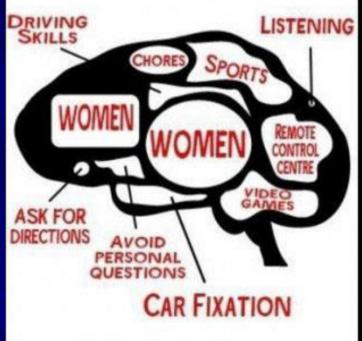
# Acquired Brain Injury Who is this person? Dealing with Mild to Severe Behavioral Challenges

**Presented By** 

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#### **MALE BRAIN**



#### **FEMALE BRAIN**



# How do Traumatic Brain Injuries (TBI) happen?

- Falls
- Motor Vehicle Accidents
- Sports Injuries
- Assault
- Penetrating Head Injury







# How do Acquired Brain Injuries (ABI) happen?

- Abscess
- Aneurysm
- Anoxia/hypoxia
- Arterioveneous Malformation (AVM)
- Encephalitis
- Tumor

# How do Acquired Brain Injuries (ABI) happen?

- Fetal alcohol syndrome
- Meningitis
- Metabolic encephalopathy
- Seizure Disorder
- Stroke
- Tourette Syndrome









# Atypical Injuries include, but are not limited to;

- Gunshot Wounds
- Near Drowning
- Anaphylactic Shock
- TEXTING while driving



# How do Children become Brain Injured?

- Bicycle Accidents (No helmet)
- Birth Trauma
- Fetal Alcohol Syndrome
- Shaken Baby Syndrome
- Brain Tumors

#### **ABI** Prevalence

- 12 million Americans
  - 5.3 Million TBI
  - .7 Million CVA
- 3.8% of the US Population
- 2<sup>nd</sup> Most Prevalent Injury in US

#### Incidence of TBI

- 1.7 million new TBI's each year
- 52,000 deaths per year
- 280,000 hospitalizations
- 2,500,000 ER visits
- A TBI occurs every 23 seconds in US
- 125,000 new onset of a long-term disability in US each year

- Brain Injury after the age of 5 and before the age of 15 accounts for more than ½ of all deaths due to trauma.
  - Of those with severe TBI, 80% have been found to have special educational needs 2 years post injury (Ewing-Cobbs et.2001)

# "Brain Injury and Behavior"



### TBI vs. CHI

### Traumatic Brain Injury

External force/blunt trauma to head

Brain is penetrated

### Closed Head Injury

Brain Injury in which skull and brain IS NOT PENETRATED

Which Causes More Damage?

### Severity of Brain Injury

Mild – No loss of Consciousness (No LOC)

 $\overline{\text{Moderate} - \text{LOC}} < 30 \text{ min}$ 

Severe - LOC > 30min

### Measuring Cognition

- 1. Glasgow Coma Scale best motor response, verbal response, eyes open to command (3-15)
- 2. Rancho Los Amigos (1-10)

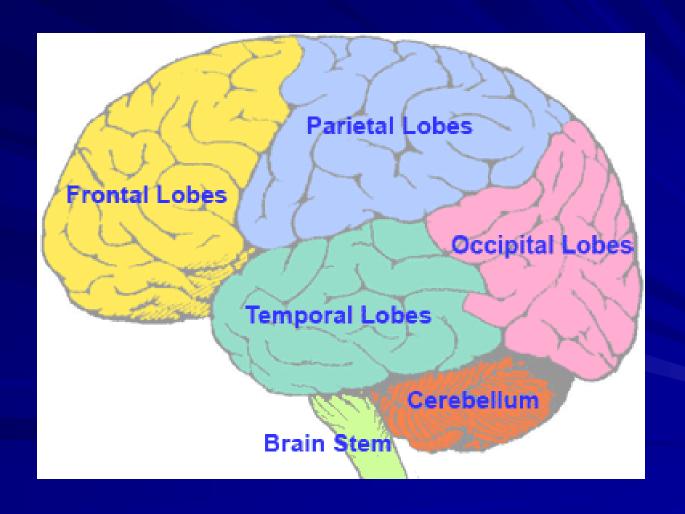
### Driving Time!



#### Overview of the Brain

- Temporal Lobe
  - Language and Forms Memory
- Parietal Lobe
  - Analyzes & Integrates Sensory & Motor Functions, Recognizes touch, location in space recognizes faces and objects
- Occipital Lobe
  - Vision
- Frontal Lobe
  - Executive Functions

#### Lobes of the Brain



When behavior is not in check...what can happen?

Placed in a....



**Psychiatric Facility** 

### Or worse....Jail



### Predicting Outcome through Pre-morbid Traits

- Age
- Level of Education
- Socially Appropriate Behavior
- Vocation
- Medical Complications / Psychiatric Diagnosis
- Time of LOC

### **Predicting Outcomes**

Early Emergency Interventions

Support Systems

### Cognitive Status and Impact

#### Memory

- PTA Post Traumatic Amnesia
- Retrograde Remembering events leading up to injury

#### Executive Function

- Limited attention span
- Difficulties planning organizing and planning ahead
- Judgment Concerns

#### Initiation

- Lack of initiative Getting out of Bed
- Doing ADL's

#### Poor Communication

- Reading, Writing, Speaking, and Understanding
- NOT ABLE TO COMMUNICATE WANTS/NEEDS EFFECTIVELY

#### Common Physical/Medical Problems

 Vision, H/A, Fatigue, Swallowing/Eating, Coordination/Balance, and Impaired Speech

# Early Signs of Behavioral Changes

- Restlessness
- Tardiness
- Confrontational or Argumentative
- Social/Emotional Problems
- Low tolerance levels
- Low self-esteem

### Increasing Signs of Changing Behaviors

- Pattern or routine changes
- Increased volume in voice tone or shouting
- Increase usage of alcohol
- Slamming doors
- Refusal to do normal tasks or activities

- Increased Anxiety
- Easily Irritated, angry, or frustrated
- Overreacts; cried and laughs easily
- Mood swings
- Depression

### Warning Signs of Severe Behavior

- Property Destruction
- Threats to harm others or self
- Pushing or shoving
- Striking or punching
- Sexual disinhibitions

### Behaviors Dysfunction most often creates:

- Rejections from friends
- Family frustration
- Martial Difficulties
- Sex

### Complete Communication Road Block

- Denial of symptoms
- NO Insight into deficits

### Treatment Strategies

### Direction Following

- Eye Contact
- Say OK
- Do the Task
- Check Back

### Social Skills Acquisition

- 3 foot distance
- Accepting 'No"
- Accepting Limits
- Accepting Compliments

#### Communication Problems

- Word Retrieval
- Expressive Language & Organization
  - "Barn", "Give me the Book"
- Comprehensive of Abstract Language
  - "Raining Cats and Dogs"

### What's in it for me?

Preferred Task

Non- Preferred Task

# Returning Home Treatment Plan

- Identify strengths and weaknesses
- Facilitate Problem Solving 1-step commands
  - "What's Important to remember opposed to what's not?"
- Communication & Cooperation with Medical Professionals and Family Members
- Provide opportunity for problem-solving
  - Open Ended Questions "Tell me"
- Prepare Home
- Special Services Needed
- Rehab Equipment
- Educational Services

# Effective Praise

- Extending a compliment and why it is important to the individual.
- Utilize an 8:1 Ratio of Compliments to Critical Comments.
- Catch your client doing something good.

#### Case Study

Patient Name: MG

Present Age: 35

Weight: 118 lbs

Height: 5 feet

Initial Diagnosis: TBI - DAI Age 18 -

MVA

- 1. Patient has been in psychiatric institutions since the age of 20.
- 2. EEG Abnormal due to presence of several left mid-temporal spikes and spike wave discharges

- ■Severe Bulimia vomit on demand 10 times per day, with a history of 25-30 events
- Projectile vomiting
- ■Self Injurious Behavior (SIB) PICA, swallowing non-food items and objects, most recently a plastic spoon...averaging 25-30 endoscopies per month
- Biting Self and Spitting Blood at others
- Fire setting
- Sexually Inappropriate/Active
- Abuse of Drugs and Alcohol
- Non compliant with medications
- 12:1 staffing Universal Precautions Run Away Precautions

### Medical Complications

- Contracted HIV at age 20
- ■HEPC (HCV)
- Herpes
- •Electrolyte Imbalance
- Complex Partial Seizures

#### Admitting Medications to FINR

- Thorazine 100mg by mouth/IM three times a day
- Klonopin 2mg by mouth twice a day
- Omerparzole 20mg by mouth daily
- Bactrim DS by mouth daily for 14 days (UTI)
- Haldol 5mg by mouth/IM twice day
- Ativan 4mg by mouth/IM every 6 hrs PRN

#### Adjusted Medications to Date

- Naltrexone 50mg .5 Tab twice by mouth daily
- Zoloft 50mg by mouth daily
- Ferrous Sulfate 325 mg by mouth once daily
- Multi-vitamin one tab by mouth daily
- Atripla one tablet at bedtime
- Clonazepam 2mg one tab twice daily
- Potassium 20mg 2 tabs twice daily
- Diastat 15mg rectally PRN for seizures lasting over 3 min.
- Omerprazole 20mg by mouth daily

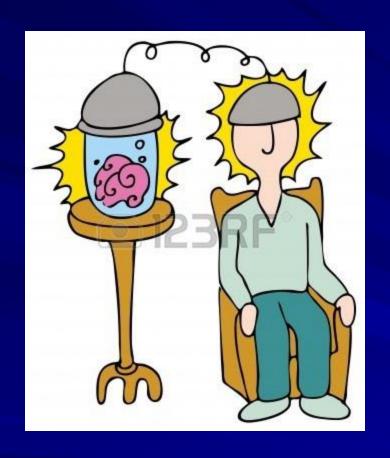
## Behavior Changes Following Medication Intervention and Behavioral Strategies

	Feb 2008	Feb 2009	Feb 2010	Feb 2011
Physical Aggression	69	30	19	3
PICA	36	12	4	2
Vomiting	395	296	31	9
Head Banging	32	6	0	0
Biting	11	2	0	0
RX Non- Compliance	90	37	14	2
Staffing	2:1	1:1	1:1	1:1

	Feb 2008	FEB 2012
Physical Aggression	69	0
PICA	36	0
Vomiting	395	0
Head Banging	32	0
Biting	11	0
RX Non- Compliance	90	1
Staffing	2:1	Visual

#### **Transitional Behaviors**

- MG is now living in a female based cabin.
- MG has a vocational position working in our computer lab earning minimum wage.
- MG participates in social activities, movies, bowling and swimming...shopping!
- In 6 months, based upon appropriate behaviors, MG will d/c to a FINR Group Home...with the long term goal of returning to a group home in Massachusetts



Q & A



# The Florida Institute for Neurologic Rehabilitation, Inc.





#### FINR's Continuum of Care



#### Skilled Medical Rehabilitation Center

@ FLORIDA INSTITUTE FOR NEUROLOGIC REHABILITATION, INC.



# FLORIDA INSTITUTE FOR NEUROLOGIC REHABILITATION, INC.







## Skilled Medical Rehabilitation Center @ Florida Institute for Neurologic Rehabilitation, Inc.







### Intensive Housing





### Cabin-Style Housing



### Pediatric Campus







### Cafeteria



# Occupational Therapy

# Physical Therapy

#### Speech Therapy







#### Vocational Green House



# In-Town Vocational Opportunities / Job Coaching



### Family Training

Immediate Family are flown in.

Meals and Hotel are provided

Family Education is key to a client's success

#### Funding Sources

Commercial Insurance

Workers' Compensation

Attorney Lien

School Board

Self Pay

Not a Medicaid or Medicare Provider

In all cases, we will assist you to find funding sources.

# Sign up for a tour and we'll fly you in!



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