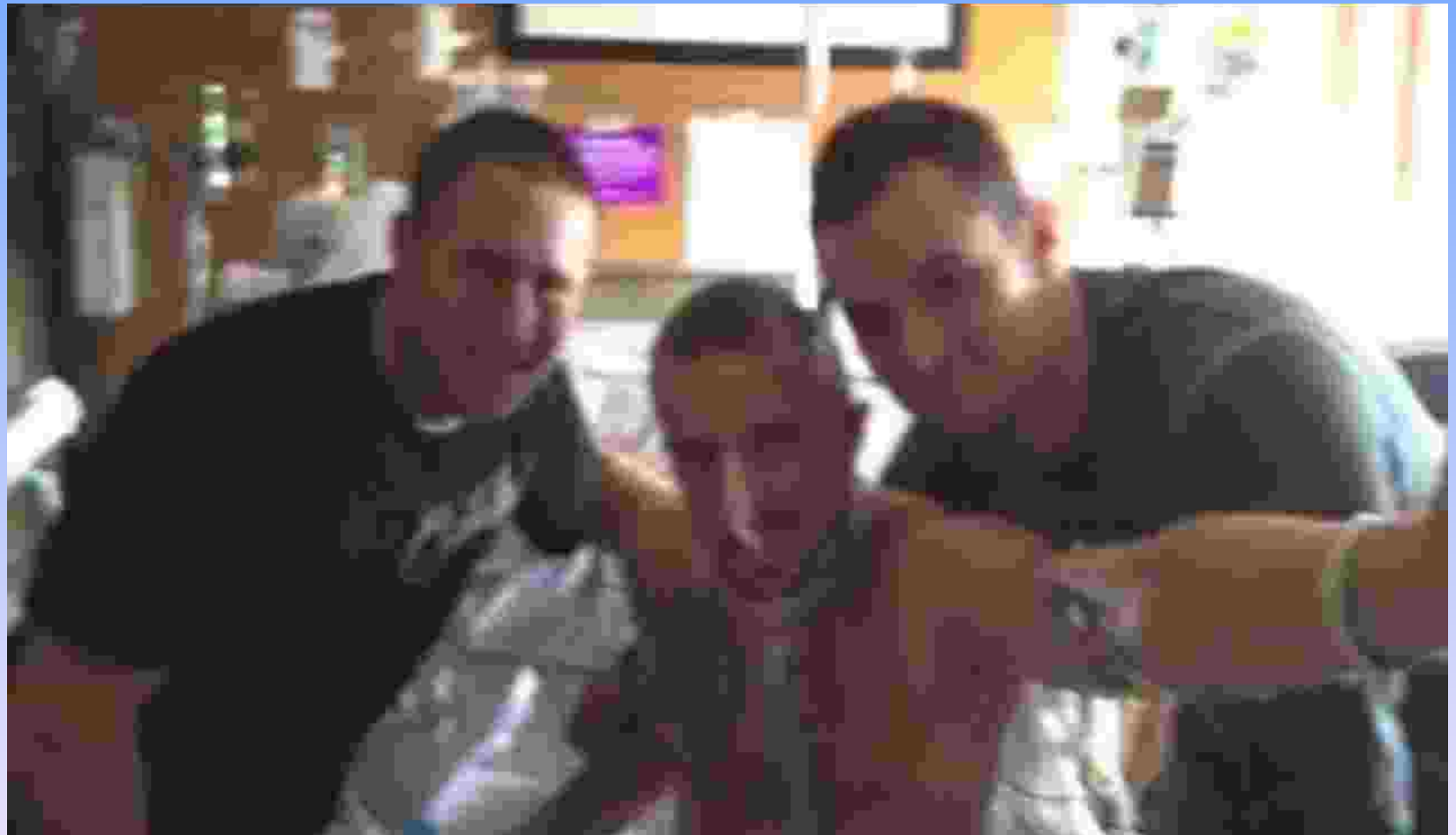


Potential Mechanisms of Injury:

- Bullet destruction
- Diffuse axonal injury
- Fall from ladder with contusion
- Bleed, swelling, compression
- Problems with blood flow to all of the body
- Seizure
- Open and retained bone; risk of infection







Misunderstanding: He looks OK to me.



Misunderstanding: He looks OK to me.



Hope and denial

Misunderstanding: He looks OK to me.



Hope and denial
Old vs new memories

Misunderstanding: He looks OK to me.



Hope and denial
Old vs new memories
“Focal” neurologic
deficits

Misunderstanding:

Perfect SAT score means full recovery.

Case: 20 yo with polytrauma from IED in Iraq







Frontal Lobe:

What am I going to do today?

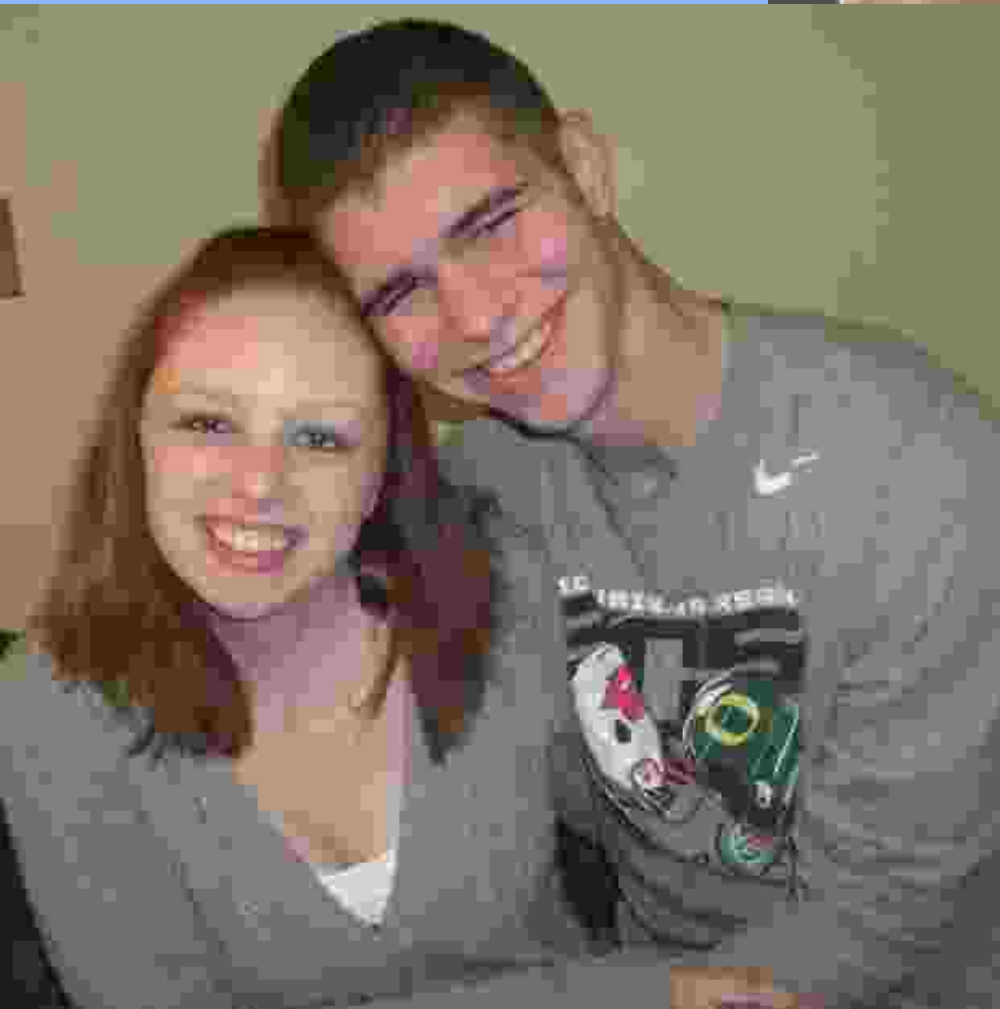
Some frontal lobe deficits:

**Difficulty with choosing goals, planning,
initiating**

Poor consideration of risks

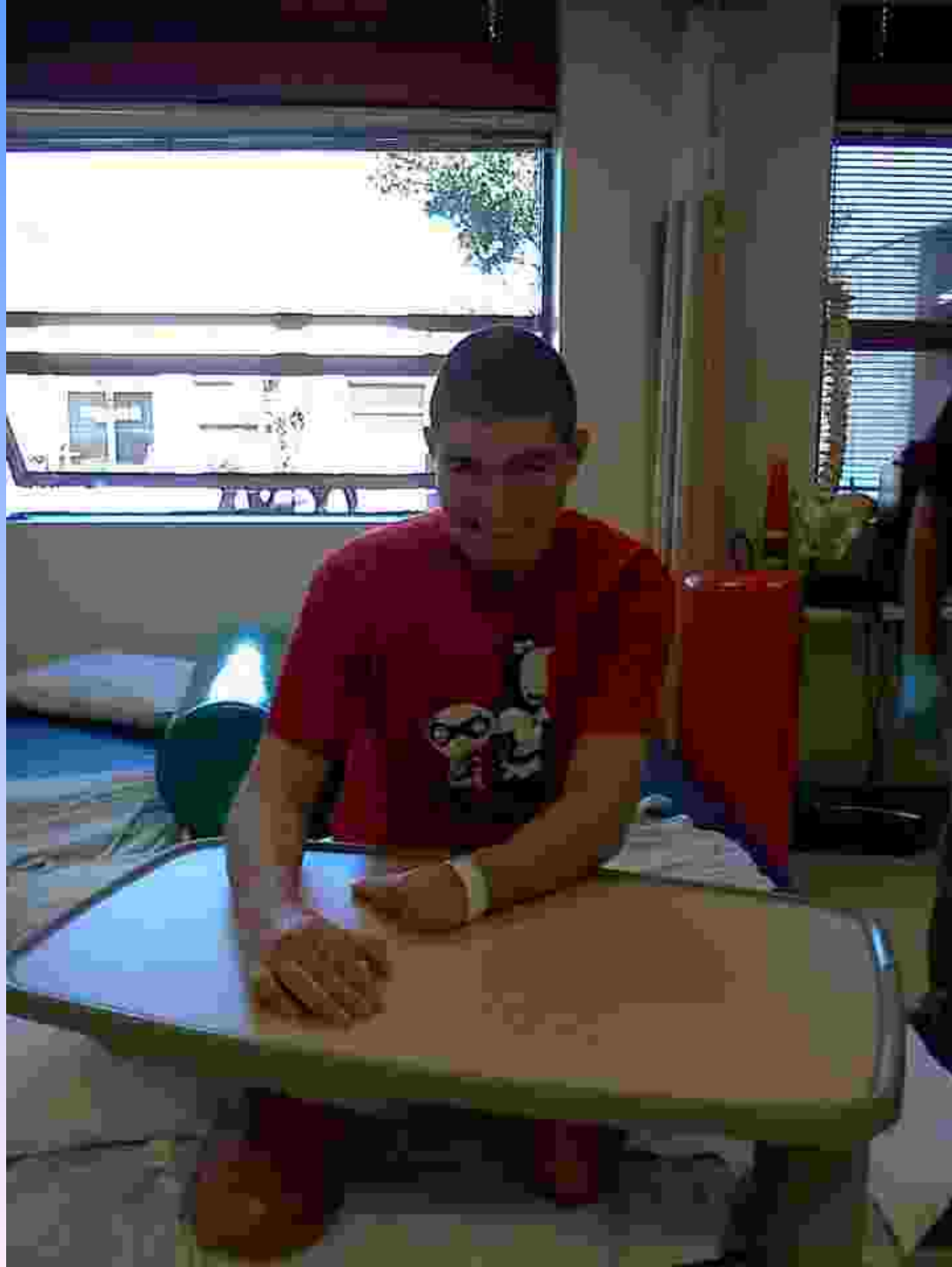
Impulsivity

Poor self-monitoring of behavior

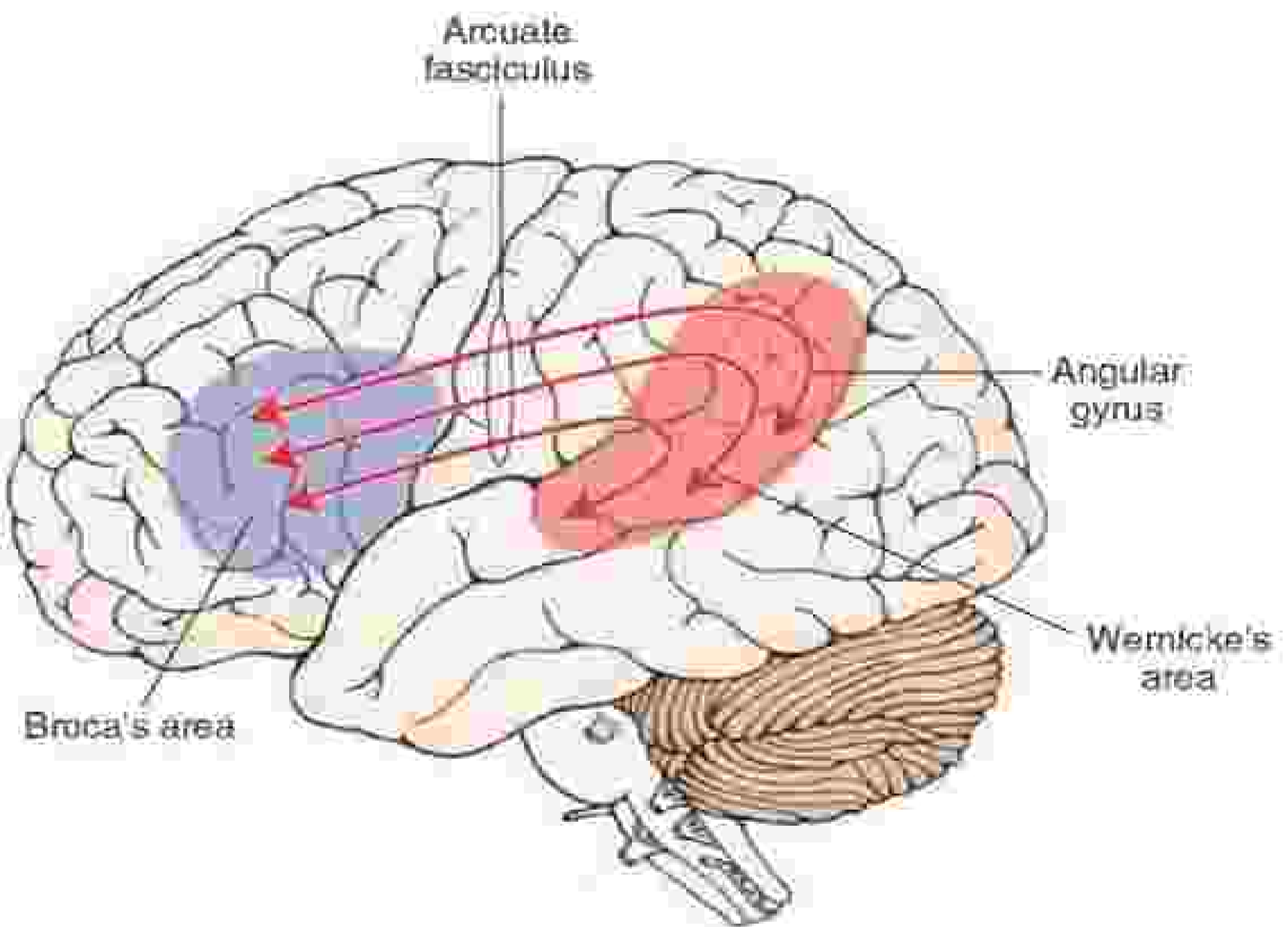








**Misunderstanding:
Speech is just words.**

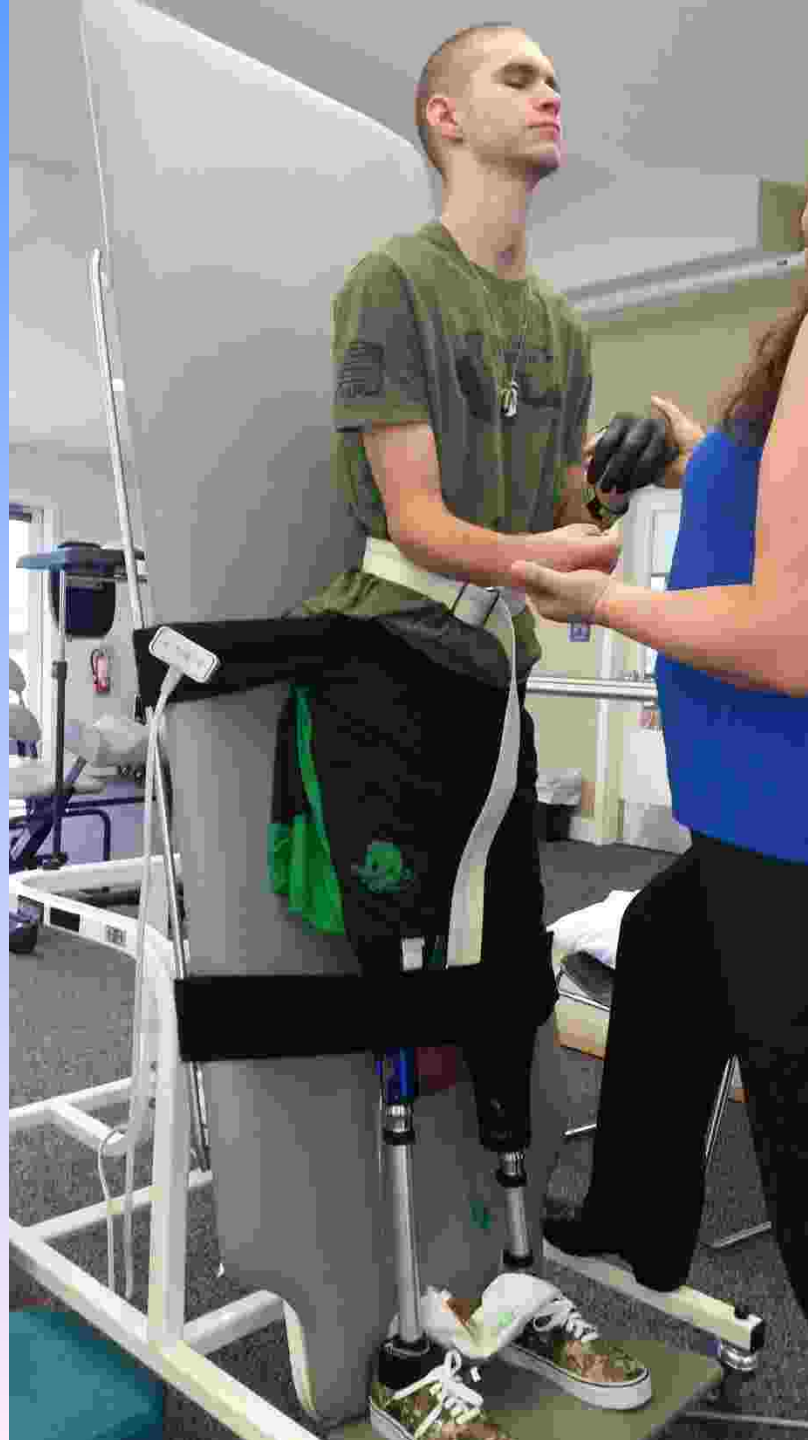


Right hemisphere communication deficits

- Takes expressions literally
- Unable to identify what is relevant information
- Sometimes confabulates
- Bad at nonverbal communication
 - Body language
 - Tone of voice
 - Facial expression
 - Bad at turn taking and other social rules
 - Social context









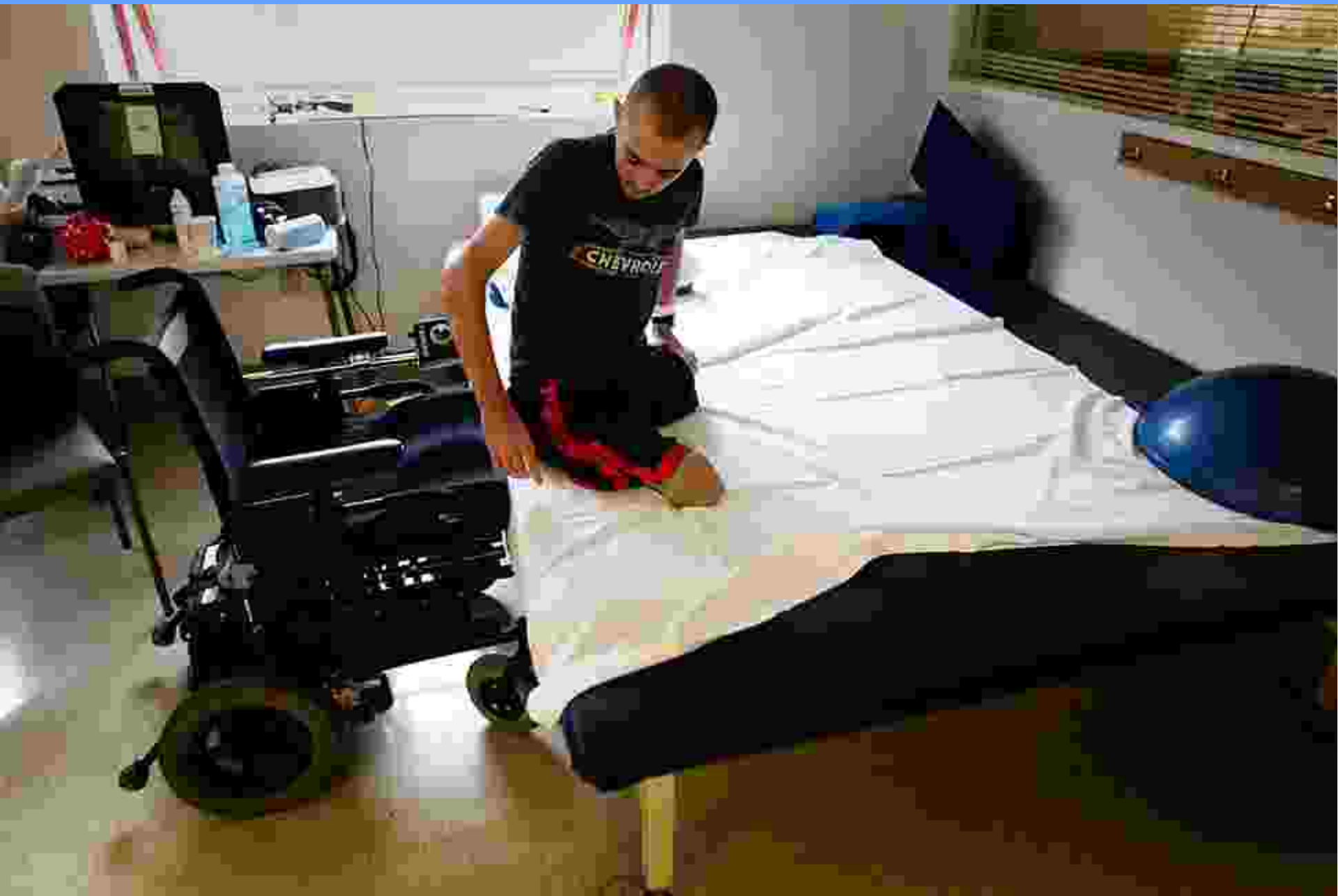


To Farrell — The nation will be forever grateful for your service!

Barack Obama















Misunderstanding: Walking means you're cured.



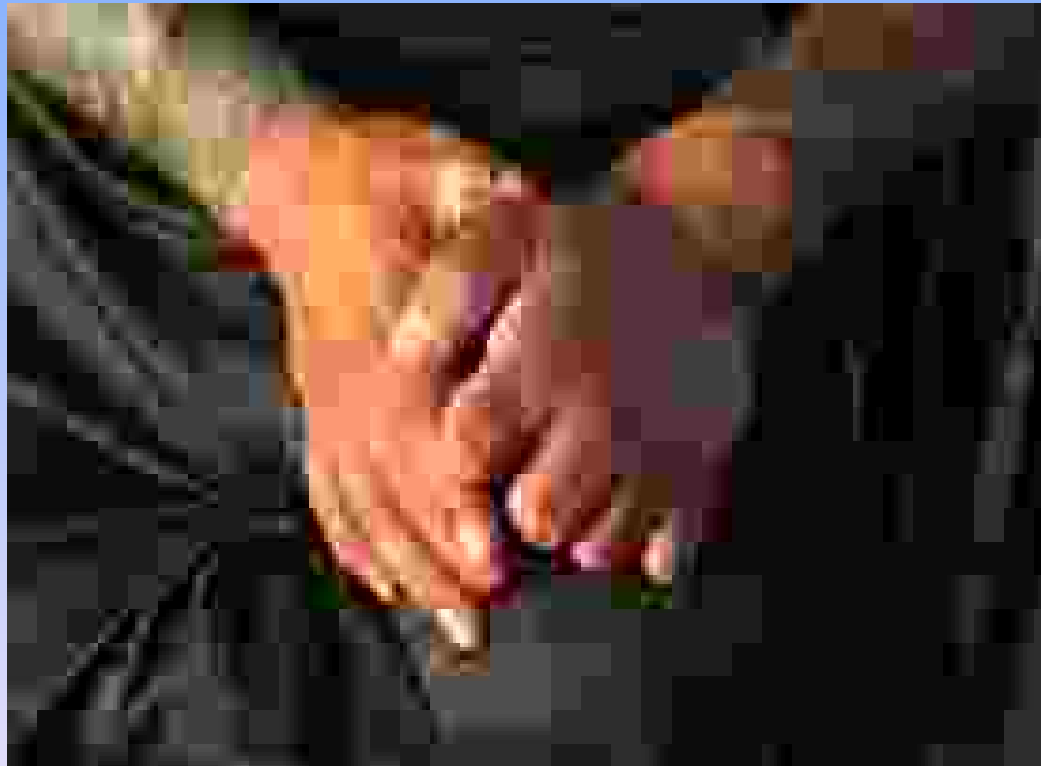


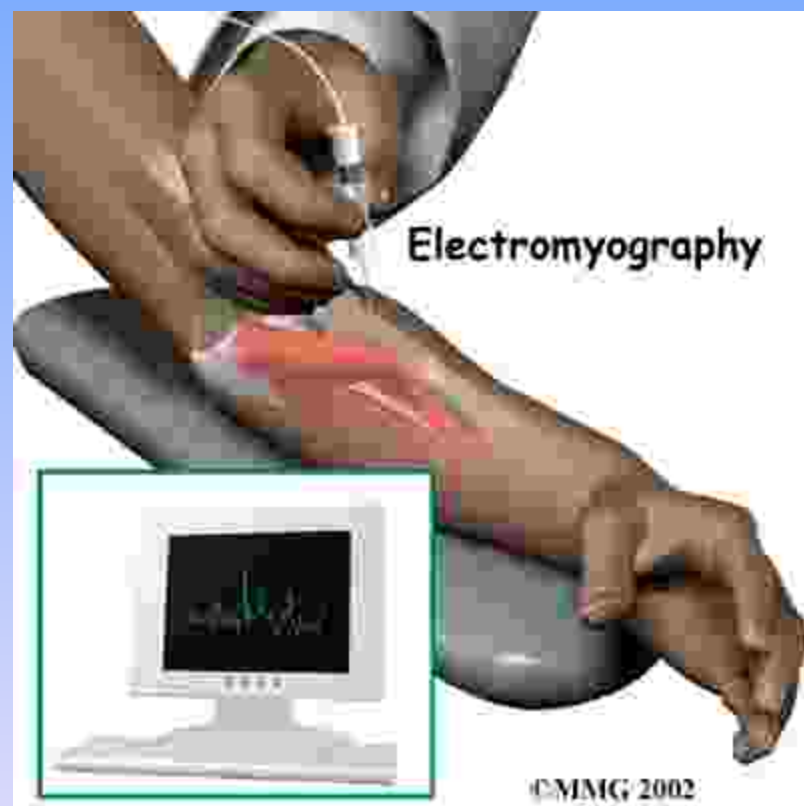


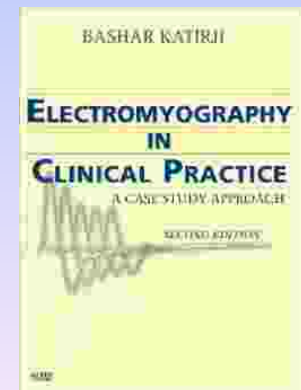
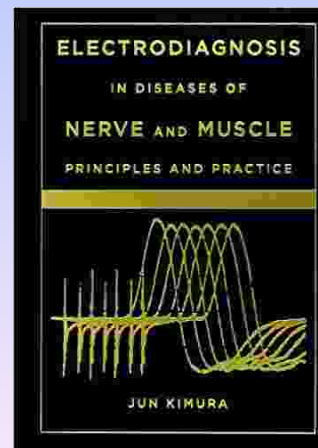
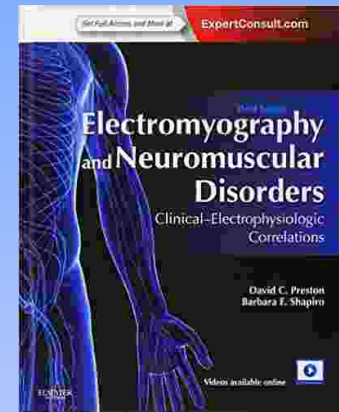
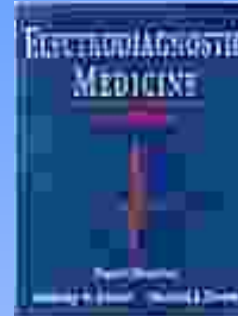


Misunderstanding:

**Only time will tell if I will move my hand
again.**







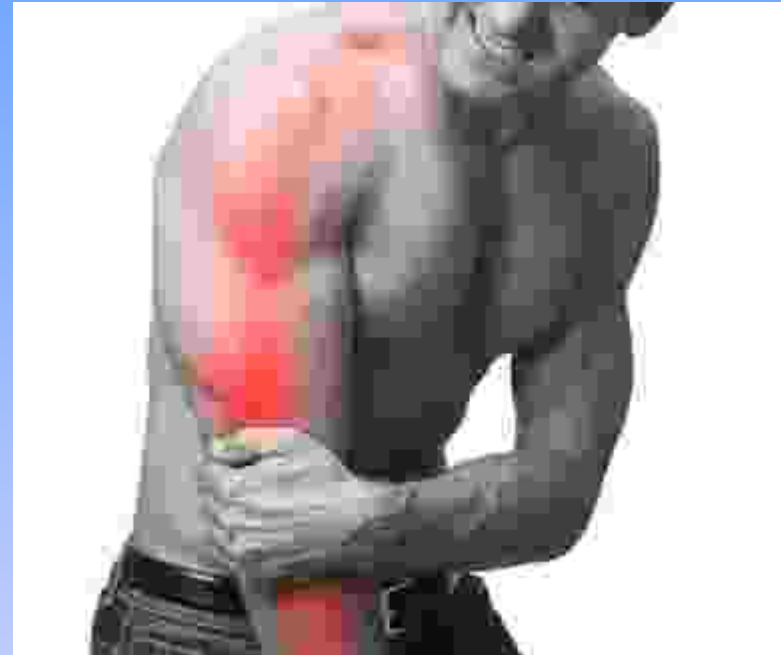




Photo Courtesy of Shadowcatcher Imagery









Misunderstanding: Pain Precludes Function





**Misunderstanding:
Thank God that's over.**





Survivors of brain injury are at a higher risk than the general population for depression.



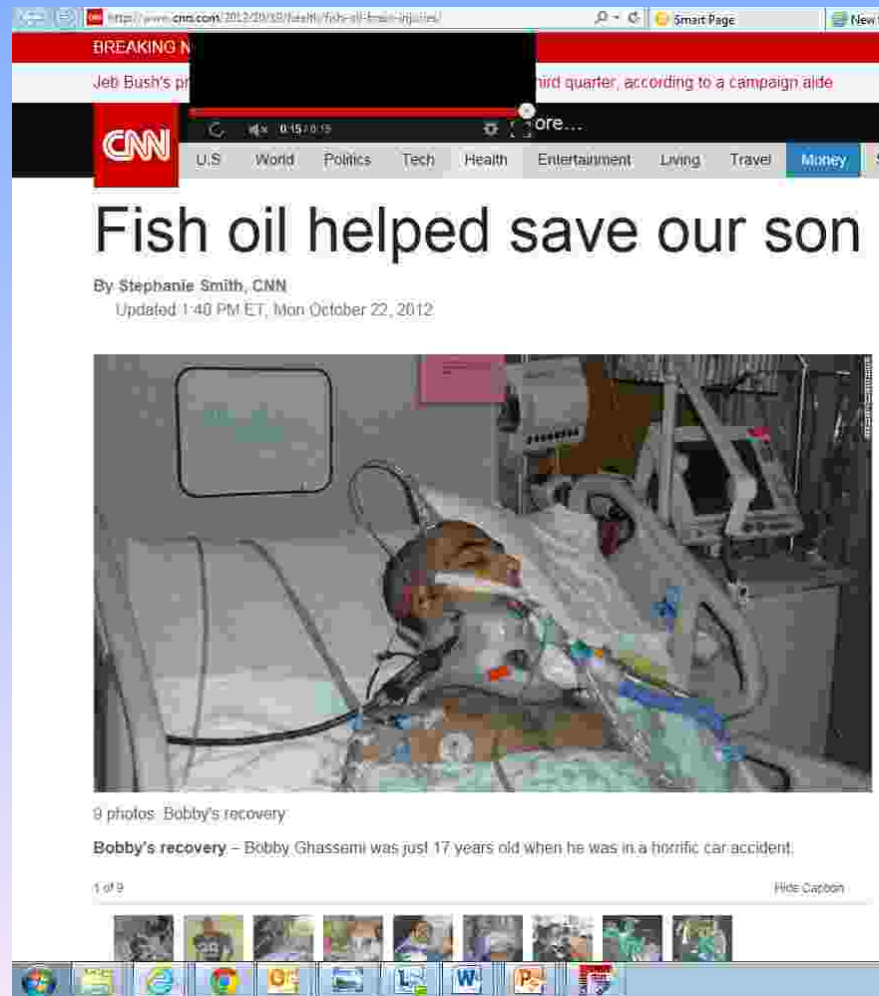
We can help



- Brain injury rehabilitation doctor
- Therapy
- Support groups
- Caregiver respite
- Education, both patient and family



Misunderstanding: There's a Secret Cure:



The image is a screenshot of a web browser displaying a CNN news article. The browser's address bar shows the URL: <http://www.cnn.com/2012/10/22/health/fish-oil-children-accident/>. The page features a red "BREAKING NEWS" banner at the top, with a video player below it showing a snippet of a news report. The main headline of the article is "Fish oil helped save our son", written by Stephanie Smith for CNN, and updated on October 22, 2012. The article's main image shows a young boy, Bobby Ghassemi, lying in a hospital bed, appearing to be in a state of recovery. Below the image, there is a photo gallery with the caption "Bobby's recovery" and a brief description of the boy's accident. The Windows taskbar at the bottom of the screenshot shows various application icons, including Internet Explorer, Google Chrome, and Microsoft Word.

http://www.cnn.com/2012/10/22/health/fish-oil-children-accident/

BREAKING NEWS


Jeb Bush's pl... hird quarter, according to a campaign alde

CNN

U.S. World Politics Tech Health Entertainment Living Travel Money

Fish oil helped save our son

By Stephanie Smith, CNN
Updated 1:40 PM ET, Mon October 22, 2012



9 photos Bobby's recovery

Bobby's recovery - Bobby Ghassemi was just 17 years old when he was in a horrific car accident.

1 of 9 [Hide Caption](#)

**Misunderstanding:
No diagnosis means no injury.**

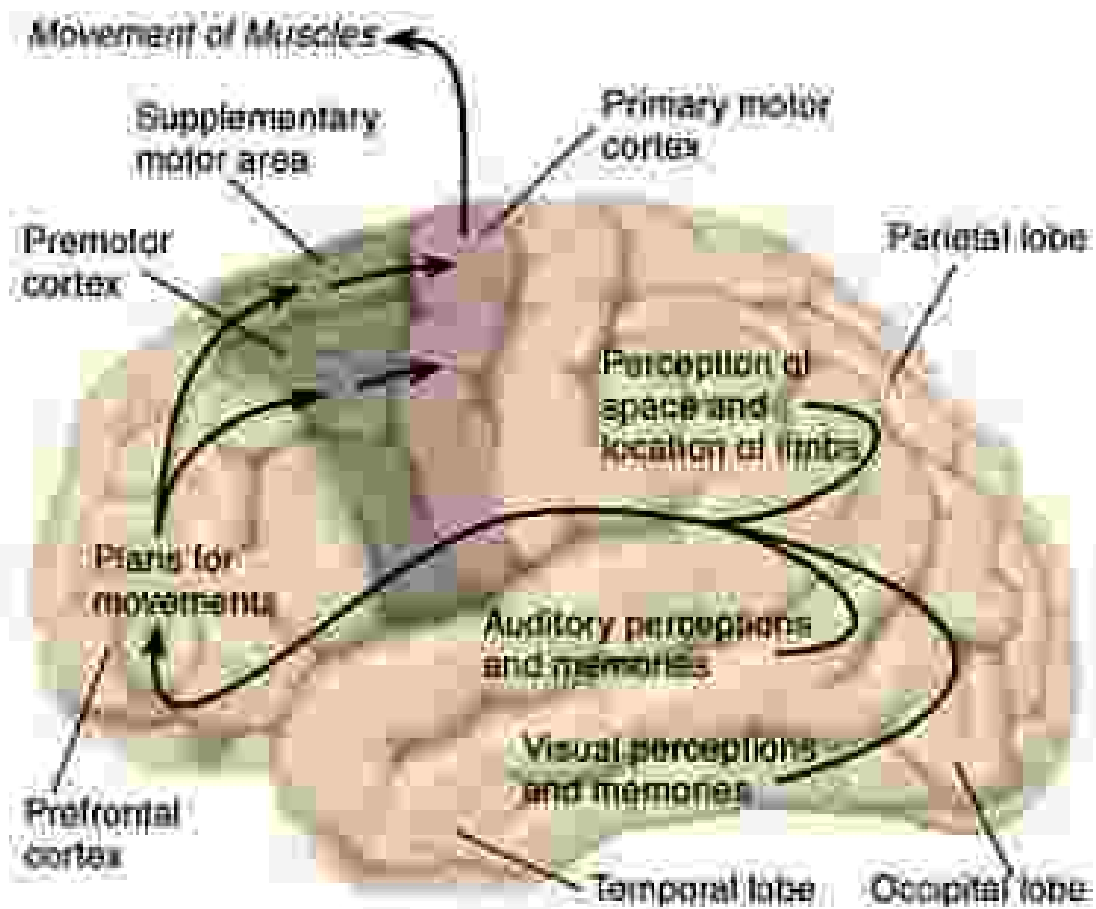


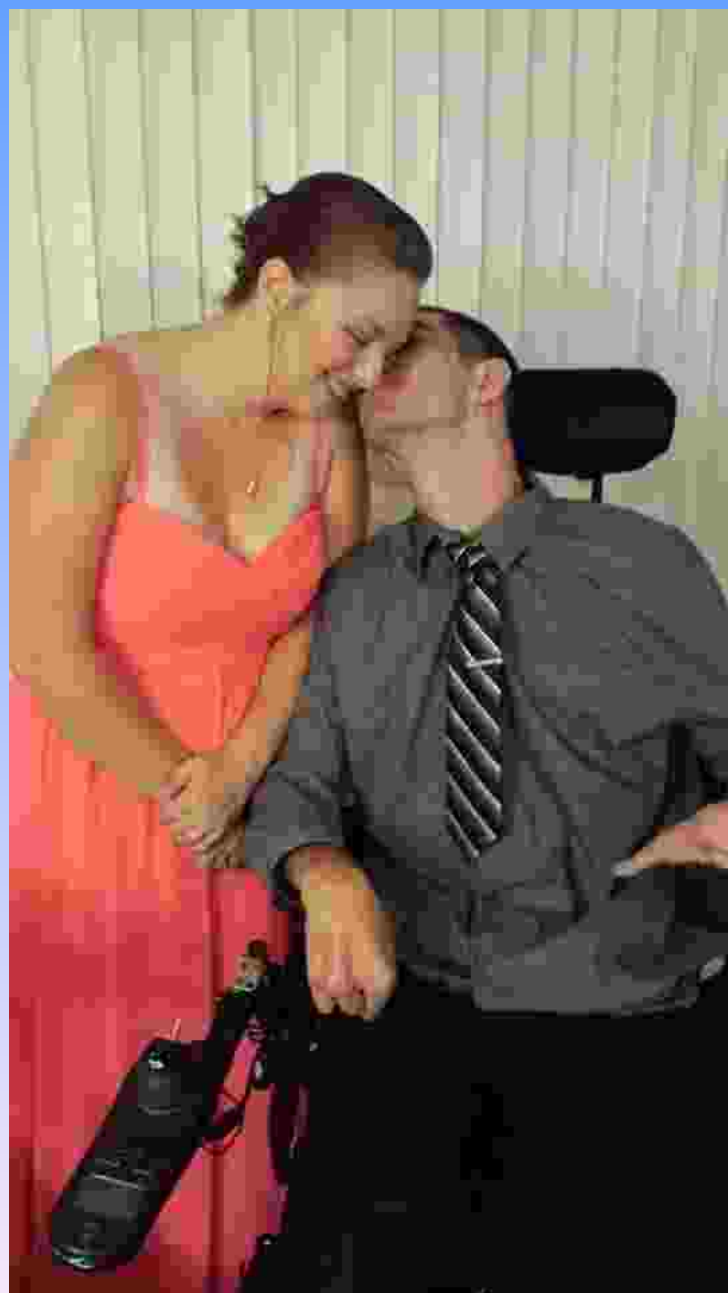
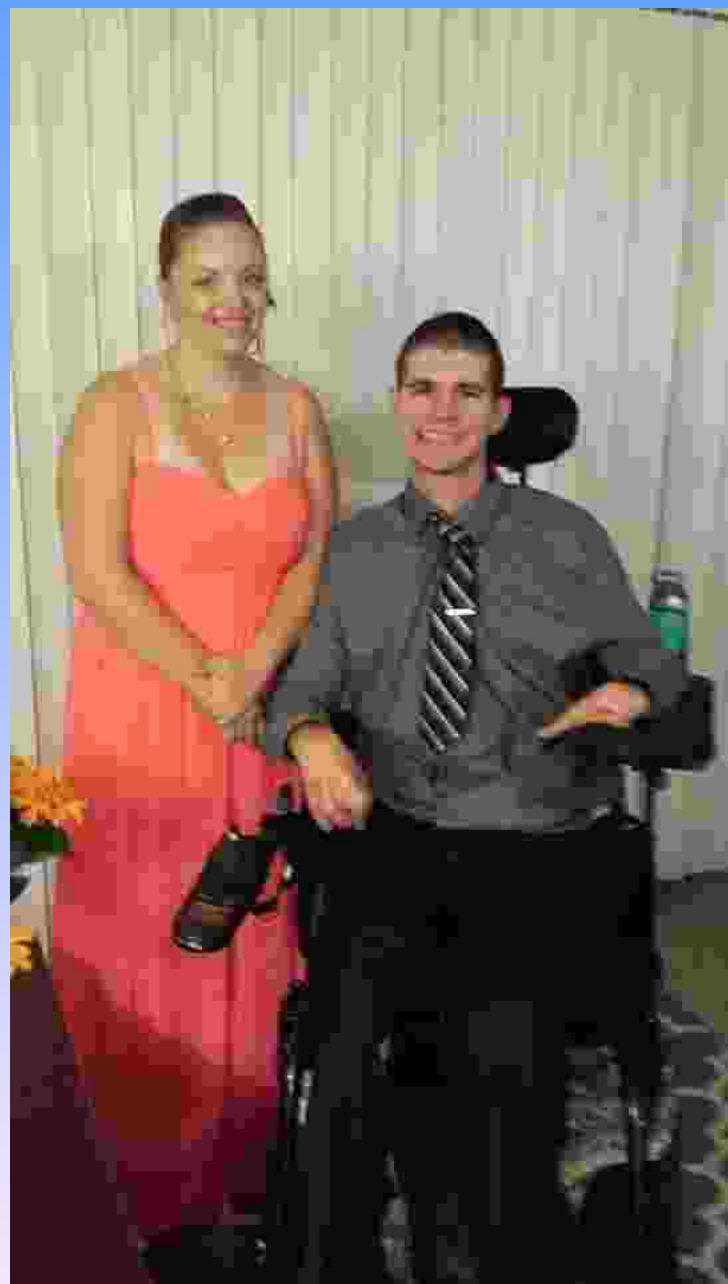
**Misunderstanding:
Strength is Function.**

Apraxia





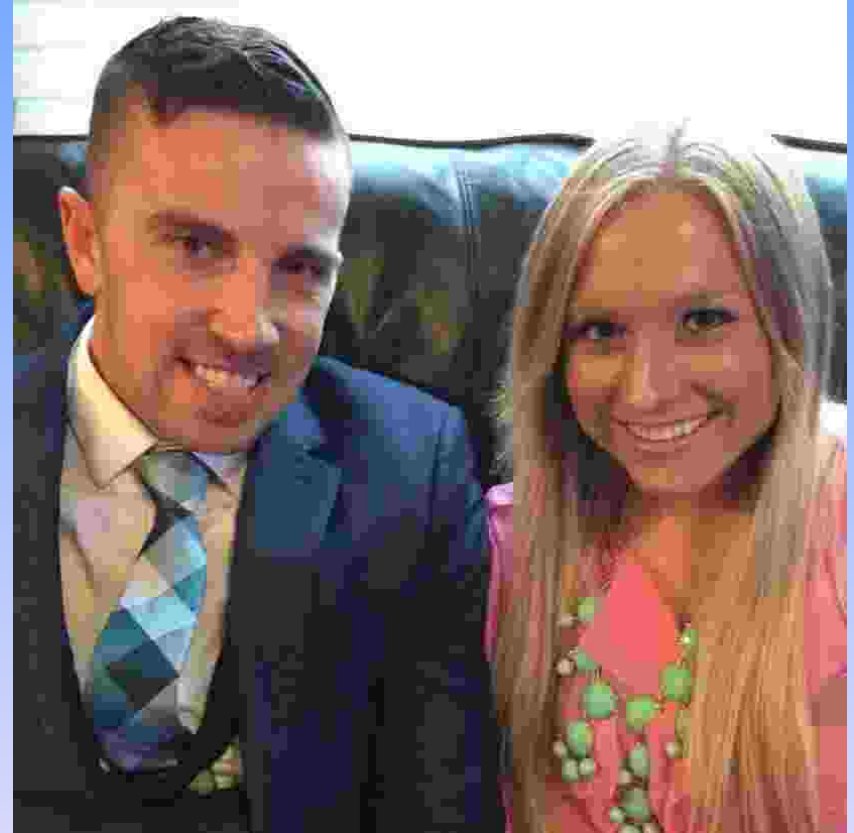






Congrats Kimmy & Alex!! 10.26.13

















Thank you to all the
patients who have shared
their experiences.

Polytrauma: Brain injury, Amputation, and Nerve Injury – what laypeople get wrong

Ted Scott, MD

Clinical Assistant Professor, Stanford School of Medicine
Attending Physician, VA Palo Alto Polytrauma Rehabilitation Center

Theodore.Scott2@va.gov

