CO-OCCURRING DISORDERS IN SUBSTANCE RELATED DISORDERS

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Overview

- At the conclusion of this presentation, participants will receive and understand the following:

- A general overview of co-occurring disorders.

- Psychiatric Induced-Co-occurring disorders.

- Quick discussion on anger and aggression.

- Substance induced-co-occurring disorders. (Alcohol, Marijuana, “K-2”, Hallucinogens, Stimulants)

CO-OCCURRING TERMS AND DEFINITIONS

Co-Occurring Disorders are also referred to as:

1. Dual Diagnosis,
2. Co-Existing,
3. Co-Morbidity Disorders

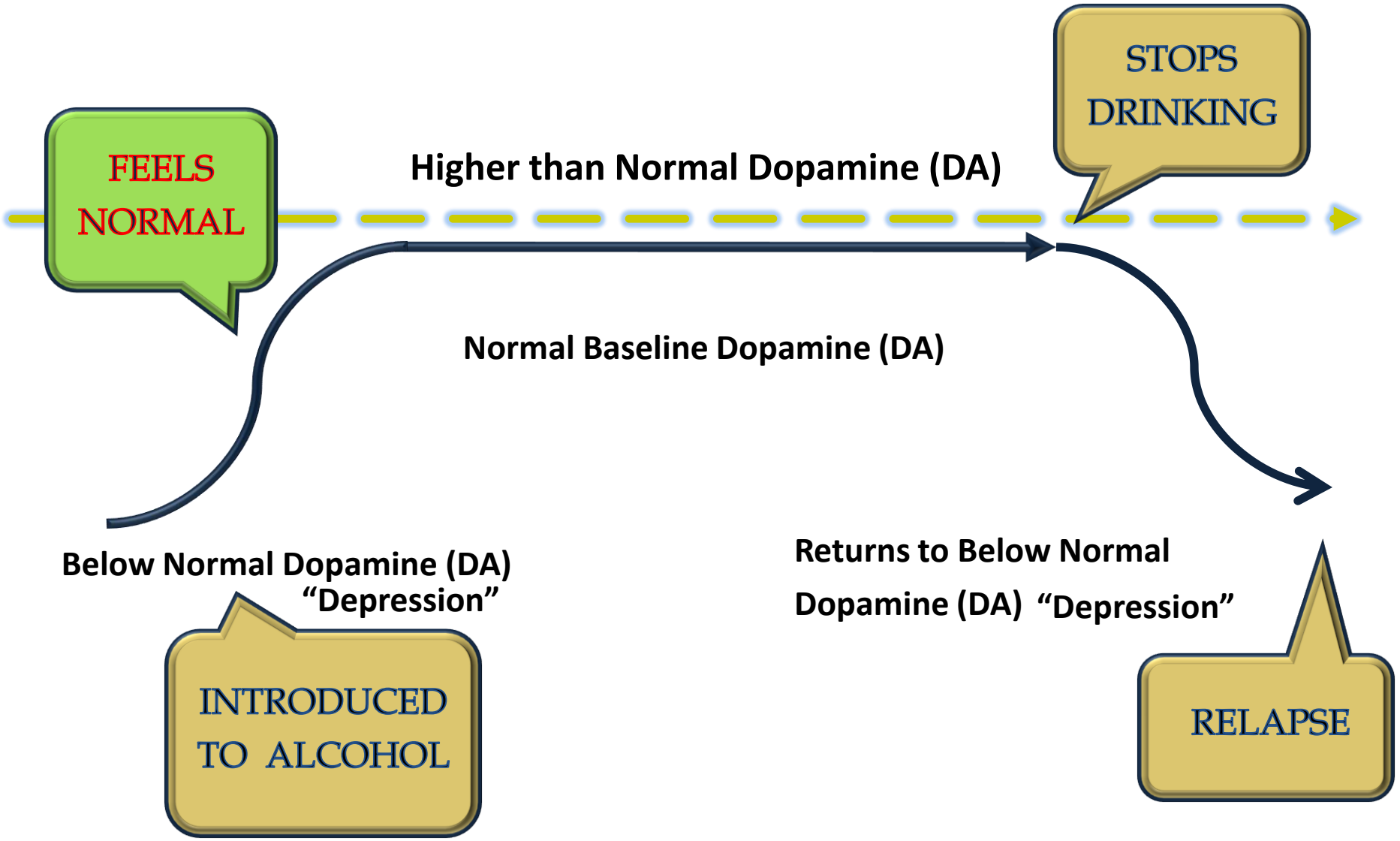
DSM-5 Diagnostic Statistical Manual of Mental Disorders, 5th edition,
(American Psychiatric Association, 2013)

“Psychiatric” Induced “Substance” Use Disorders

“Psychiatric“ Induced - “Substance“ Use Disorders refers to:

Mental “Psychiatric” Disorders that were present **BEFORE** the onset of a “Substance“ Use Disorder.

PSYCHIATRIC INDUCED "ALCOHOL" MOOD DISORDERS



“SUBSTANCE“ INDUCED “PSYCHIATRIC“ DISORDERS

“SUBSTANCE“ INDUCED - “PSYCHIATRIC“ DISORDERS refers to:

Mental “PSYCHIATRIC“ Disorders that occur AFTER the onset of “Substance“ Use

A GENERAL REVIEW OF PSYCHIATRIC DISORDERS AND RECOMMENDATIONS FOR TREATMENT

All Centrally Active
(aka: Psycho-Active) drugs possess the potential to
either imitate or create each
of the standard symptoms
found in the DSM-5 manual.

Anger and Aggression

The Frustration-Aggression Hypothesis

A theory predicting aggressive behavior develop by Dollard, Dobb, Mower, Miller and Sears (1939)

STATES THAT AS AN INDIVIDUALS LEVEL

OF SUBJECTIVE FRUSTRATION,

WILL LIKELY INCREASE THEIR POTEINTIAL FOR ACTING OUT

AGGRESSIVELY.

Five(5) predictive signs of possible extreme violent behavior

1. Acquired or non-acquired brain injury or neurological trauma.

2. A history of mental illness.

3. A history of childhood abuse.

4. A history of social isolation.

5. A history of social rejection.

A REVIEW OF PSYCHIATRIC DISORDERS

"SUICIDE"

- **Technically, suicide is not considered a psychiatric disorder, it's considered a consequence of a psychiatric disorder.**

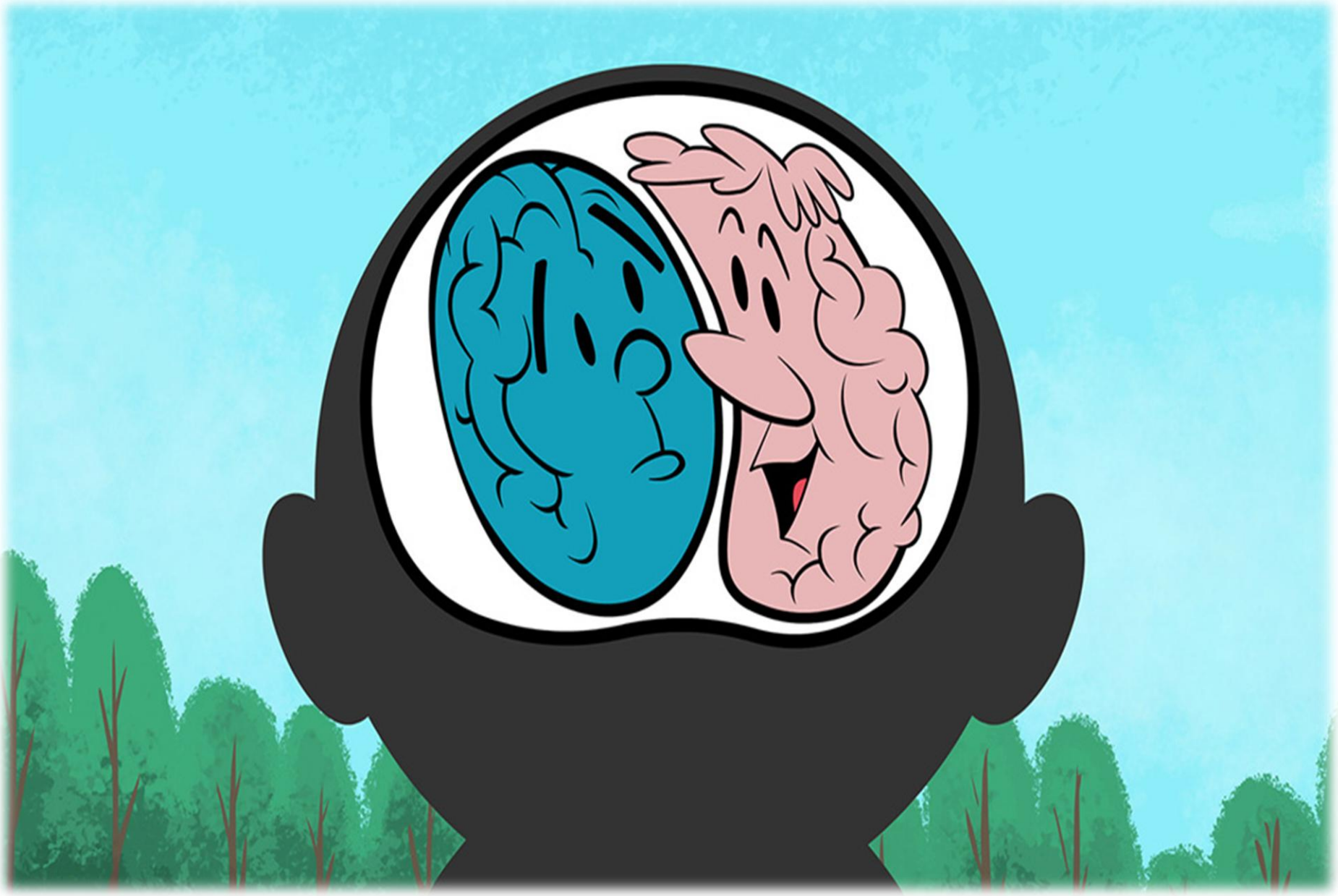
- **The risk of suicide is greatest when substances are abused by individuals who are also experiencing profound guilt, shame, grief and loss.**

- **Alcohol abuse is believed to be associated with Four (4) out of Five (5) suicides.**

- **Treatment Recommendations:**

  Immediate Medical – Psychiatric Intervention.

“Moods“ and the two sides of the human brain



Mood Disorders

- **Mood "Affective" Disorders:**
- **Are disturbances associated with mood, feelings and emotions.**
- **The most common include:**
- **Reactive and Major Depression (98%),**
- **Bi-polar Disorders (20-60%).**

Treatment Recommendations:

Cognitive Behavioural Therapy (CBT) with Mood Stabilizing Medications and Exercise.

Anxiety Disorders

- **Anxiety Disorders (23%): Are disorders associated with unrealistic perceptions of fear.**

The most common include:

Panic Disorders (Anxiety attacks),

Generalized Anxiety Disorders (GAD),

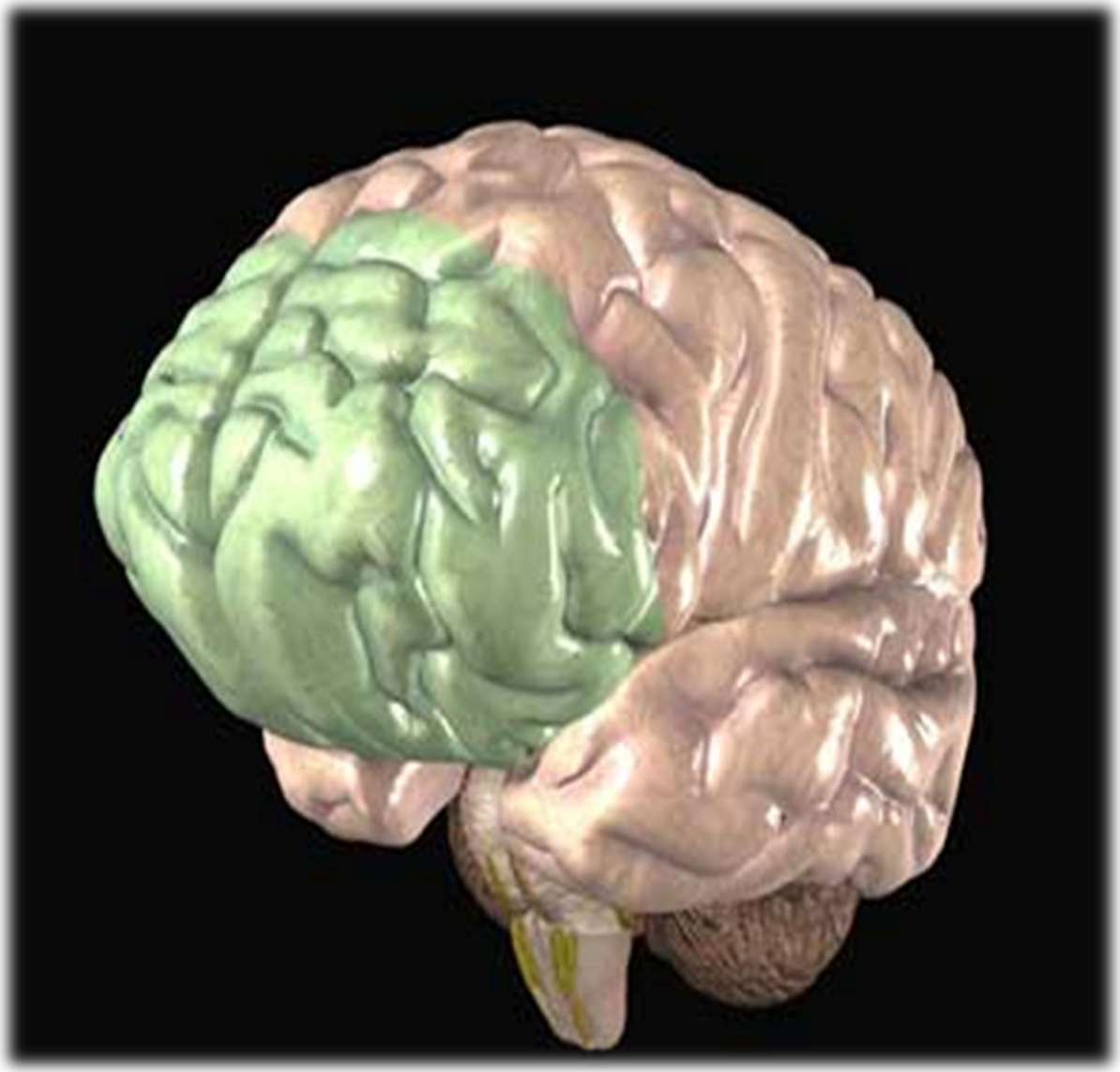
Obsessive-Compulsive Disorders (OCD),

Acute Stress Disorders and PTSD.

Treatment Recommendations: Exercise, CBT, Group therapy and anti-anxiety and/or anti-depression medications for a limited period of time.

PERSONALITY DISORDERS

The frontal regions of the brain are believed to house our personality



Personality Disorders

- **Personality Disorders and "Pseudo-Personality Disorders" are routinely seen in substance abuse treatment programs (39.5%).**

- **<u>Treatment Recommendations</u>:**
  Personality disordered individuals are difficult to treat with either conventional therapy or psychiatric intervention/medications.

Personality Disorders (PD): Are deeply ingrained, destructive, and rigid patterns of behaviour.

Common features seen in all Personality Disorders:

1. **Difficulty maintaining long-term relationships.**
2. **Intense fear of rejection and abandonment.**
3. **Troubled interpersonal life.**
4. **Frequent and unpredictable mood swings.**
5. **Difficulty accepting responsibility for their actions, usually blaming others.**
6. **Controls others by manipulation and confusion.**
7. **Frequent problems recalling details of events.**
8. **Risk taking behaviour when frustrated and angry.**

Antisocial Personality Disorder

AKA: Psychopath or Sociopath

- Typically a male, features began before age 15 yrs.
- Bed wetter's, animal crudity, fascination with fire,
- Lies, steal, fights and is sexually uninhibited.
- Does not care about the rights of others.

Biologic Origins of and Antisocial Personality Disorder:

- Monoamine oxidase A (Warrior gene).
- Lack of stimulation in the Autonomic Nervous Syst.
- Reduced activity in the frontal lobes of the brain.
- Orbital damages indicate psychopathology.

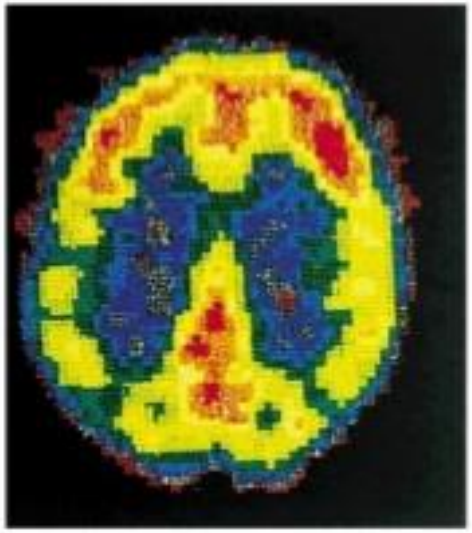
Environmental causes of Antisocial Personality Disorder:

- Unstable family, poverty,
- Physical-mental-sexual abuse
- Substance use, abuse and dependency

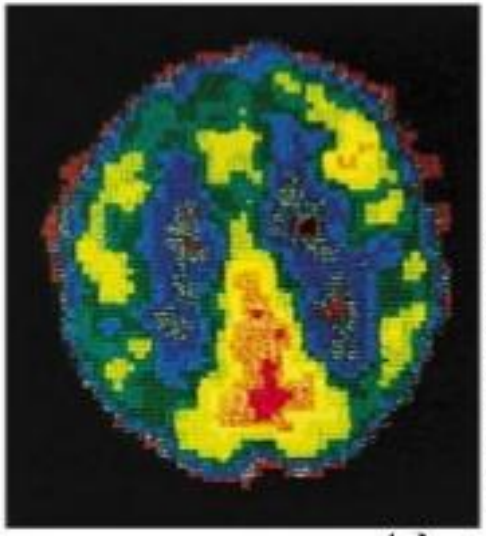
-Ted Bundy-
Serial Killer convicted of killing several people including Florida State Chi Omega Sorority girls in 1978.

Understanding Antisocial Personality Disorder

PET scans of 41 murderers revealed reduced activity in the frontal lobes. In a follow-up study, repeat offenders had 11% less frontal lobe activity (Raine et al., 1999; 2000).



Normal



Murderer

Courtesy of Adrian Raine, University of Southern California

PSYCHOSIS AND OTHER PSYCHOTIC DISORDERS

Two (2) Question:

A. What mental health conditions are most associated with the following terms?
   1. Delusions
   2. Delirium
   3. Dementia

B. What type of hallucinations do substance abusers typically experience?
   1. Auditory (Hearing)
   2. Visual (Seeing)
   3. Tactual (Physical sensations)
   4. Taste
   5. Smell

Psychotic Disorders

- **Psychotic Disorders (40%): are severe disturbances of thought "Delusions" involving symptoms of false perceptions, beliefs and auditory (hearing) hallucinations.**

Schizophrenia (14 - 47%).

Treatment Recommendations:

Typically include the use of psychiatric interventions, anti-psychotic medications, Social Services and conventional therapy.

SUBSTANCE INDUCED-CO-OCCURRING DISORDERS

SUBSTANCE INDUCED – PSYCHIATRIC DISORDERS

- **A Substance-Induced "Co-Occurring" Psychiatric Disorders . . . is a Psychiatric disorder that occurs AFTER the use of a drug.**

  Alcohol (Depressant).

  Cannabis (Sedative, Illusions).

  Hallucinogens (Hallucinations, Illusions).

  Opioids/Opiates (Pain Relief, Depressants).

  Sedative-Hypnotics (Depressants).

  Cocaine and Amphetamines, Methamphetamines (Stimulants).

REMEMBER:

Whatever signs or symptoms a drug was originally designed to treat…the withdrawal symptoms from that drug will usually be the opposite time's two (x2).

Anti-anxiety…… Rebound-anxiety

Anti-pain……. Rebound-pain

Anti-depression….. Rebound-depression

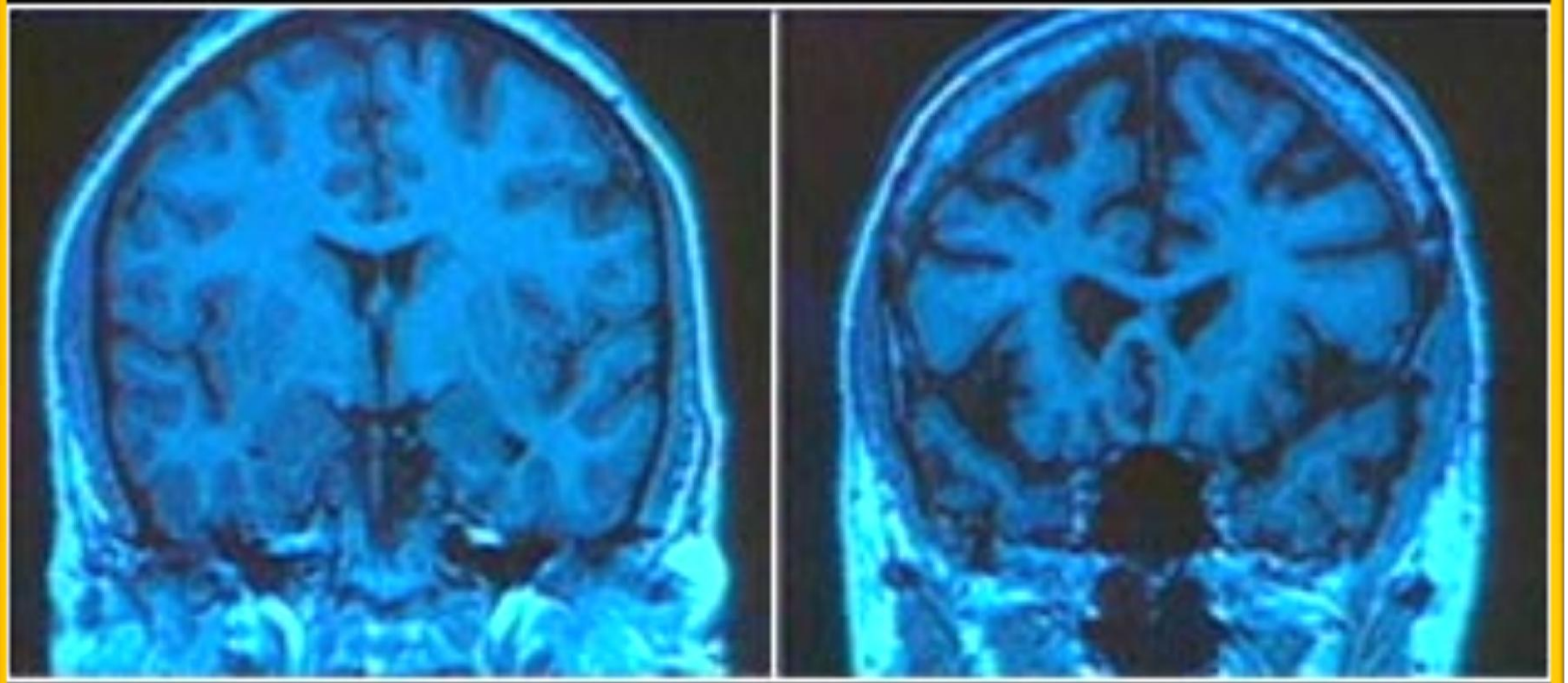
Anti-weight ……. Rebound-weight

Anti-sleep…… Rebound-insomnia

ALCOHOL

Question:

Does alcohol actually kill brain cells ?



Normal
43-year-old

Alcoholic
43-year-old

Alcohol and Drug Withdrawal Syndrome

- **Tremulousness: The most common symptom. (similar to flu like symptoms).**

- **Substance Induce Hallucinations: Most likely to occur within 24 hrs. after stopping.**

- **Only Twenty (20%) of the clients will experience some withdrawal hallucinations.**

Hallucinations

Most common hallucinations include:

- **Visual "sight", Auditory "hearing" and**
- **Tactile "touch".**

- **Less common hallucinations include: Gustory "taste" and Olfactory "smell".**

- **The presence of Gustory and Olfactory hallucinations could indicate Organic Brain injury.**

Seizure Disorders

- **Substance Induce Withdrawal Seizure Disorders may present with the following features:**

- **They may occur within 12 to 24hrs. after stopping, and occur as late as 7 days after discontinuing use….**
  (Delayed Withdrawal Syndrome).

- **Observe for the presence of Hallucinations, Confusion, Fever, Temp. increased heart-respiration difficulties.**

One in Five will Die!

ORGANIC BRAIN DISEASE AND ALCOHOL

Wernicke's Syndrome

-

Korsakoff's Psychosis

- **Vit. B-1 "Thiamine" deficiencies due to excessive alcohol use resulting in neurological-physiological damages and occurs before Korsakoff's Syndrome.**
- **<u>Pathologically</u>, alcohol has damaged the following regions of the brain due to 10 to 20 years of excessive alcohol use.**

  1. Cortex: (Wernicke's area associated with receptive speech).

  2. Cerebellum: (Ataxic, gait disturbance, peripheral neuropathy).
- **<u>Symptomatically</u>, the individual will appear:**

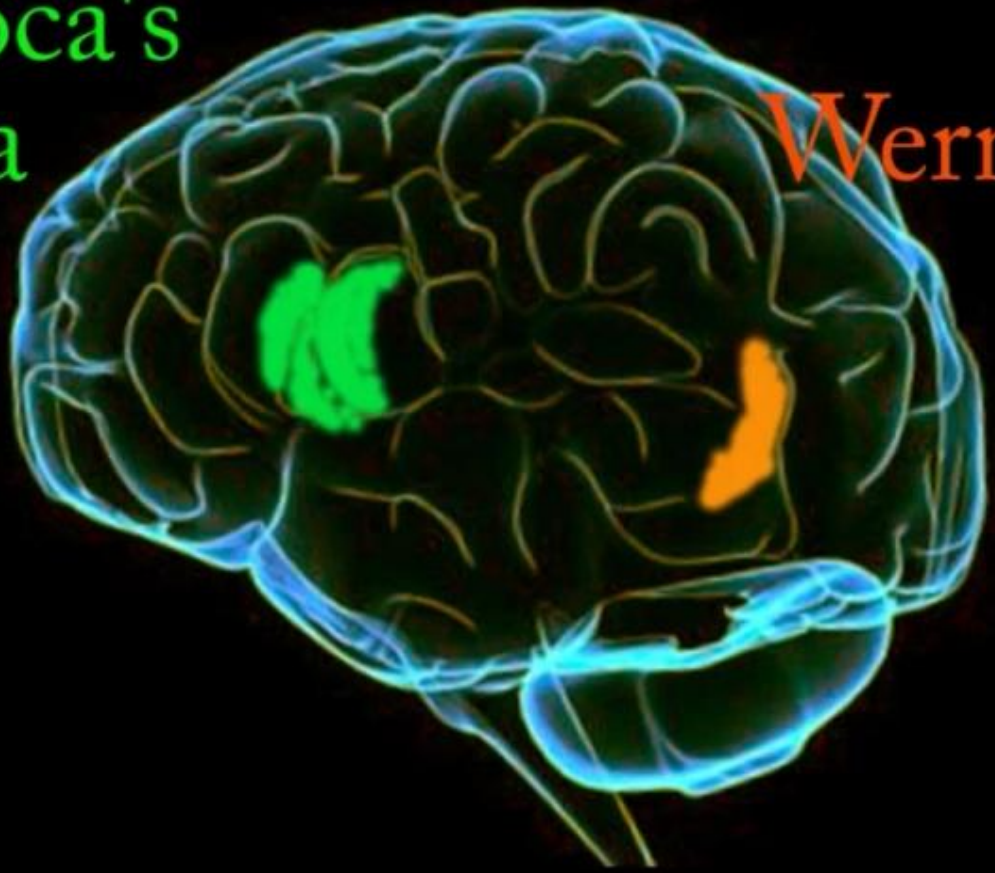
  1. Sensorium: (Time, Place, Person).

  2. Delirious: (confused thoughts, anxious, apprehensive).

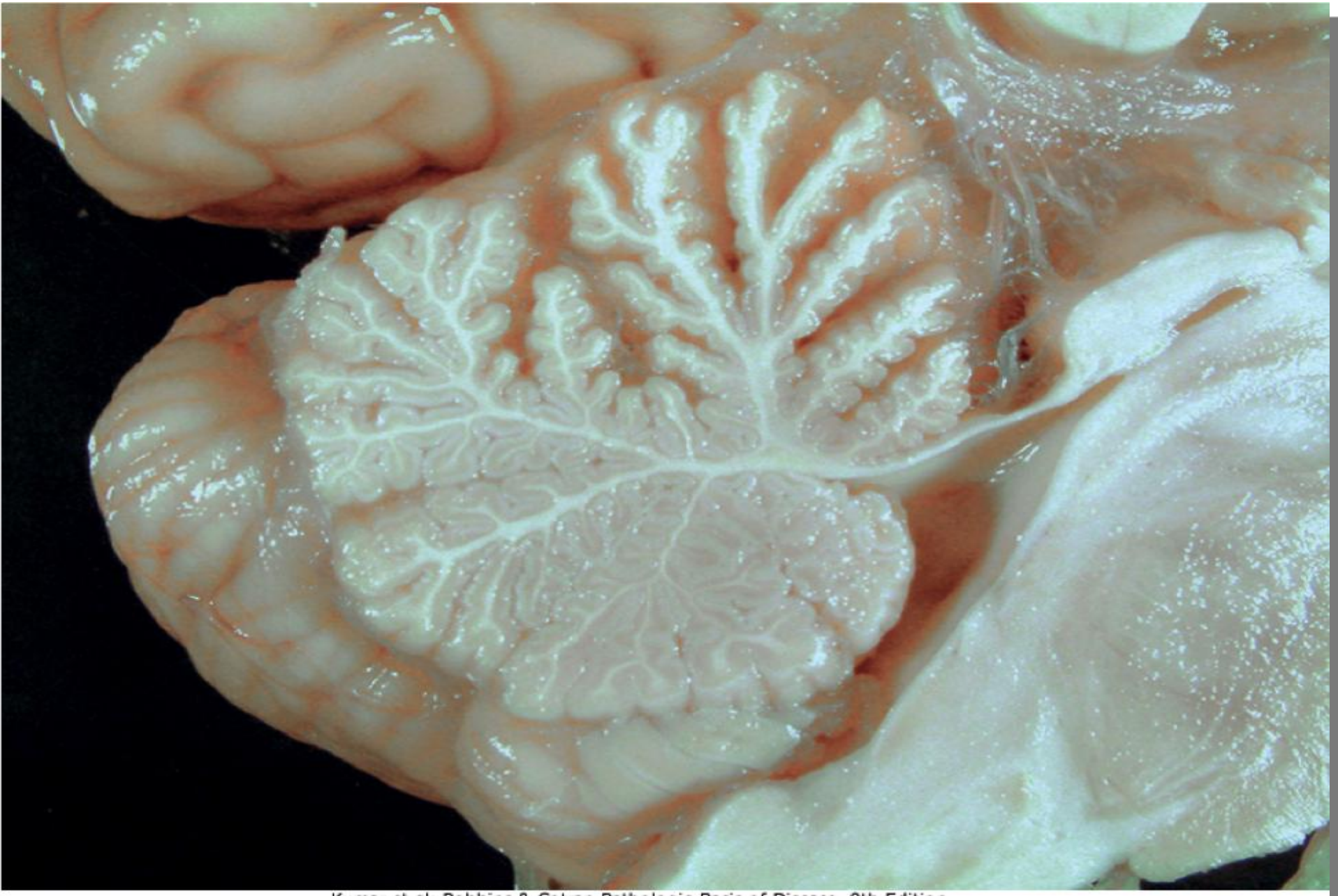
  3. Nystagmus: (uncontrolled lateral palsy of the eyes).

Broca's area

Wernicke's area



Cerebellum damage due to excessive alcohol



Korsakoff's Syndrome "Psychosis"

- **Vit. B-1 "Thiamine" deficiencies resulting in damages to the memory centers of the brain with individuals between 45 and 65 years of age with a history of long term alcohol use.**

- **Korsafoff's Syndrome is sometimes referred to as the "Alcohol Amnestic Syndrome" due to the individuals inability to encode, store or retrieve new memory information "Anterograde".**

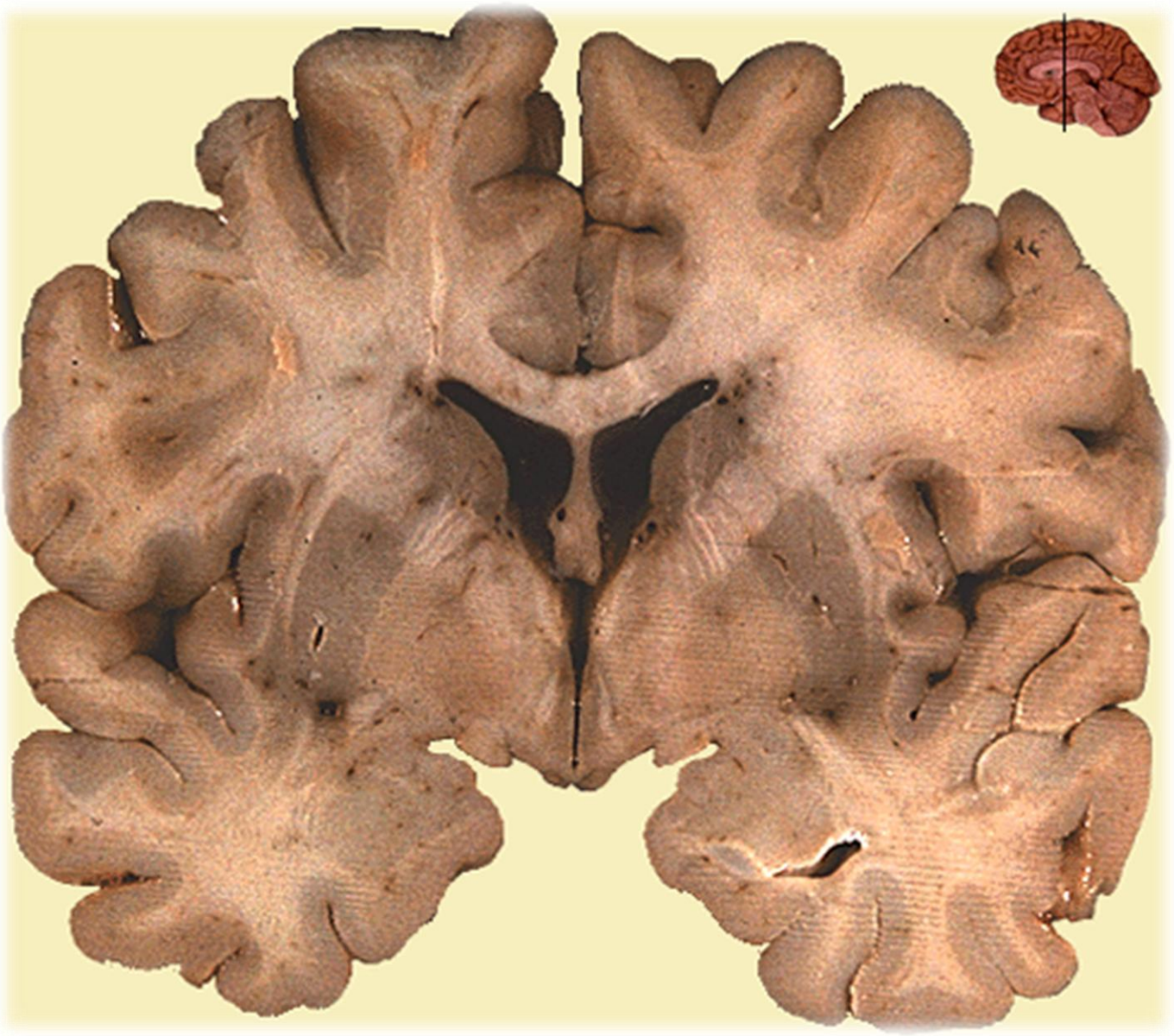
- **"Confabulation" is a term used specifically with this disorder that characterizes the Korsakoff patient making up grandiose stories in order to fill in the areas of their memory they don't remember.**

Cannabis
(Marijuana)

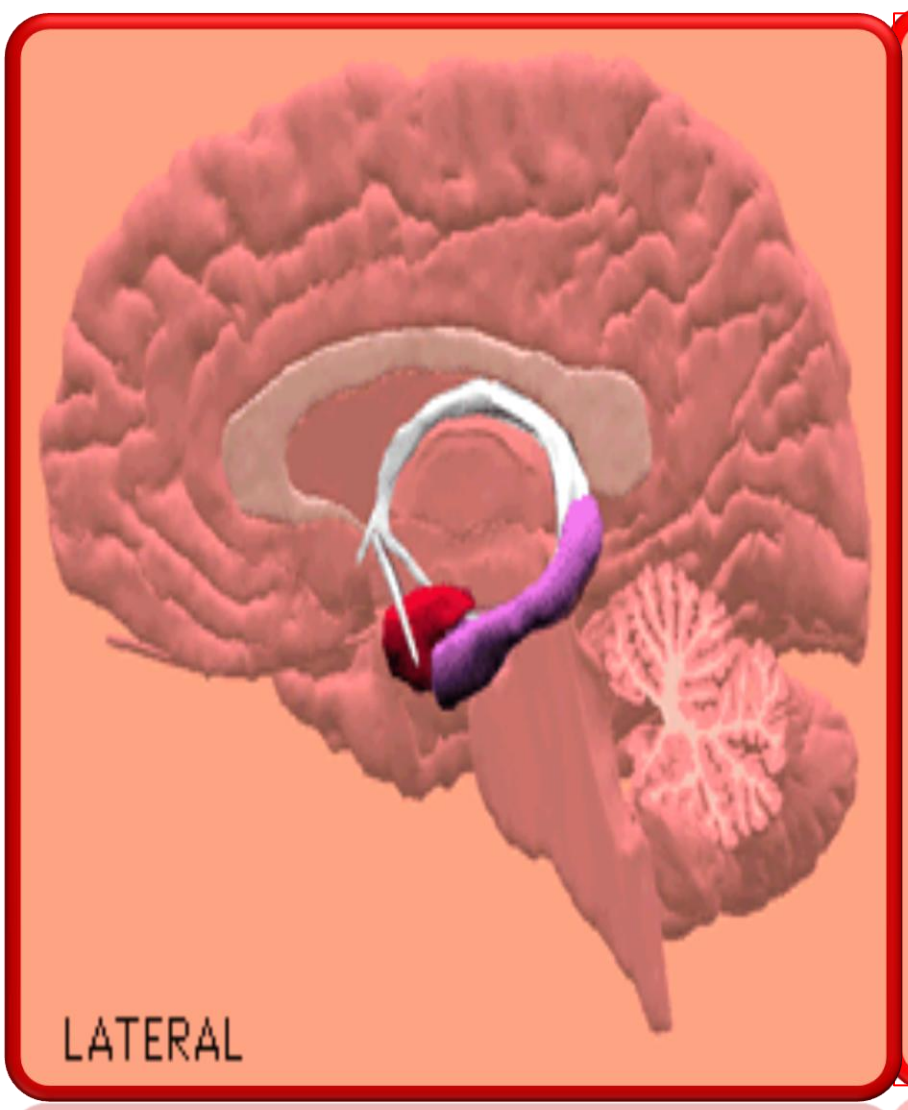
CANNABIS “MARIJUANA“

- CANNABIS “Marijuana“ is strongly attracted
- to the regions of the brain that are involved
- in short term memory and executive functioning, “Hippocampus“ - “Amygdala“ regions of the brain, resulting in Attention-Concentration problems typically observed in Attention Deficit Disorders, (ADD) and Attention Deficit-Hyperactivity Disorders (AD-HD).

White matter regions of the human brain



Short-term memory “Brain” centers that are impacted by marijuana



Cannabis “Marijuana”

- **Marijuana’s discontinuance syndrome has been compared to the withdrawal symptoms typically observed with tobacco withdrawal, and**
  . . . usually lasting approximately. . .
  Two (2) weeks.

Mood, anxiety, and panic disorders are routinely observed in individuals discontinuing marijuana.

Cannabis Hyperemesis

Signs and Symptoms:

1. **Long term and dosage dependent use of cannabis substances.**

2. **Believed to be impacting the hypothalamus.**

3. **Presents with severe morning nausea, vomiting and abdominal cramping.**

4. **Symptoms my cycle for months.**

5. **Temporary relief of symptoms is found by:**
   a. **Compulsive and frequent hot baths or showers.**
   b. **Discontinued use of cannabis substances.**

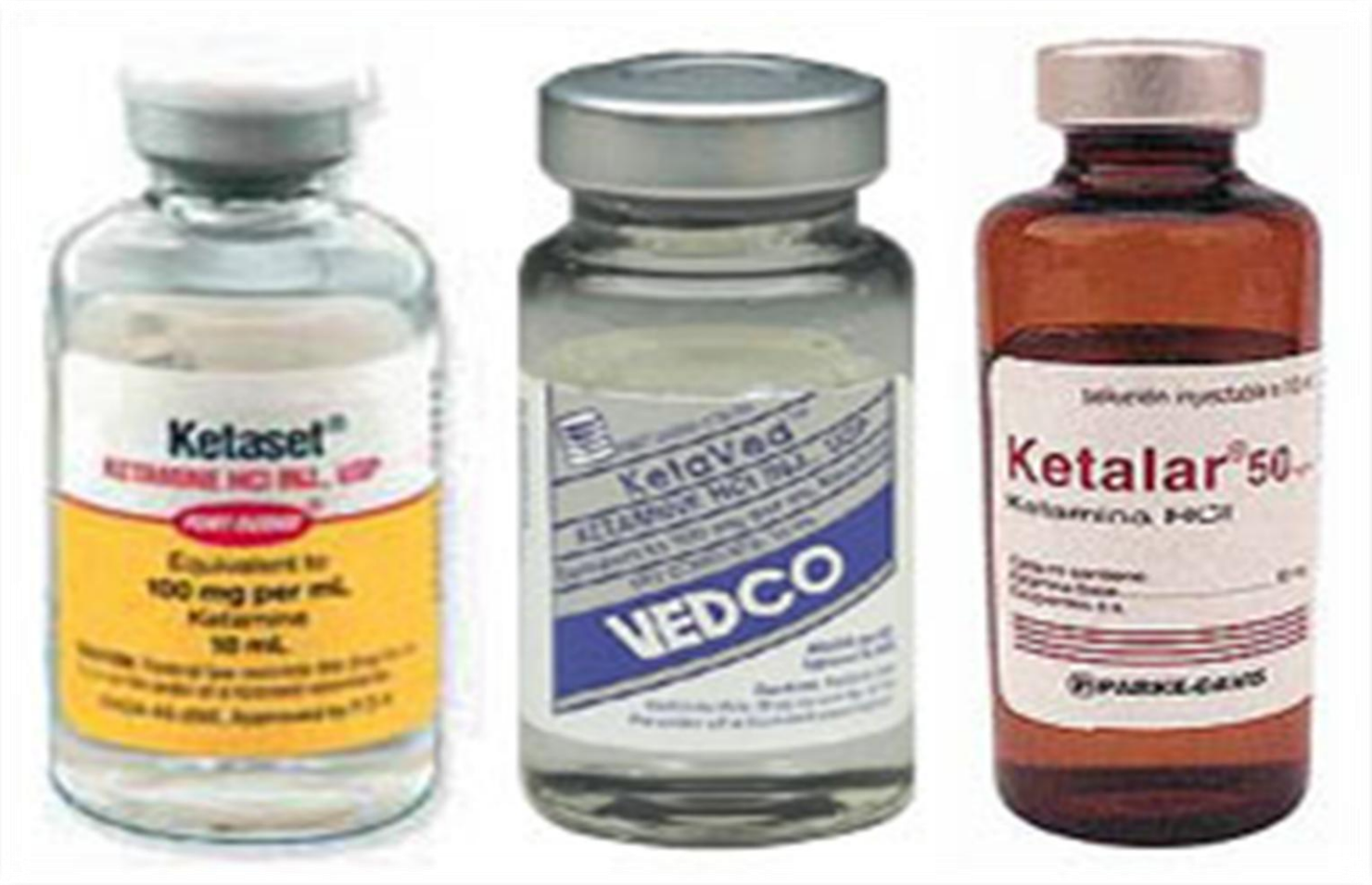
HALLUCINOGENS

HALLUCINOGENS

Hallucinogenic drugs include:

1. **Lysergic Acid Diethylamide (LSD), “Acid”.**
2. **Mescaline: “Found in Peyote cactus”.**
3. **Peyote “Cactus”.**
4. **Psilocybin “Mushrooms”.**
5. **MDA and MDMA “Ecstasy”.**
6. **Phencyclidine (PCP) “Angel Dust”.**
7. **Ketamine Special “K”.**

Designer “Hallucinogenic Drugs (Ketamine)



Ketamine (Special “K”)

- Ketamine was a drug used in human and veterinary medicine.
- Currently ketamine is being used with medication resistant depression.

- Ketamine’s general effects with humans include:
  1. Analgesia (Pain relief)
  2. Anesthesia (temporarily blocking pain
  3. Amnesia (Memory loss)
  4. Hallucinations and dissociative effects (PCP)
  5. Hypertension (Increased blood pressure)
  6. Bronchodilator (Improves breathing)

Designer “Hallucinogenic” Drugs (Dextromethorphan)

STIMULANTS
(Drugs that “activate“ the brain)

Cocaine,
Amphetamines, Methamphetamine,
MDMA, Mephedrone-Cathinone

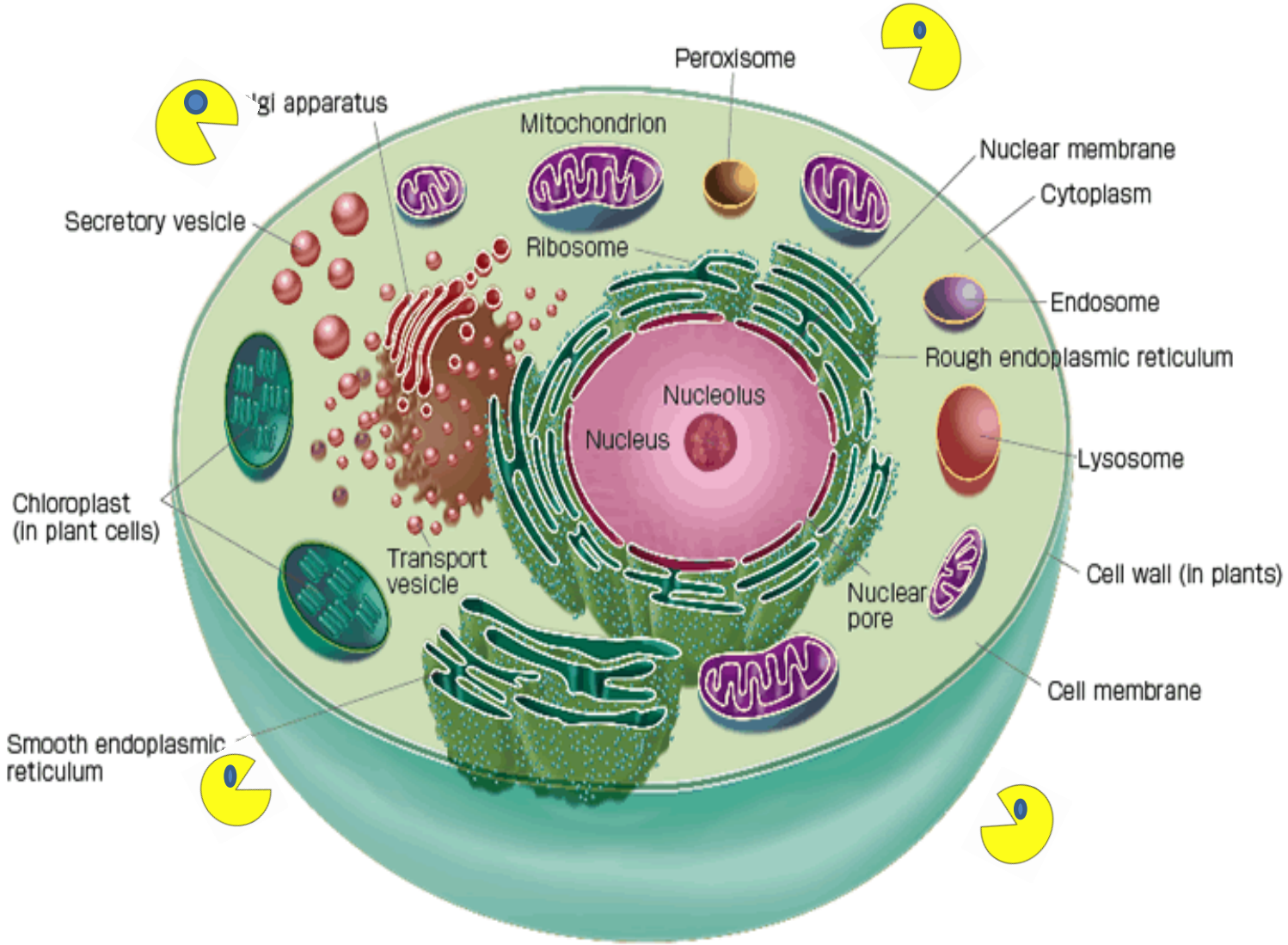
Stimulant drugs “activate” or excite the brain

- **<u>Stimulant drugs include the following:</u>**

Weight control, anti-sleep, anti- (ADD-AD-HD) medications as in the form of amphetamines and phentermine's . . (Ritalin, Cylert and Adderall).

Over the Counter products containing either ephedrine, ephedra or pseudoephedrine.

Cocaine and cell cannibalization



Stimulants

- **Binge or chronic use of stimulant drugs increase the potential for impulsive, violent and paranoid behaviours, due to the excessive levels of Dopamine (DA) released in the brain.**

- **Cocaine Psychosis: is characterized as a state of temporary paranoid delusions, however, less intense and bizarre than a psychosis created by Amphetamines.**

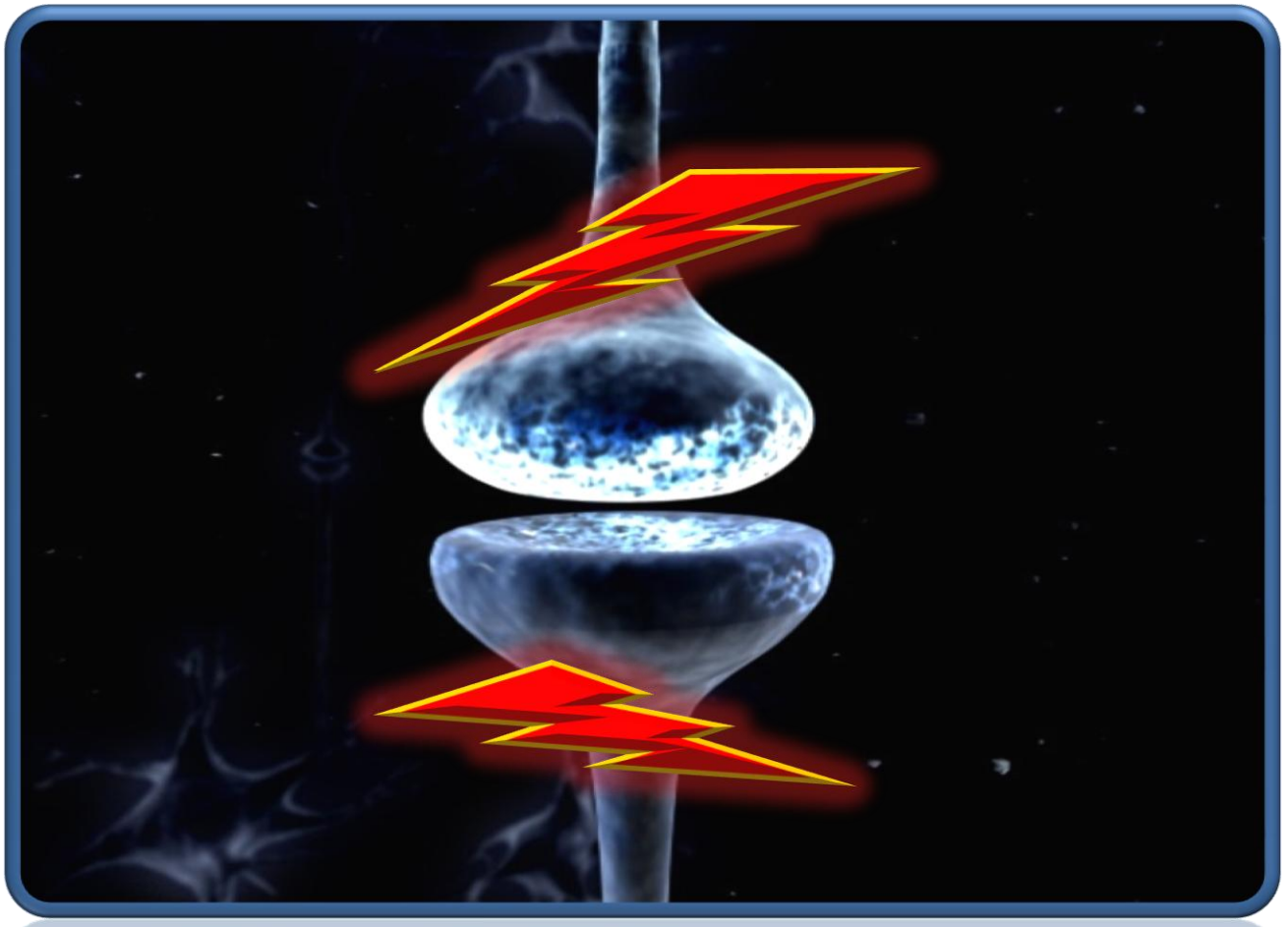
Stimulants

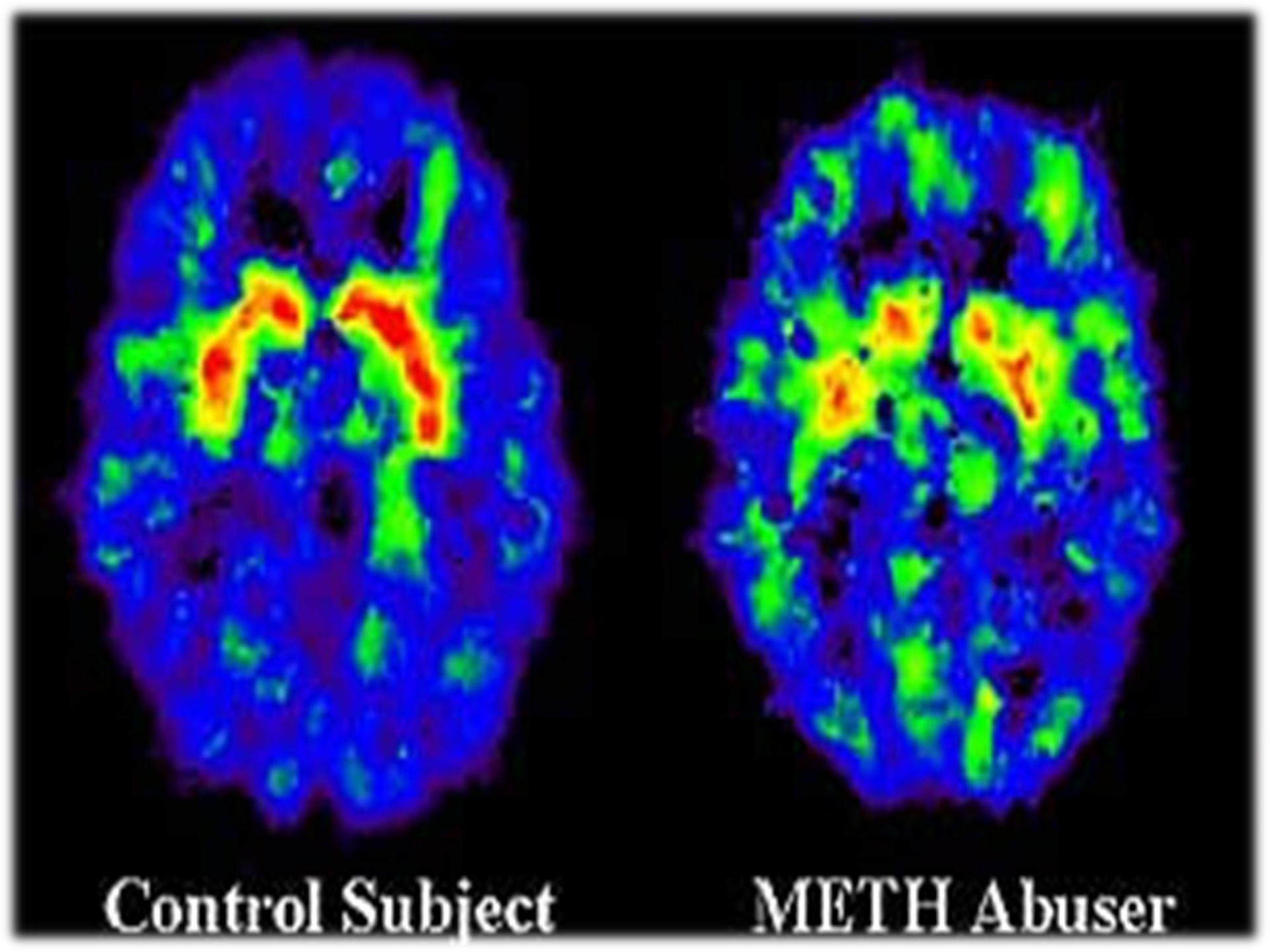
Amphetamine Psychosis: is characterized by thoughts of paranoia, lasting for weeks, months and even years longer than observed in Cocaine Psychosis. The physical changes that occur in the brain are considered long-term .

Amphetamine Psychosis symptoms typically include: Cycling depression, anxiety, mental confusion and concentration problems.

(Comparable to a "Head-Brain Injury" victim)

In order to limit the release of excessive dopamine (DA), "which is now neuro-toxic", the human brain will began the process of neuronal suicide, actually killing the entire neuron or pruning the axon terminals.




Control Subject
METH Abuser

QUESTION:

IF GIVEN THE CHANCE, CAN OR WILL THE METH. BRAIN ATTEMPT TO HEAL?

REVIEW

- We reviewed general Psychiatric disorders, including suicide, co-occurring disorders and the use of alcohol and drugs.

- We reviewed specific Substance-Induced, Co-occurring psychiatric disorders and the typical intoxication, withdrawal associated with each general class of drugs.

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REFERENCES and RECOMMENDED READINGS

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5h ed). Washington, DC: American Psychiatric Association.

- Buelow, G., Herbert Suzanne (1995). Counselor's Resource on Psychiatric Medications, Issues of Treatment and Referral. Brooks/Cole Publishing Co., Pacific Grove, Ca.

- **U.S. DEPARTMENT OF HEATLTH AND HUMAN SERVICES**

  Public Health Service

  Substance Abuse and Mental Health Services Administration

  Center for Substance Abuse Treatment

  TREATMENT IMPROVEMENT PROTOCOL

  (TIP) SERIES

  Rockwall II, 5600 Fishers Lane

•Cooper, H.R., Bloom, F.E., & Roth, R.H. (1991). The biochemical basis of neuropharmacology. New York: Oxford University Press.

•Erickson, C.K. (2007). The Science of Addiction. New York: W.W. Norton & Company, Inc.

•Stahl, S.M. (2003), Essential Psychopharmacology, Neuroscientific Basis and Practical Applications (2nd ed). Cambridge University Press.

•Scaer, R. (2005) The trauma Spectrum. WW Norton, New York.

•Siegal, D.J. (1995). Memory, trauma, and psychotherapy: A cognitive science view, Journal of Psychotherapy Practice and Research, 4, 93-122.

•Van der Kolk, B.A., McFarlane, A.C., Weisaeth,L., Traumatic Stress :

•The effects of overwhelming experience on mind, body and society.