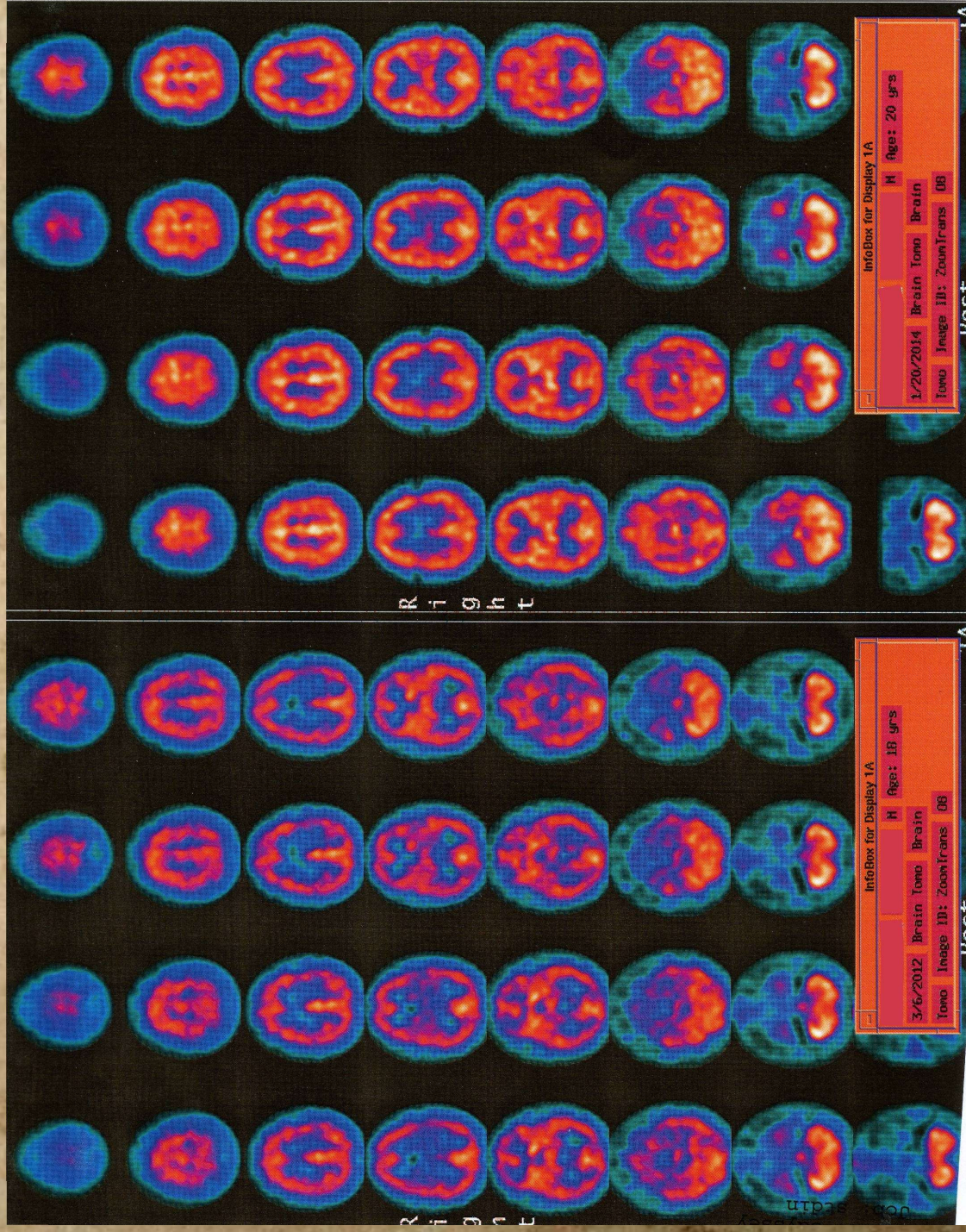
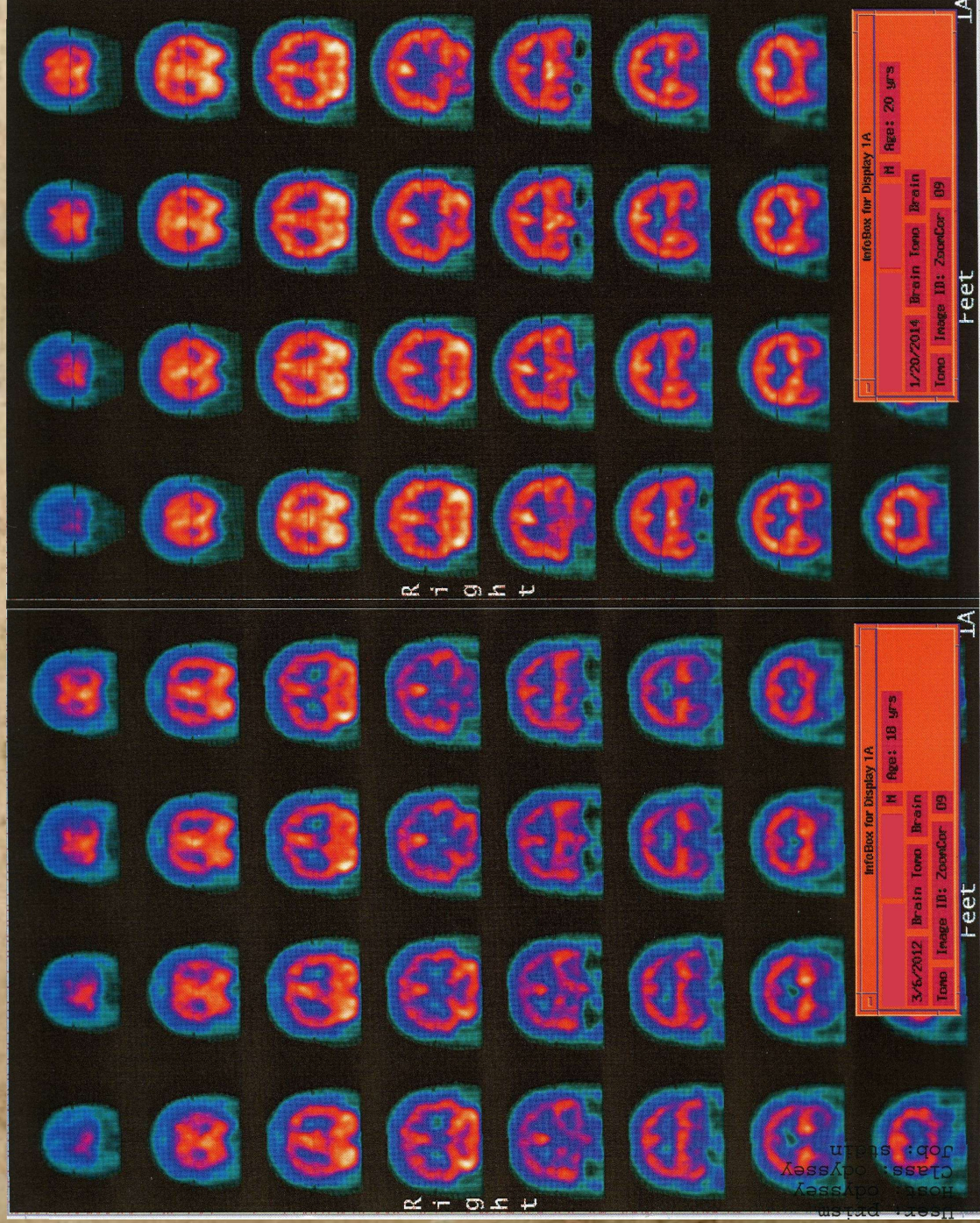


# HBOT IN PEDIATRIC NEUROLOGY: PANS



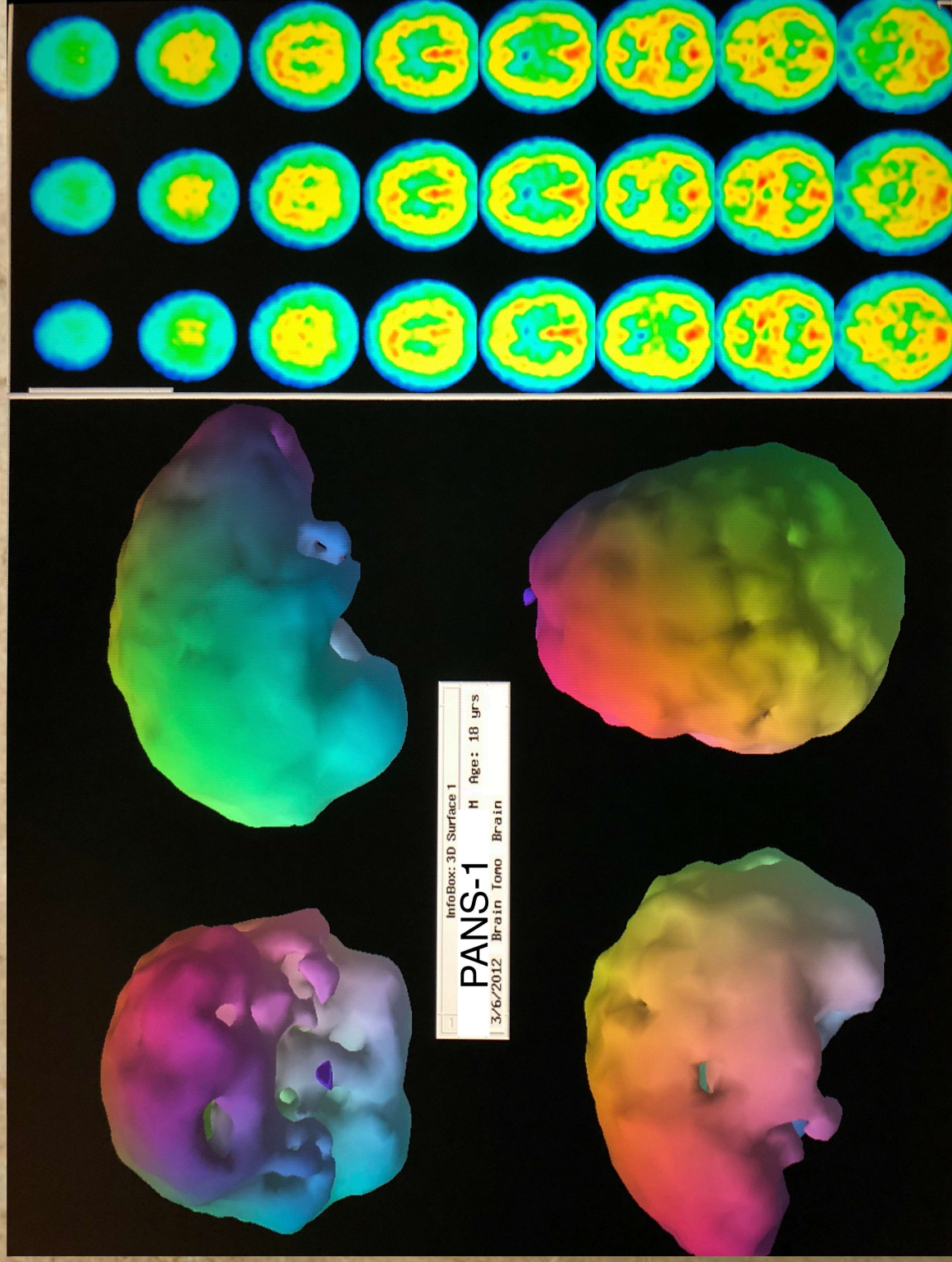


# HBOT IN PEDIATRIC NEUROLOGY: PANS



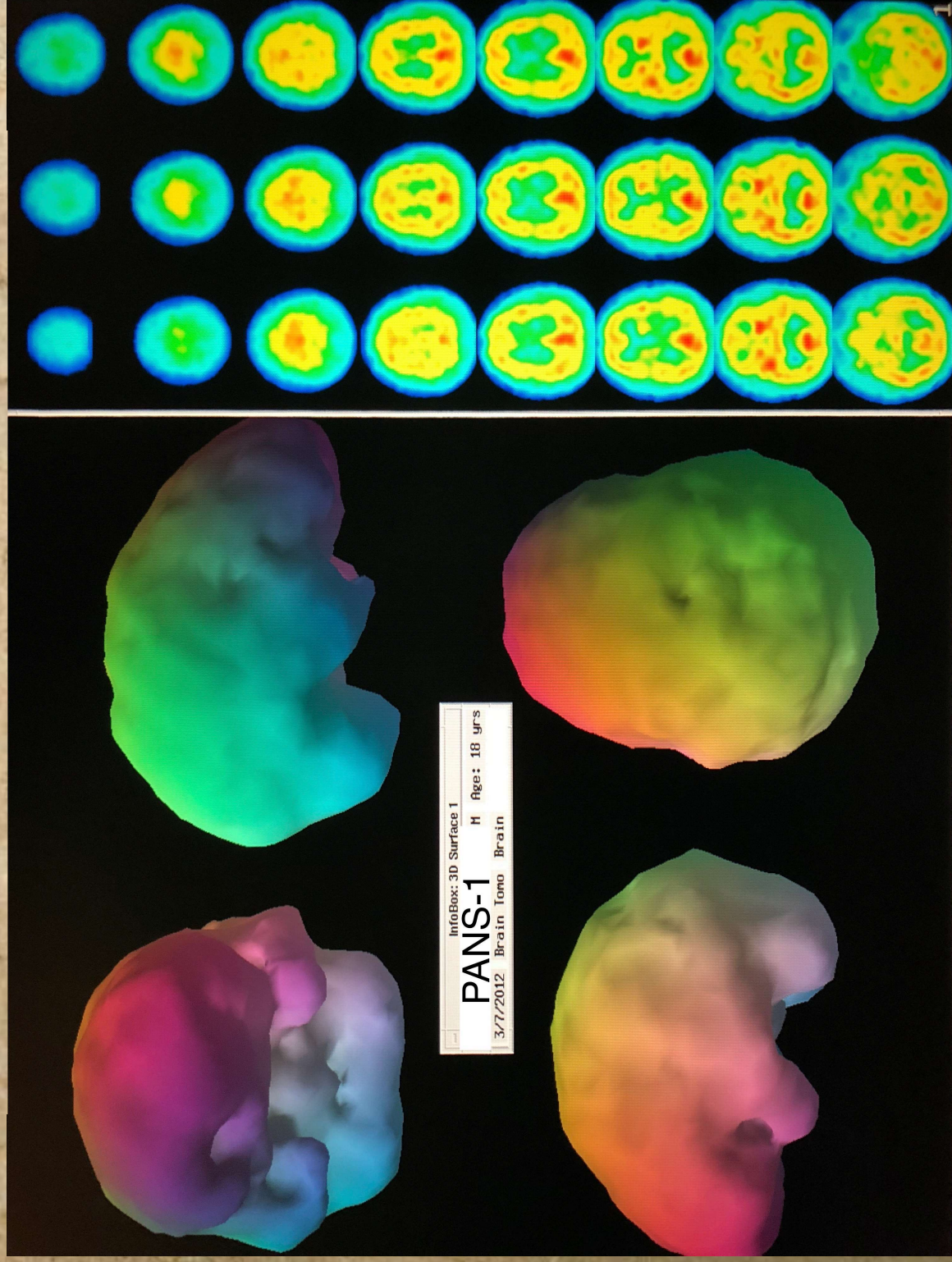


# HBOT IN PEDIATRIC NEUROLOGY: PANS





# HBOT IN PEDIATRIC NEUROLOGY: PANS





**POLYDRUG**

**ABUSE<sup>H</sup>**

**ADOLESCENT**

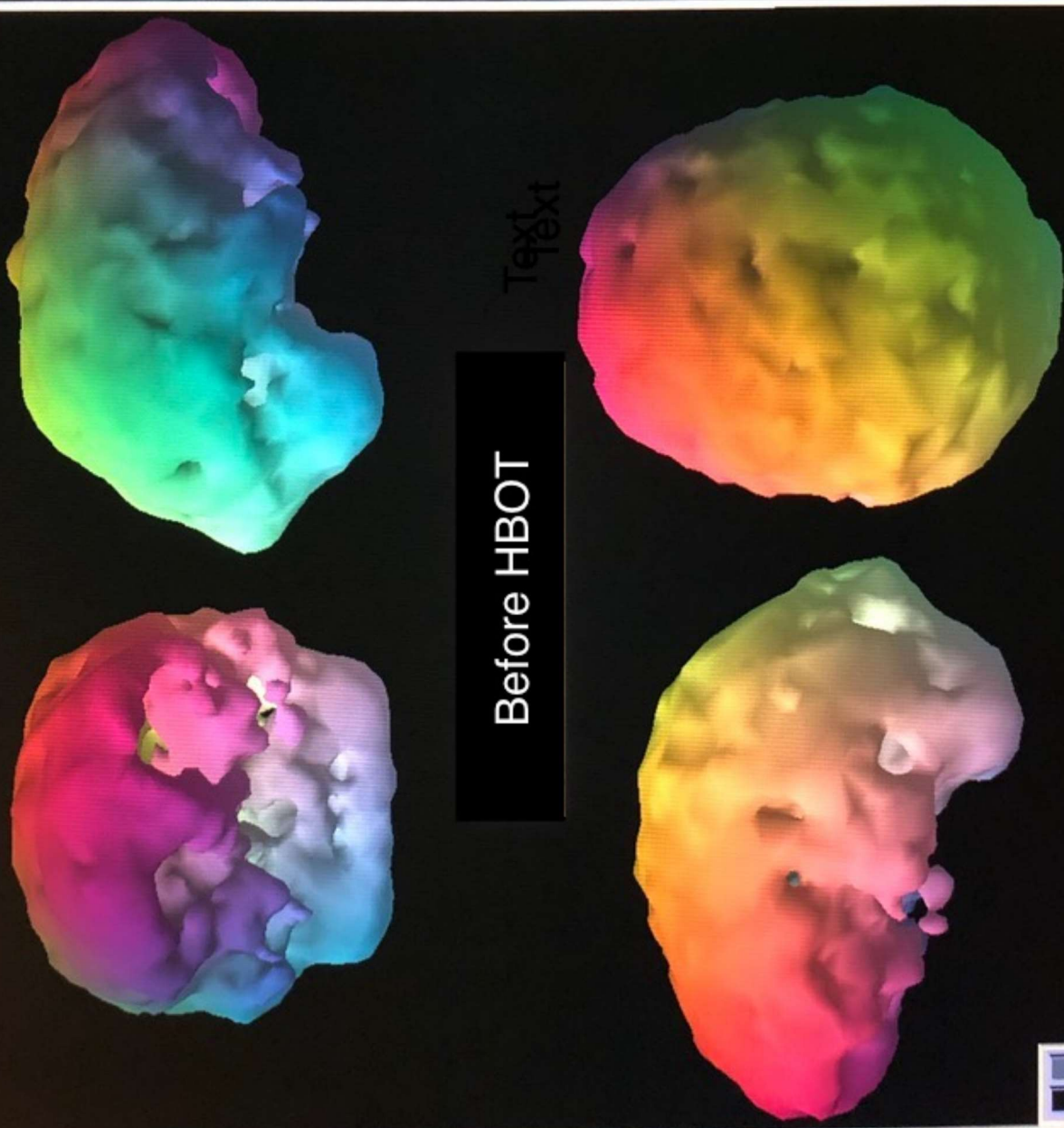
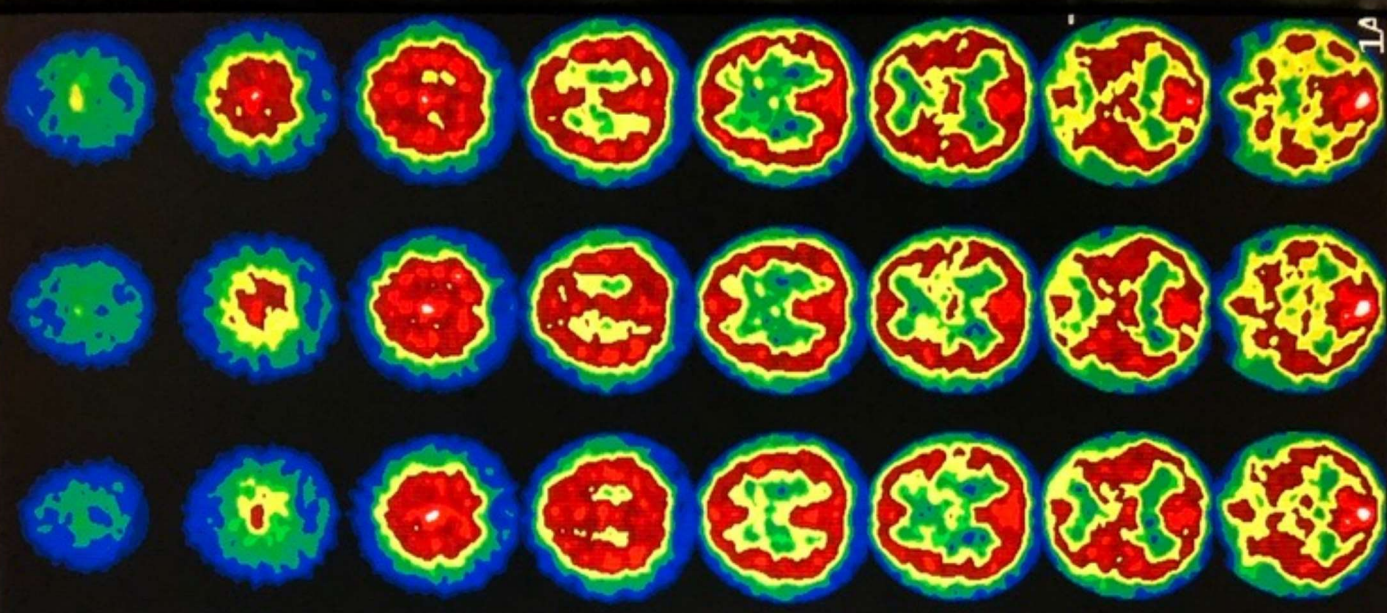


# CASE PRESENTATION

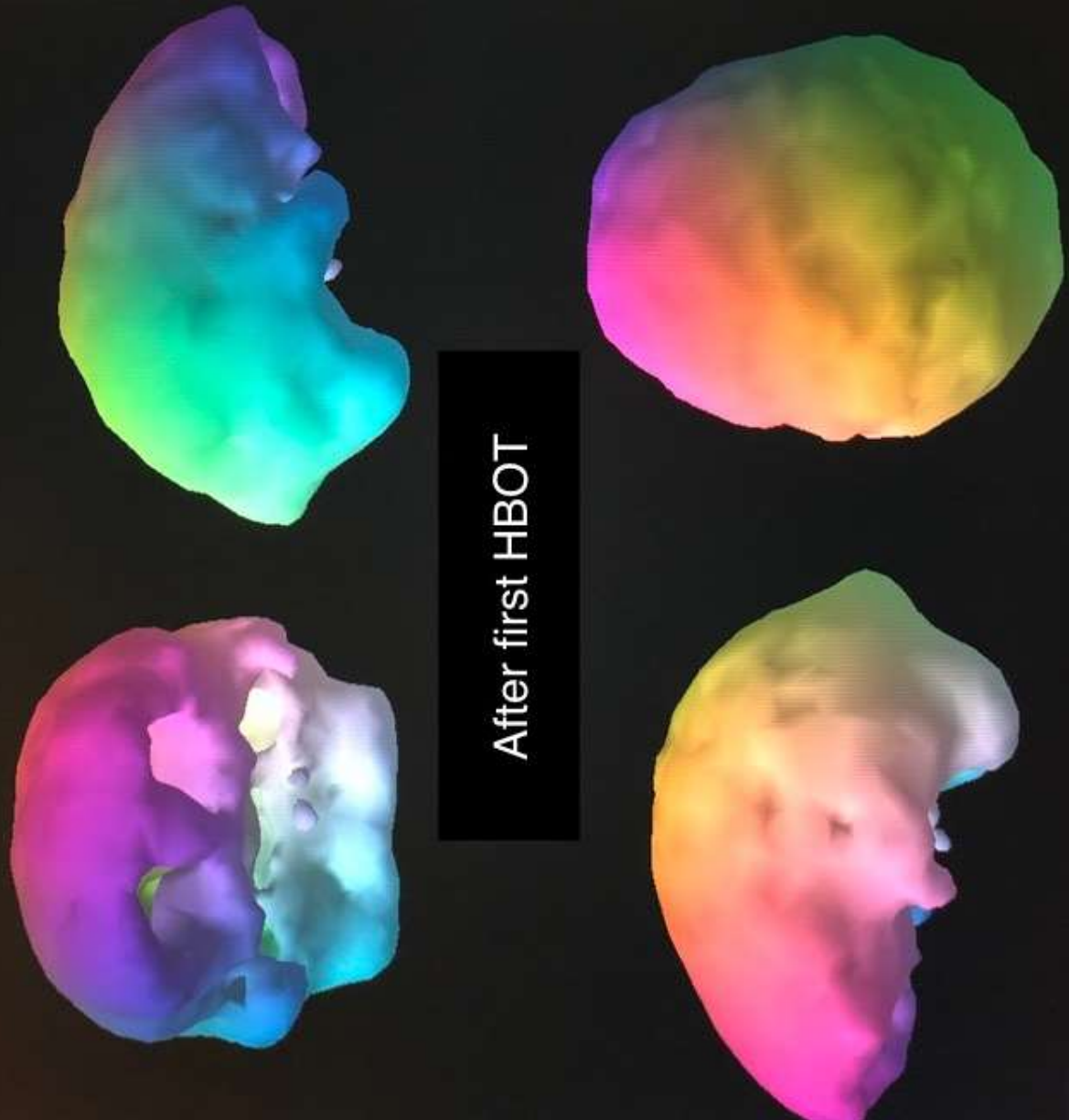
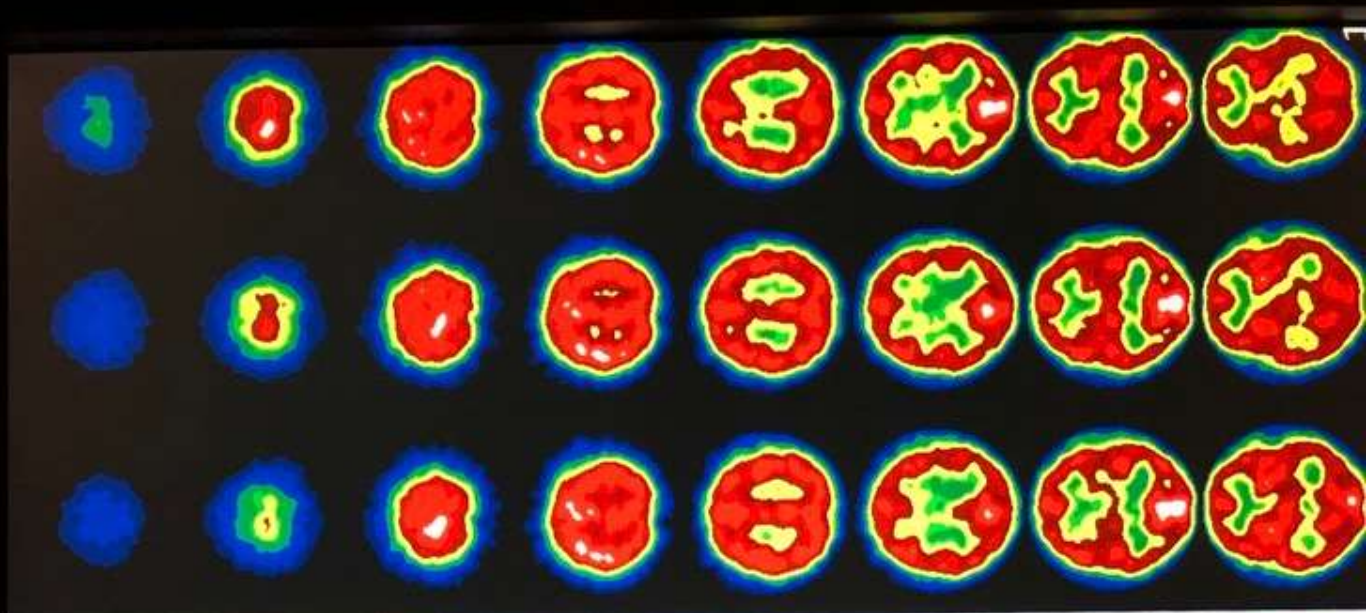
## POLYDRUG ABUSE

- 19 YEAR OLD MALE:
  - ATTENTION/CONCENTRATION PROBLEMS, SHORT TERM MEMORY PROBLEMS, IMPULSIVE BEHAVIOR, SHORT TEMPER, DEPRESSED MOOD, MOOD SWINGS (NORMAL TEENAGER).
- 6 YEAR HISTORY OF POLYDRUG ABUSE: OVER 2,000 DOSES OF ROHYPNOL (TO INDUCE LOC), LARGE AMOUNTS OF ECSTASY, OTHER DRUGS TO INCLUDE ALCOHOL, COCAINE, INHALANTS.
- EVALUATION IN NEW ORLEANS: H & P, BASELINE SPECT, 35 LOW PRESSURE HBOT' S, REPEAT SPECT.
- RESULTS: IMPROVED MOOD, BEHAVIOR, COGNITION, MOTIVATION. IMPROVED SPECT CONSISTENT WITH CLINICAL FINDINGS









After first HBOT



**GLOBAL  
ISCHEMIA/  
HYPOXIA  
(1999)**



# C.A.-GLOBAL ISCHEMIA/HYPOXIA

- 8 YEAR OLD GIRL
- NORMAL PREGNANCY AND DELIVERY
- ASPIRATION OF FORMULA IN NURSERY, CYANOSIS, RESUSCITATION, HOSPITALIZATION FOR 5 DAYS
- 4 MOS. OLD: INCOORDINATION, POOR EYE MOVEMENT, BLANK STARE, DELAYED MOTOR
- EXTENSIVE 2 YEAR EVALUATION
- MRI: MICROCEPHALY.
- SECRETIN, ONGOING CHELATION, MULTIPLE THERAPIES

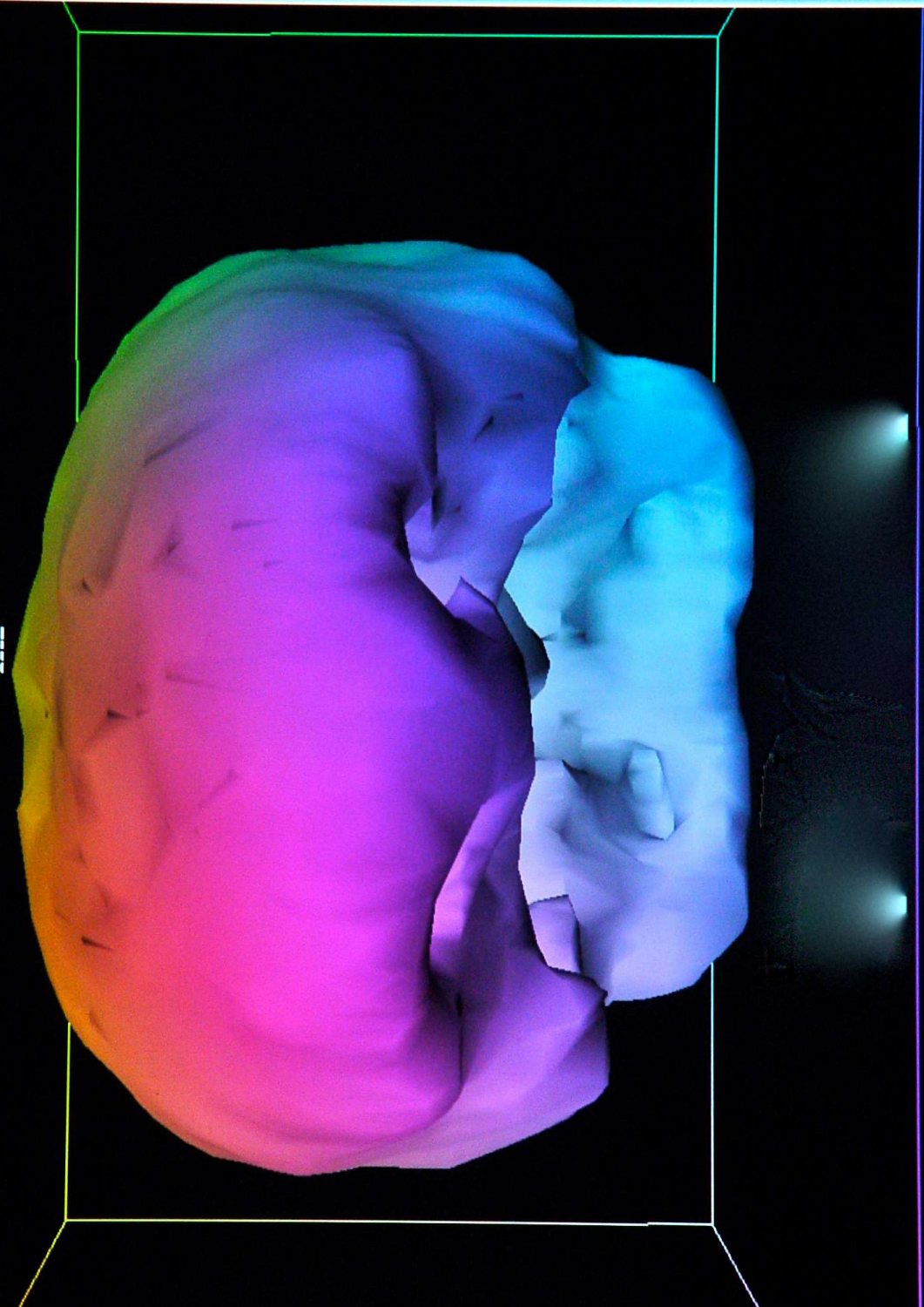
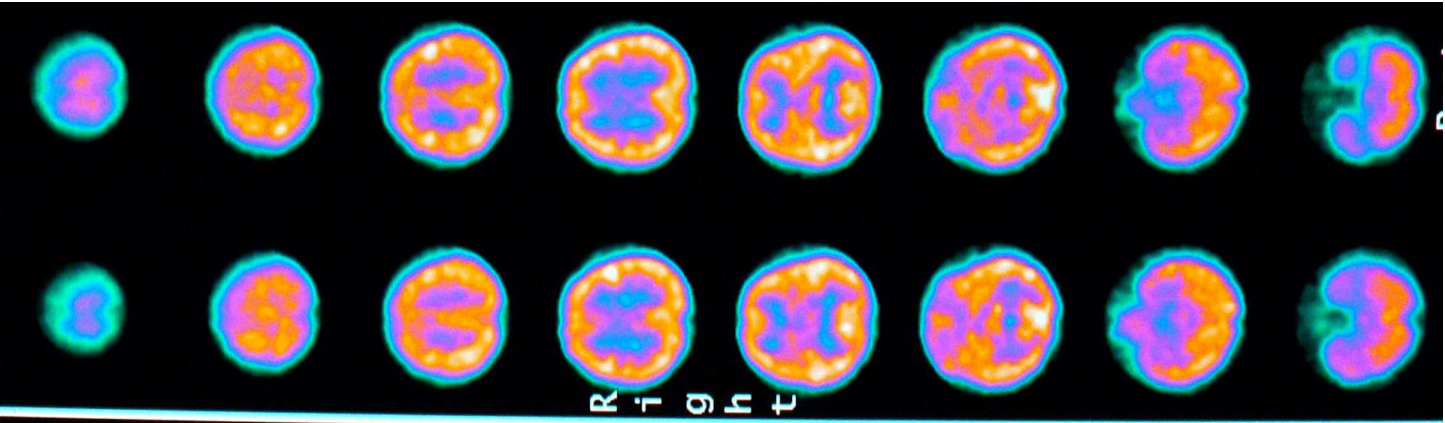


# C.A.-GLOBAL

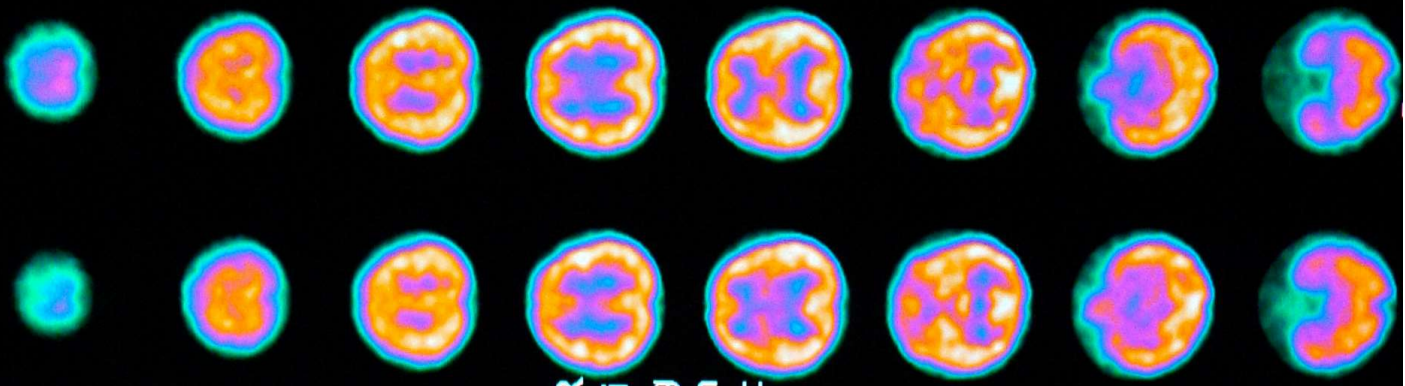
## ISCHEMIA/HYPOXIA

- MINIMAL SPEECH, LIMITED UNDERSTANDING, GLOBAL MOTOR DELAY, ABNORMAL GAIT, INABILITY TO SLEEP, AUTISTIC BEHAVIORS
- SPECT, DIVE, SPECT
- HBOT: THREE BLOCKS OVER TWO YEARS
- REPEAT SPECT
- IMPROVED ATTENTION SPAN, VOCABULARY, COMMUNICATION, UNDERSTANDING, BEHAVIOR, CALMER, FOLLOWS COMMANDS
- 4 SLEEPING PILLS→ 1 PILL; SLEEPS MOST OF THE NIGHT

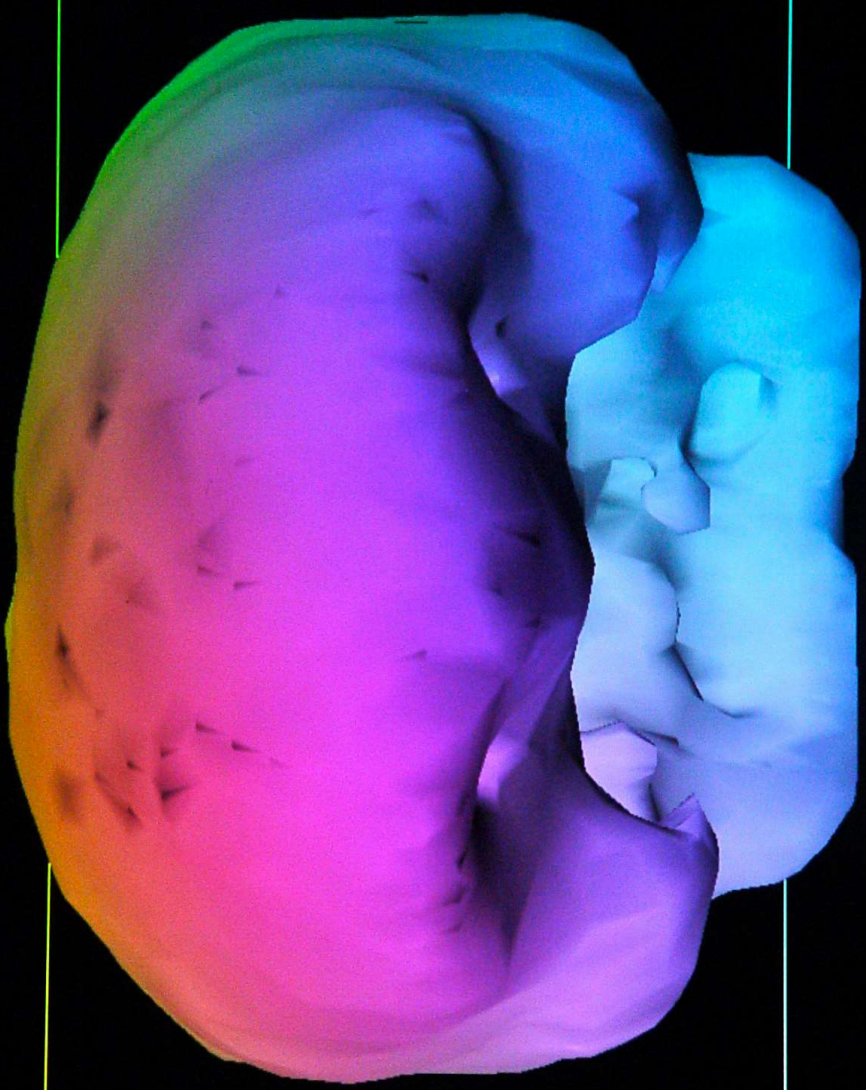




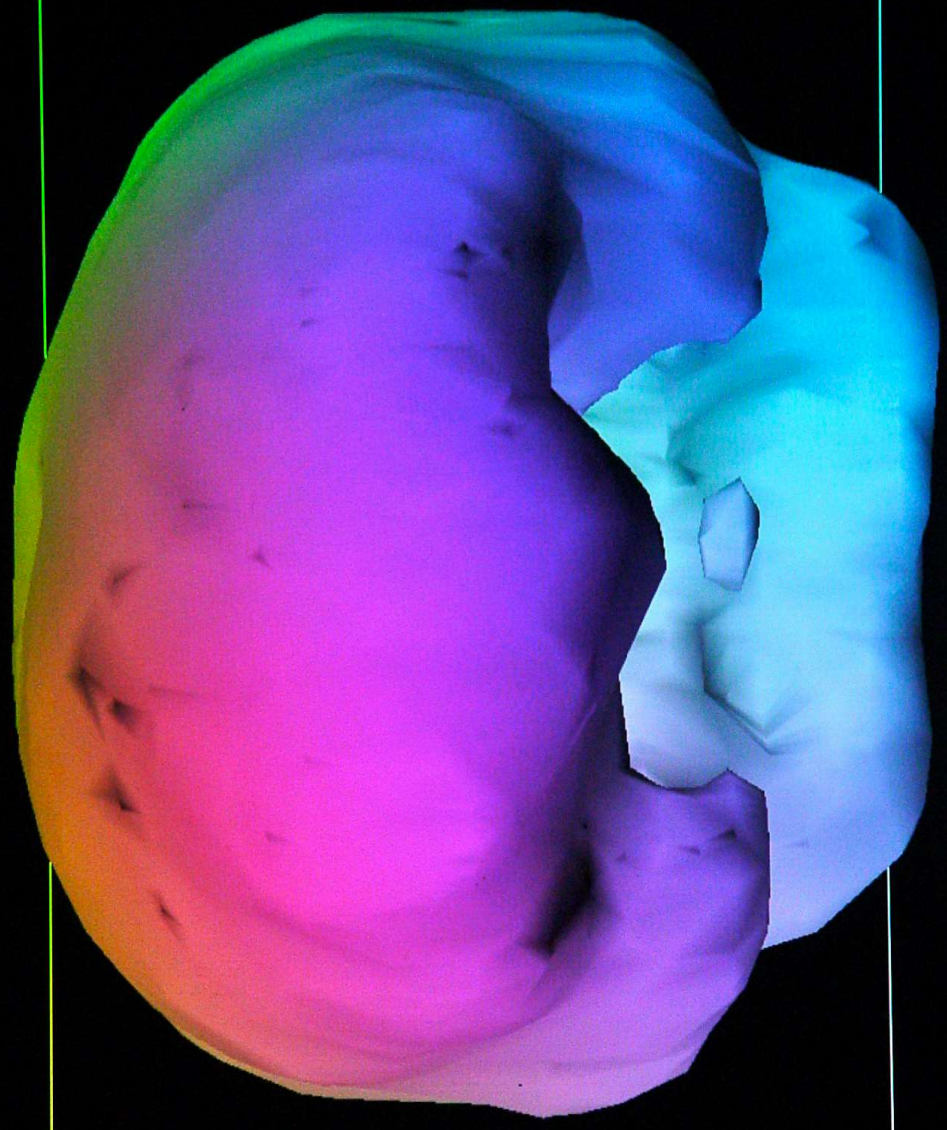
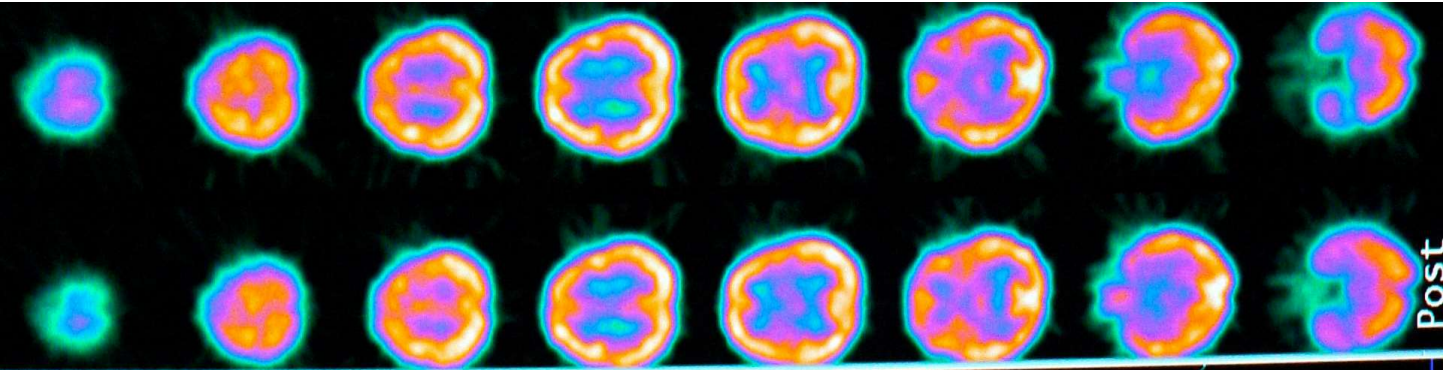




R I G H T









# CEREBRAL PALSY (1999)-5 YEARS OLD

Premie, severe brain bleeds. At 1 y.o., parents told he would never walk, talk, think, or live very long.

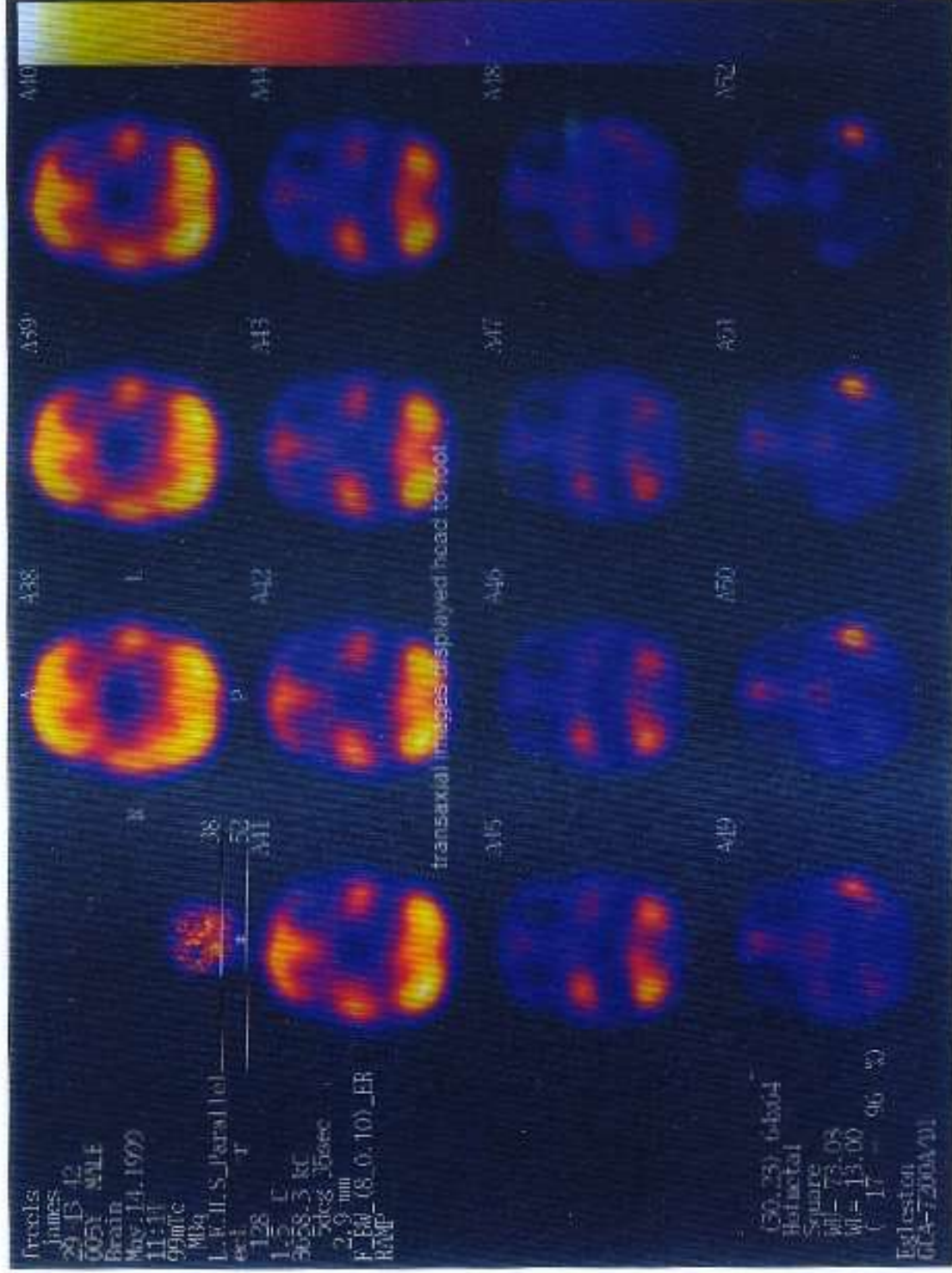
By 5 y.o., global developmental delays: 2-3 word couplets of speech, when prompted No abstract thinking.

21 HBOTs: Feeding self for first time, initiating conversation, explaining himself, concepts, imaginative thinking, comprehension.

21 additional HBOTs

Conversational, speaking sentences, use of hands

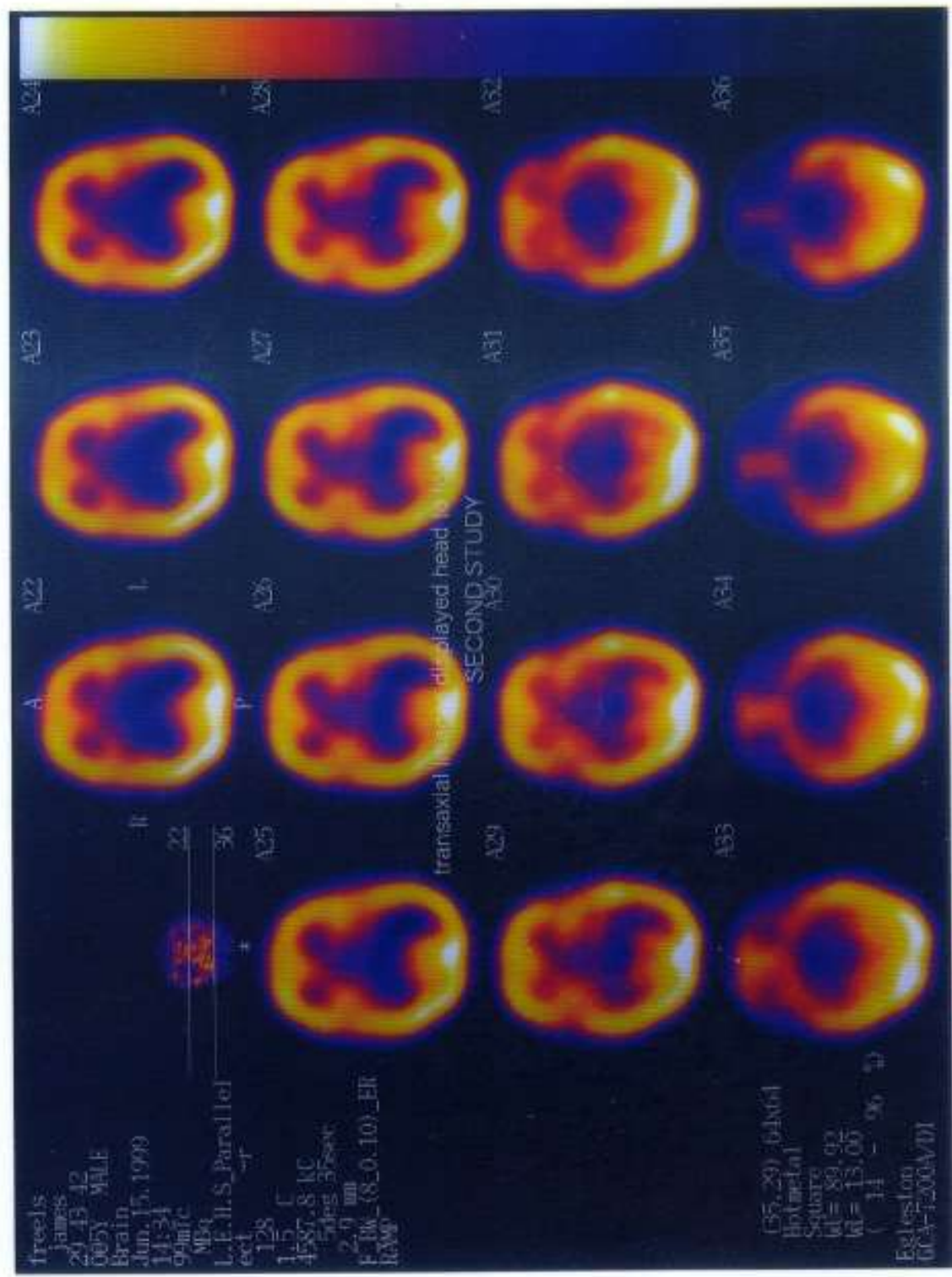




Jimmy Freeels. Before HBOT. TRANSAXIAL.3



# Jimmy Freels. AFTER HBO7. TRANSAXIAL.2

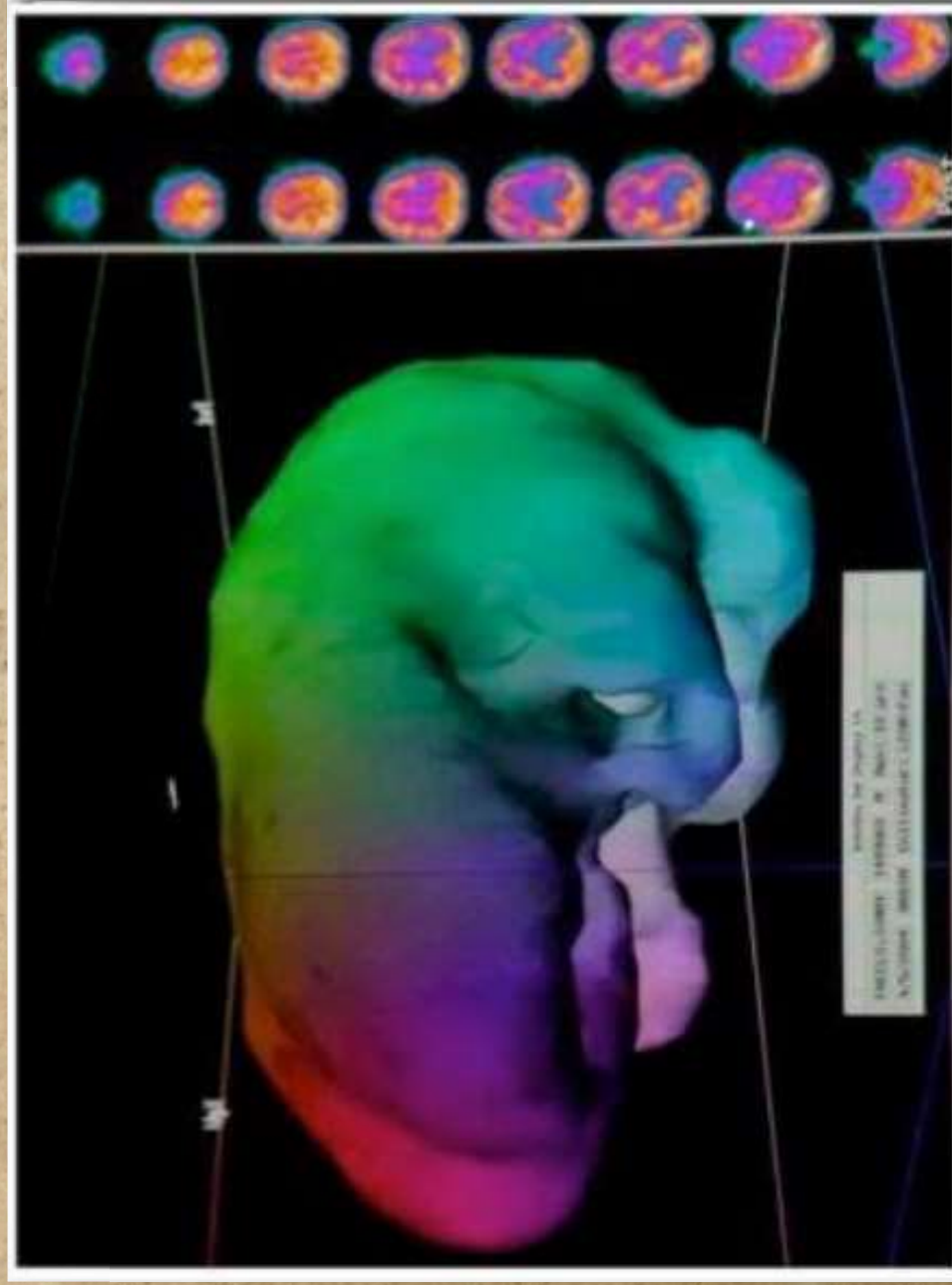


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# HBOT IN PEDIATRIC NEUROLOGY

Evaluation  
In New  
Orleans  
5 years  
later

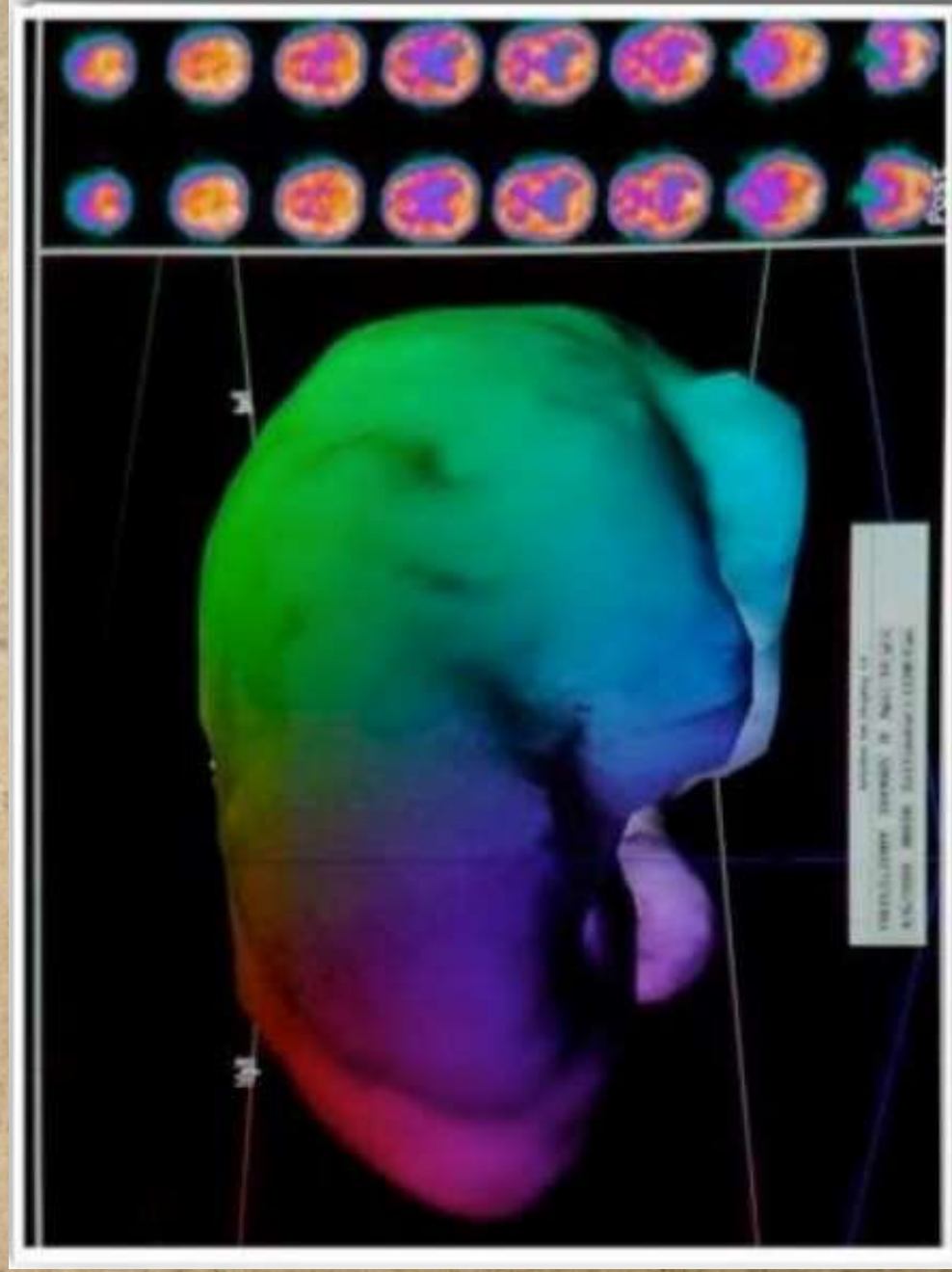


**Jimmy Freels before HBOT .**



# HBOT IN PEDIATRIC NEUROLOGY

Evaluation  
In New Orleans  
2 years later



**Jimmy Freels after HBOT .**



# **HBOT IN PEDIATRIC NEUROLOGY**

- **JIMMY FREELS:**
  - He graduated from high school with a college prep diploma as a member of the National Honor Society.
  - 2019: Graduated from Georgia State University with a bachelor's degree.



# **HBOT IN PEDIATRIC NEUROLOGY-SHAKEN BABY**

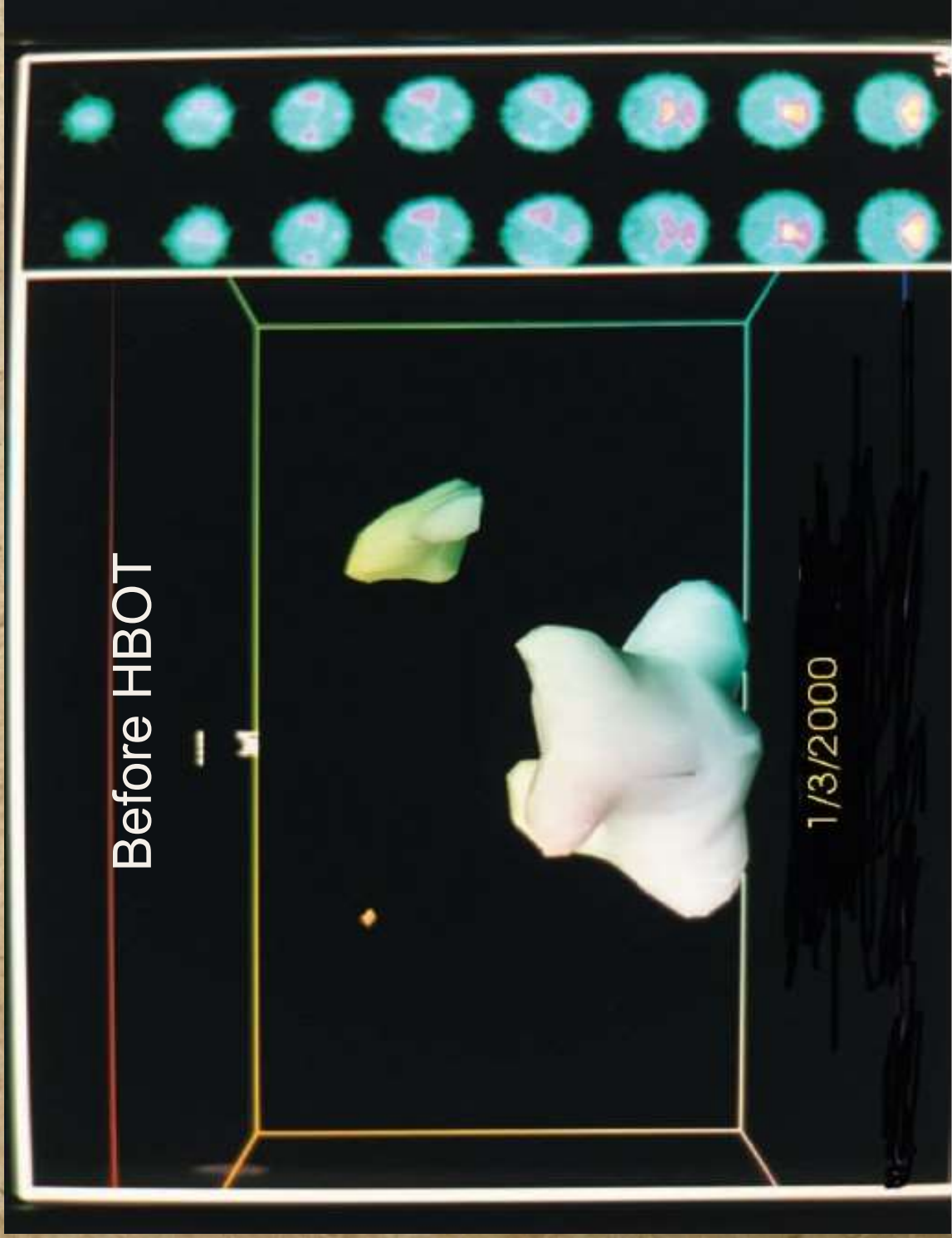
**6 MONTH OLD BABY GIRL, NORMAL PREGNANCY, DELIVERY, HEALTHY.  
AT 2 MONTHS FATHER REPETITIVELY SLAMMED CHILD ON CRIB BED IN  
TWO SEPARATE INCIDENTS. MOTHER ARRIVED HOME FROM WORK TO  
FIND BABY LISTLESS. TAKEN TO HOSPITAL. CARDIAC ARREST,  
PROLONGED HOSPITALIZATION.**

**FOUR MONTHS LATER EVALUATION IN NEW ORLEANS: NO SMILE, NO  
SOCIAL INTERACTION, PARAPLEGIC, MOSTLY G-TUBE FED, SEIZURES.  
SPECT, SINGLE TREATMENT, REPEAT SPECT, 40 HBOTS, BREAK,  
40 HBOTS, REPEAT SPECT.**

**REACQUIRED VISION, SMILES, SOCIAL INTERACTION, SEIZURES  
RESOLVED, STARTED MOVING LEGS IN POOL.**

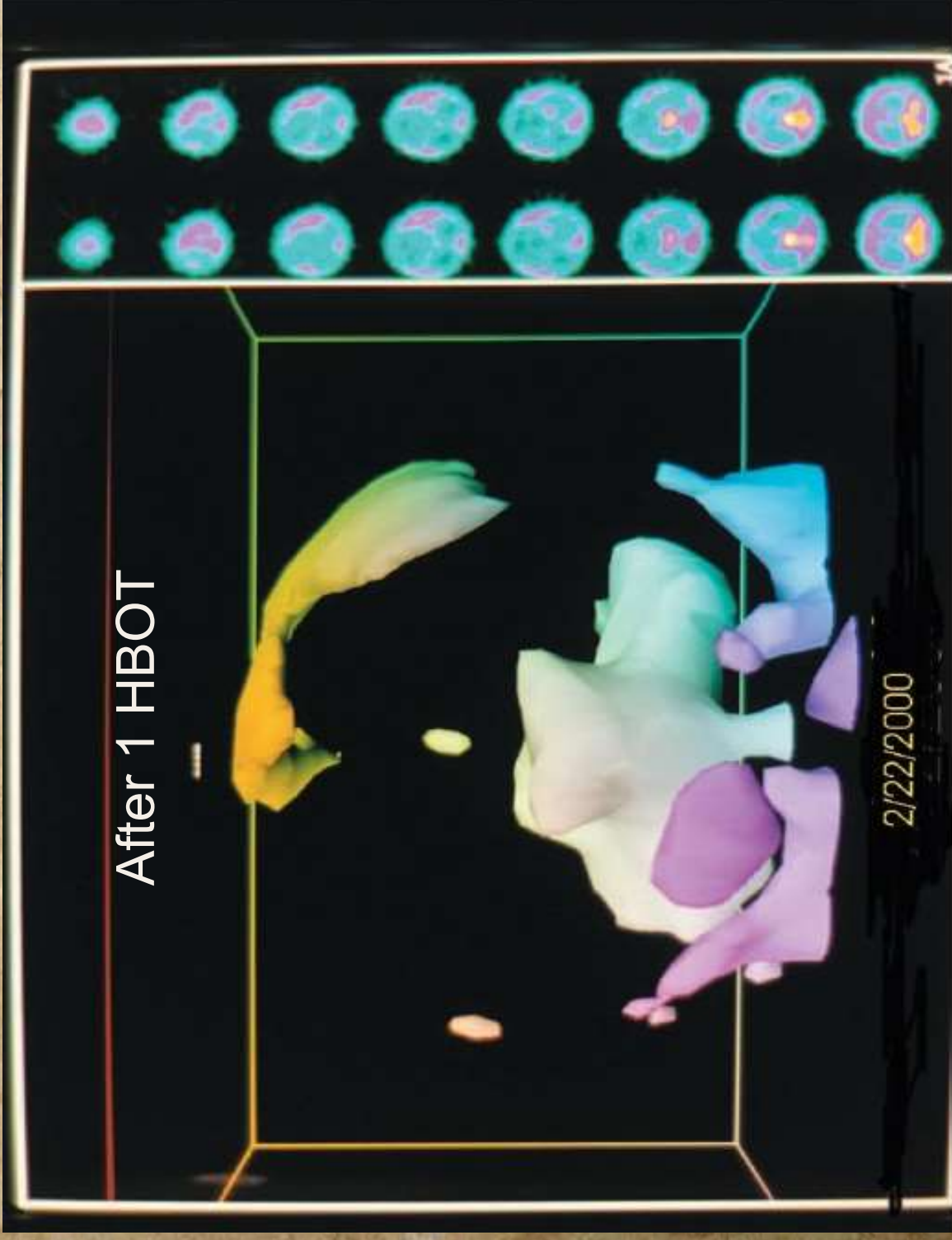


# HBOT IN PEDIATRIC NEUROLOGY-SHAKEN BABY





# HBOT IN PEDIATRIC NEUROLOGY-SHAKEN BABY





# HBOT IN PEDIATRIC NEUROLOGY-SHAKEN BABY





# **HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS**

- **13 Y.O. GIRL, 2 WEEK FEBRILE ILLNESS  
3/2002, CULMINATING IN**
  - **STATUS EPILEPTICUS, HOSPITAL ADMIT**
  - **46 DAYS PENTOBARBITAL COMA**
  - **REHAB HOSPITAL X 2.5 MONTHS.**
  - **HOME X 2 MONTHS, PARENTS CAN'T CONTROL CHILD.**
  - **LOCKDOWN HOSPITAL REHAB X 4 MONTHS WITH HEAVY  
SEDATION. HOSPITAL REFUSES TO RELEASE TO  
PARENTS. PARENTS GET LOUISIANA GOVERN. OFFICIAL  
TO SECURE RELEASE TO HOME.**
  - **PARENTS BUILD SEPARATE "SCHOOL" HOUSE.**

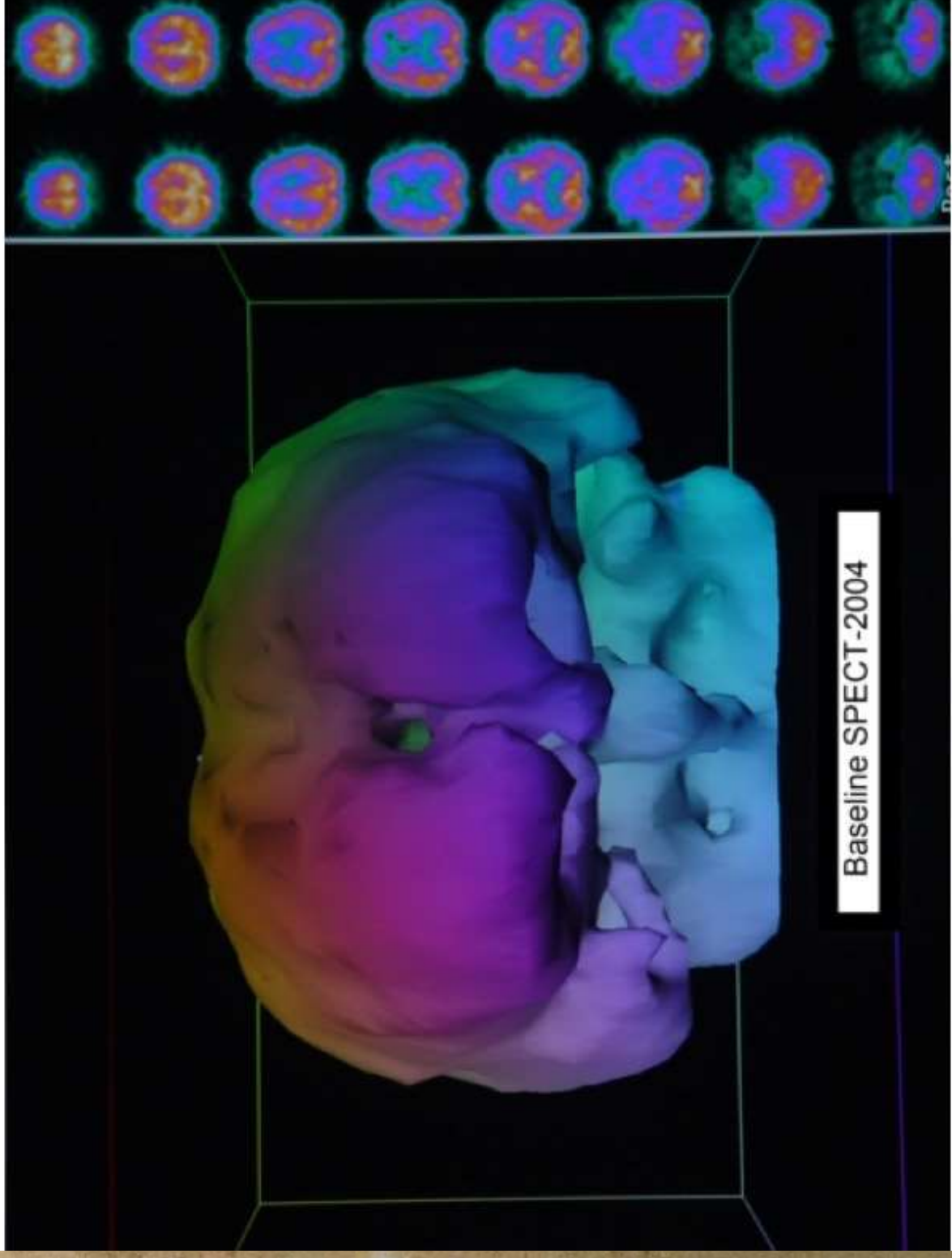


# **HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS**

- **COMMUNICATIVE WHEN IN WATER.**
- **PROBLEMS: VIOLENT, NOT TOILET-TRAINED, NO PERSONAL HYGIENE, SEIZURES WITH PERIODS, NO CONVERSATION OR RELATIONSHIP WITH MOTHER, NO SOCIALIZATION, CAN'T GO OUT OF HOUSE-LOCKDOWN.**
- **SPECT, SINGLE HBOT, REPEAT SPECT**

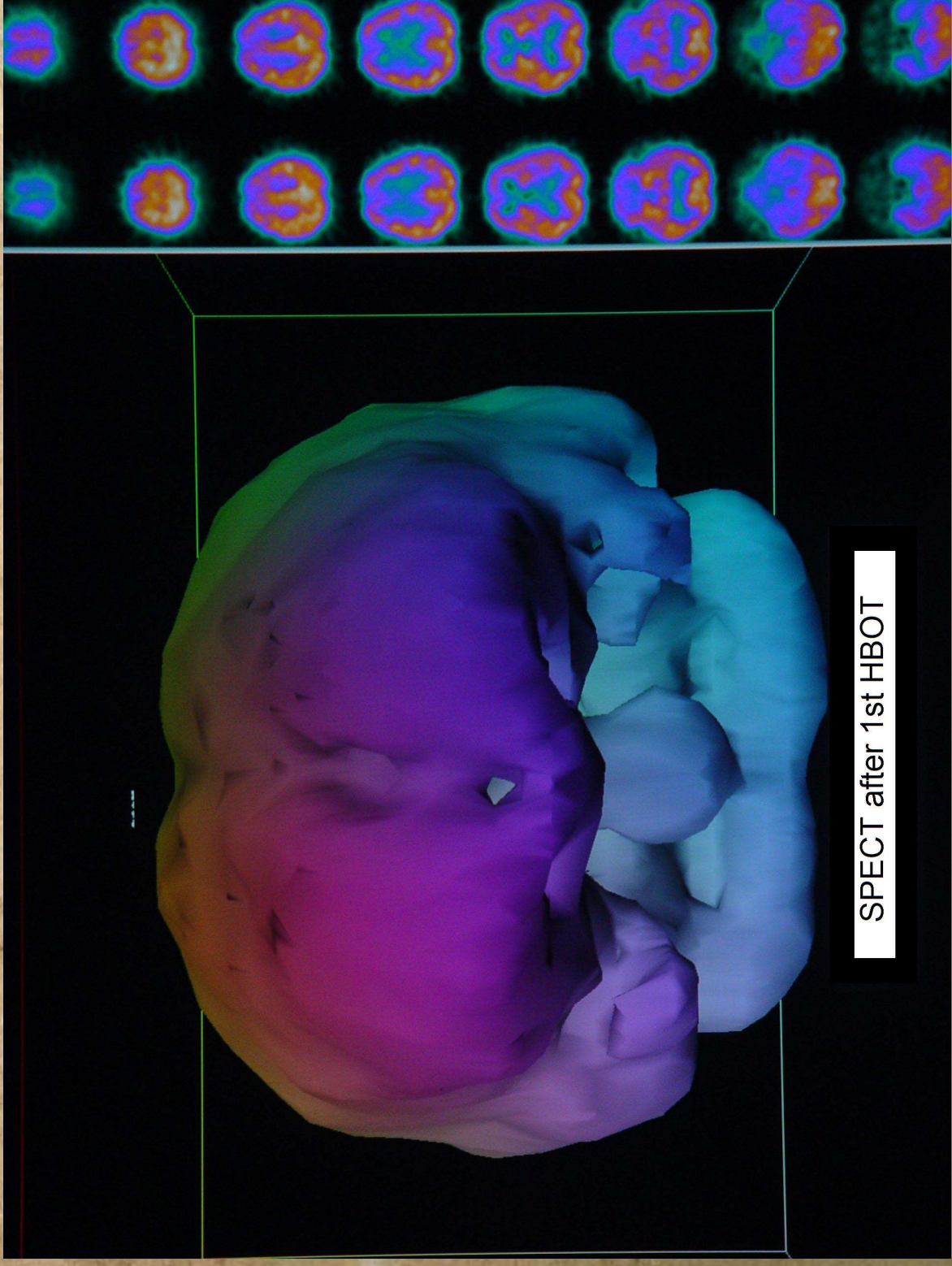


# HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS





# HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS





# **HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS**

- **HBOT, 5/04-7/04, 41 TREATMENTS.**
- **PROGRESSIVE MARKED IMPROVEMENT IN ALL PROBLEMS. NO SEIZURES. SOME SENSITIVITY LAST FEW RX'S.**
- **FURTHER IMPROVEMENTS ON BREAK.**
- **HBOT 8/04- 10/04, 37 TREATMENTS, DECREASED DOSE. "PURE HEAVEN 1<sup>ST</sup> 15-20 TREATMENTS."**
- **FURTHER IMPROVEMENT THEN REGRESSION DURING LAST HALF OF TREATMENTS.**
- **BOUNCES BACK WITHIN ONE WEEK.**



# HBOT IN PEDIATRIC NEUROLOGY- POST ENCEPHALITIS

- HBOT, 5/04-7/04, 41 TREATMENTS.
- 5 MONTHS LATER: FURTHER IMPROVEMENT:
  - 3-5H/DAY HOME SCHOOL, 1.5-2H/DAY REAL SCHOOL.
  - AGGRESSION AND SEIZURES ONLY WITH PERIODS: SEIZURES NOW “TINY”-TWITCHING FOR SECS.
- MULTIPLE DOCTOR VISITS, ALL DUMBFOUNDED, ESPECIALLY NEUROLOGIST: DR. AH.
- 4 MONTHS LATER: FURTHER IMPROVEMENT.
- HBOT: 8-12/2004, 13 RX'S IN CLUSTERS OF 2-4 WITH IMPROVEMENTS EACH CLUSTER:
  - SELF-CARE, HYGIENE, REAL SCHOOL 4H/D, 5D/WEEK, SELF-CONTAINED, SOCIALIZING, MINIMAL SEIZURES (TWITCHING), MINIMAL SEIZURES.



# **Dosing of HBOT for Neurological Conditions**

## **SUMMARY:**

**CP, autism, air embolism, PANS,  
polydrug abuse, global  
Ischemia/hypoxia, shaken baby,  
post-encephalitis**

## **IMPLIES:**

**HBOT IS A GENERIC TREATMENT FOR  
PEDIATRIC WOUNDING CONDITIONS OF THE BRAIN**



**CENTRAL QUESTION  
FOR PARENTS:**

**DOES MY CHILD  
HAVE A WOUND IN  
HIS/HER BRAIN?**



# **CENTRAL QUESTION FOR PARENTS:**

**If so, HBOT is evidence-based medicine for treatment of chronic pediatric neurological conditions**



# Conclusions

1. HBOT IS A DUAL-COMPONENT DRUG COMPOSED OF INCREASED PRESSURE AND INCREASED OXYGEN.
2. HBOT HAS EFFECTS ON DISEASE PROCESSES THAT ARE COMMON TO A WIDE RANGE OF DISORDERS.
3. MOST OF THESE DISORDERS ARE WOUNDING CONDITIONS.
4. MOST PEDIATRIC NEUROLOGICAL CONDITIONS CAN BE CONSIDERED WOUNDING CONDITIONS IN THE BRAIN.
5. THERE IS NOW ENOUGH EVIDENCE FOR THE EFFECTIVENESS OF HBOT IN PEDIATRIC NEUROLOGICAL DISORDERS TO CONSIDER IT EVIDENCE-BASED MEDICINE, ESPECIALLY WHEN NO OTHER ACCEPTED TREATMENT EXISTS.



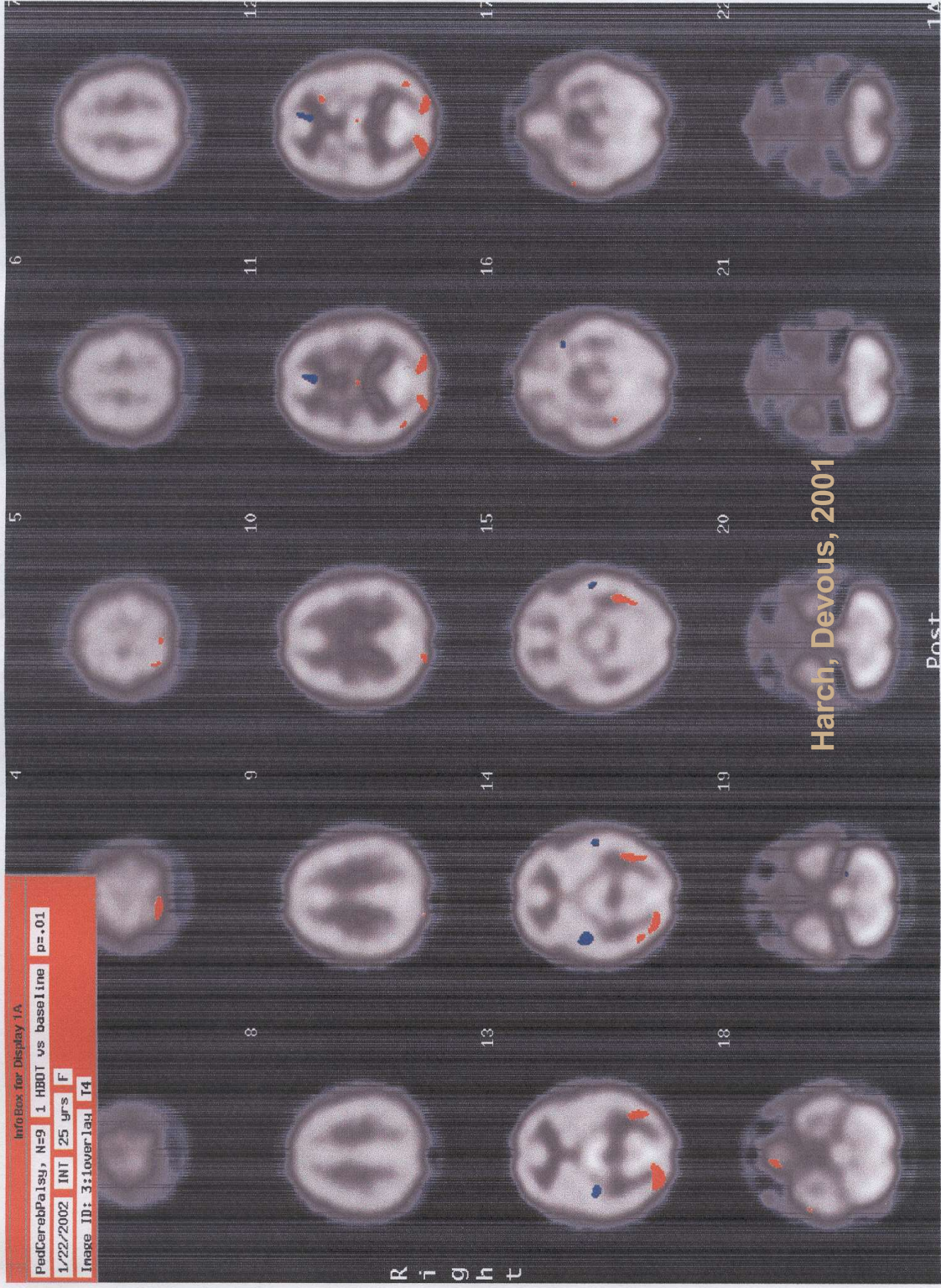
THANK YOU





# One HBOT vs. Baseline

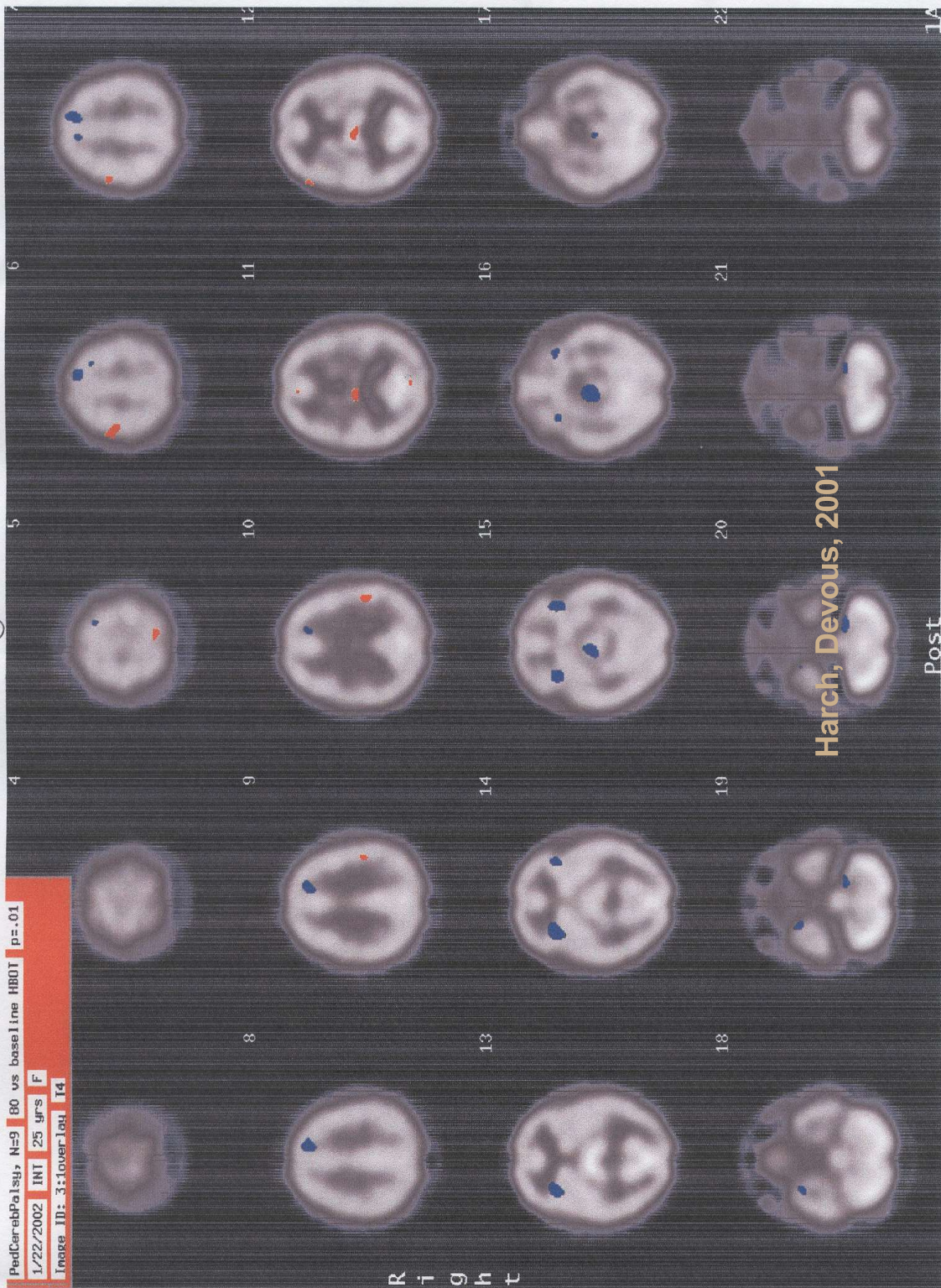
④





# 80 HBOTs vs. Baseline

5



Harch, Devous, 2001



# THANK YOU



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