BRAIN HEALTH PROFESSIONAL CERTIFICATION

SUBTYPING ADD, ANXIETY, DEPRESSION, ADDICTIONS, AND OBESITY

Lesson 6 Guided Notes

7 ADD BRAIN TYPES AS THEY APPEAR ON SPECT IMAGES

- **Classic ADHD:** Low activity in the prefrontal cortex (PFC) and cerebellum.
- **Inattentive ADHD:** Low activity in the PFC and cerebellum (but not as low as Type 1).
- **Overfocused ADD:** Low PFC activity with high anterior cingulate activity – a pattern often observed in the grandchildren of alcoholics.
- **Limbic ADD:** Low PFC activity and high limbic activity. Clinical presentation is often dysthymic.
- **Temporal Lobe ADD:** Temporal lobe symptoms (i.e., mood instability, irritability, temper problems, etc.) and low PFC activity.
- **Ring of Fire ADD:** Overall hyperactivity in the brain; stimulants often worsen symptoms.
- **Anxious ADD:** High basal ganglia activity along with low PFC activity.

7 BRAIN TYPES ASSOCIATED WITH ANXIETY AND DEPRESSION AS THEY APPEAR ON SPECT IMAGES

Pure anxiety: High activity in the basal ganglia.

Pure depression: High activity in the limbic area.

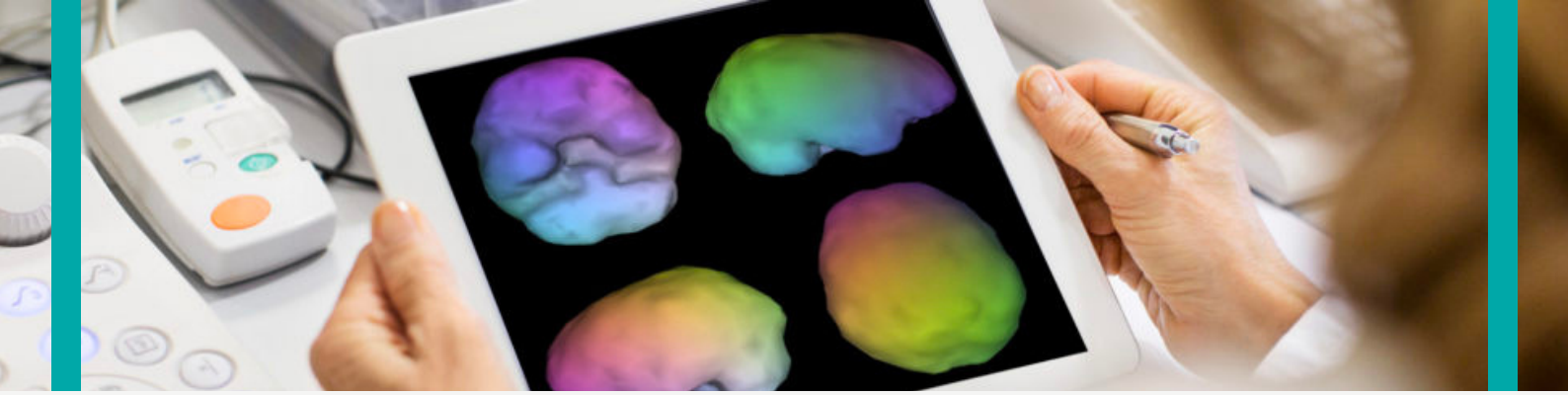
Mixed anxiety and depression: High activity in the basal ganglia and limbic area.

Overfocused: High activity in the anterior cingulate and limbic area.

Cyclic: Common in bipolar patients.

Temporal lobe: Mood instability and temper problems – likely stemming from traumatic brain injury but possibly mislabeled as bipolar.

Unfocused: Overall low activity, possibly due to toxin exposure, infection, or anoxic injuries.



6 BRAIN TYPES ASSOCIATED WITH SUBSTANCE ABUSE

Impulsive: Low PFC activity; tend to abuse stimulants, smoke, and drink caffeine.

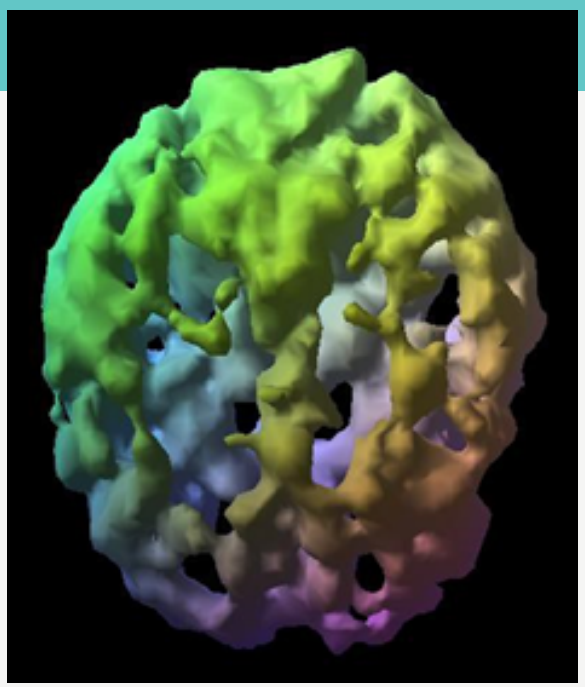
Compulsive: High cingulate activity; obsessed with their drug of choice.

Impulsive-Compulsive: Low PFC with high ACG activity craves substances that mimic dopamine and serotonin.

Sad addicts: Use substances to try and escape mood problems.

Anxious addicts: Use substances to calm anxieties.

Temporal Lobe: Substance abuse often occurs after a TBI, and they tend to get violent after drinking.



5 BRAIN TYPES ASSOCIATED WITH OBESITY

- **Impulsive Overeaters:** Low PFC activity; they are easily distracted, so they can't stick with a diet plan and have trouble saying "no" to food.
- **Compulsive:** High anterior cingulate activity; always thinking about food and feel compulsively driven without a sense of control.
- **Impulsive and compulsive:** Low PFC combined with high anterior cingulate activity.
- **Sad overeaters:** Overactive limbic activity tends to medicate feelings of sadness with food and gain weight in the winter because of decreased vitamin D levels, which interferes with the hormone leptin that tells us when to stop eating.
- **Anxious Overeaters:** High activity in the basal ganglia - this type tends to eat to soothe anxiety.