Schizophrenia/Bipolar Disorder – Abstract of Tests that Can be Administered.

Positive Symptoms of Psychosis

High Release Dopamine – Excitatory State

High release Serotonin - Excited State

Levels above should crash into a depressive state if the individual is exhibiting highs and lows as the lows tend to follow the highs.

Higher Levels of Amino Acid Release

Glutamate behaves exactly like dopamine – Higher levels of Glutamate in excitatory states

Inflammatory Markers as a result of inflammation in brain that is constantly processing stimuli and that dies. - Several <u>inflammatory markers</u>, spinal fluid can be tested for S100- β , a neurotrophic protein; tumor necrosis factor (TNF)- α ; interleukin (IL)-1 β , IL-2, IL-4, IL-6, IL-8, and IL-10; and C-reactive protein.

The psychiatric patients also had significantly higher levels of IL-1 β , TNF- α , IL-5, IL-6, and IL-10 than did controls. "These inflammatory mediators are often directly involved in BBB [Blood Brain Barrier] disruption letting in toxic chemicals that affect the brain and kill the brain.

Period followed by manic state should be depressive. I should crash. I don't. I can live each day

Tests conducted to test for excitatory states – Zero??.

I am diagnosed manic/psychotic – Manic - since I am hyperactive since 4:00 in the morning – PSYCHOTIC- [because of the non stop commands and garbage that flows out of my mouth.] . Both state should have heightened emotional states tied with it.

After 2 years of such a heightened state prior to committal in 2012, My brain should be too conditioned to emotion to the point where I should not even have the capacity to be able to function without that level of emotion in me. I should be addicted to that state with a year and half of heightened states.

Observations on Emotional States in while in committal in 2012??? - Zero

EEG"S should be conducted especially while in the 72 hr hold and that is the perfect time for the brain to still have plenty residual activity from the manic state even if she is in control of her emotions. EEG's ALWAYS SHOULD PICK UP THE ACTIVITY. There was none administered.

Brain's inability to focus from the constant internal and external stimuli leads to depressive states in individual –

Tests and observations to monitoring depressive states and loosening of associations in the brain - P300 monitors attention span. Schizophrenics have low P300, and is not able to chain thoughts as while it is processing a stimuli it is unable to process the next thought after as it is constantly being interrupted and looses the ability to chain. Very Impaired Memory – ATROPHY of Hippocampus.

Skin Conductance – Flushed states, sweaty palms in manic states.

P50 & PPI, measures sensory overload – Manic/Emotional States – High P50 & PPI

FMRI – Brain should be lit up with the constant stimuli the brain is experiencing especially manic state

FMRI – For brains unable to cope with the stimuli low activity displayed in a brain that is dying.

High Adrenaline as a result of prolonged euphoria also known as epinephrine – Measured Simple Blood Test.

Excess Auditory stimuli - Atrophy of temporal Gyrus, Sensory Overload - Parietal Gyrus Atrophy, Frontal Lobe Atrophy - As a result impairment of Frontal Lobe – resulting in an unregulated brain. MRI's may or may not pick it up.

MRI Studies Show - These findings include ventricular enlargement (80% of studies reviewed) and third ventricle enlargement (73% of studies reviewed). There is also preferential involvement of medial temporal lobe structures (74% of studies reviewed), which include the amygdala, hippocampus, and parahippocampal gyrus

Negative Symptoms of Psychosis

EEG Activity – Brain is ridiculously sleepy and impared. Brain should be displaying

low frequency waves while awake - Theta & Delta - Low attention span, zoned out

phase constantly.

Alpha Waves – They disappear with attention span. I technically should will have

presence of Alpha waves as I have an inability to focus.

Beta Waves – Abnormal – Inability to focus as they tend to give into their stimuli.

AntiPsychotics

Release of D2 receptors to bring down dopamine levels

Brain gets sensitive - Brain is not used to seeing it more - It is deprived, It gets

supersensitive.

Least amount of stimuli puts it highly excited state

Psychotic states worsen as a result of that.

A leaky Schizophrenic Brain tends to be deficient in amino acids.

http://www.nytimes.com/health/guides/test/plasma-amino-acids/overview.html

Alpha-amino-N-butyric acid

o Children: 8 to 37

Adults: 15 to 41

Glutamine

4

o Children: 420 to 730

Adults: 390 to 650

 Normal dopamine levels are contingent on age and method of testing. With urine testing, individuals 17 and younger should have 51 to 645 micrograms of dopamine every 24 hours. For adults, 52 to 480 micrograms is normal, according to Medscape

Serotonin Normal Blood Levels - The normal range is 101 to 283 ng/mL.

Reference - https://www.nlm.nih.gov/medlineplus/ency/article/003562.htm

Note: Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or test different samples. Talk to your health care provider about the meaning of your specific test results.

- Look for Regular Levels for Inflammatory Markers such as S100- β , a neurotrophic protein; tumor necrosis factor (TNF)- α ; interleukin (IL)-1 β , IL-2, IL-4, IL-6, IL-8, and IL-10; and C-reactive protein
- When a person is threatened, either from real or perceived threats, adrenaline causes dilation of the blood vessels and airways, a faster heart rate and higher blood pressure. Bursts of energy and more oxygen in the body allow for quick and efficient reactions. Along with adrenalin, norepinephrine and cortisol are also released to help the body function in reactive mode.
- Adrenaline Levels
- Norepinephrine Levels

Cortisol Levels -

Cortisol ¹			
Adult/Child	Morning	5-23 micrograms per deciliter (mcg/dL) or 138-635 nanomoles per liter (nmol/L)	
	Afternoon	3-16 mcg/dL or 83-441 nmol/L	

Catecholamines in Blood

A test for <u>catecholamines</u> measures the amount of the <u>hormones</u> <u>epinephrine</u>, norepinephrine, and dopamine in the <u>blood</u>. These catecholamines are made by <u>nerve tissue</u> , the <u>brain</u>, and the <u>adrenal glands</u>. Catecholamines help the body respond to stress or fright and prepare the body for "fight-or-flight" reactions.

The adrenal glands make large amounts of catecholamines as a reaction to stress. The main catecholamines are epinephrine (adrenaline), norepinephrine (noradrenaline), and dopamine. They break down into vanillylmandelic acid (VMA), metanephrine, and normetanephrine. Metanephrine and normetanephrine also may be measured during a catecholamine test.

Catecholamines increase <u>heart rate</u>, <u>blood pressure</u>, breathing rate, muscle strength, and mental alertness. They also lower the amount of <u>blood</u> going to the <u>skin</u> and <u>intestines</u> and increase blood going to the major organs, such as the <u>brain</u>, <u>heart</u>, and <u>kidneys</u>.

A psychotic individual reported in as psychotic for a year and a half prior to commitment is under extreme stress. An individual who is experiencing extreme paranoia should exhibit a heightened fearful state – It can be argued that the prolonged periods of laughter balances the reaction out. It can also be

argued that she did not exhibit prolonged periods of laughter prior to 2012 and should have been monitored for these levels.

Reference for Levels is found in WebMD

Catecholamines in blood ¹			
Epinephrine:	Lying down:	Less than 110 picograms per milliliter (pg/mL) or less than 599 picomoles per liter (pmol/L)	
	Standing up:	Less than 140 pg/mL or less than 762 pmol/L	
Navaninanhvina	Lying down:	70-750 pg/mL or 381-4,083 pmol/L	
Norepinephrine:	Standing up:	200-1,700 pg/mL or 1,088-9,256 pmol/L	
Dopamine: Sitting or lying dow		Less than 30 pg/mL or less than 163 pmol/L	
Metanephrine: Sitting or lying down:		Less than 0.50 <u>nanomoles per liter</u> (nmol/L)	
Normetanephrine: Sitting or lying down:		Less than 0.90 nmol/L	