



UW PACC

Psychiatry and Addictions Case Conference

UW Medicine | Psychiatry and Behavioral Sciences

PSYCHOSIS

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GENERAL DISCLOSURES

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SPEAKER DISCLOSURES

- ✓ No conflicts of interest

OBJECTIVES

At the conclusion of this presentation, participants will be able to:

1. Understand key diagnostic features psychotic disorders.
2. Become familiar with the medical work-up for first-episode psychosis.
3. Know how to initiate treatment with an antipsychotic and when to refer to specialty care.

PSYCHOSIS

- Three out of 100 people will experience psychosis at some time in their lives
- About 100,000 adolescents and young adults in the US experience first episode psychosis each year
- The most vulnerable age of psychosis is 12 to 25
- 85 % have onset by age 35
- Primary care is often the point of first contact for patients with psychotic symptoms

Griswold et al, 2015; Anderson et al, 2013 ; www.nimh.nih.gov

PRODROMAL PHASE OF FIRST-EPIISODE PSYCHOSIS

Gradual non-specific changes in the person's thoughts, perceptions, behaviors, and functioning:

- Anxiety, depression, irritability, anger
- Sleep disturbances, appetite changes
- Difficulty focusing/thinking clearly
- Feeling disconnected, withdrawal/isolation
- Suspiciousness or mistrust
- Bizarre behavior/appearance, poor hygiene
- Changes in the way things look or sound
- Decline in functioning (school, work, social)

Yung et al, 1996; Singh et al, 2005

PSYCHOSIS

- Psychosis = gross impairment of reality testing
- Core symptoms
 - Hallucinations
 - Delusions
 - Disorganized thinking and speech
 - Disorganized behavior
 - Negative symptoms
 - Cognitive deficits
- Functional impairments
 - relationship, work, education, activities of daily living

DIFFERENTIAL DIAGNOSES FOR PSYCHOTIC DISORDERS

- Schizophrenia
- Schizophreniform Disorder
- Schizoaffective Disorder
- Bipolar I Disorder with psychotic features
- Major Depressive Disorder with psychotic features
- Delusional Disorder
- Brief Psychotic Disorder

- Substance/Medication-Induced Psychotic Disorder
- Psychotic Disorder due to Another Medical Condition

MEDICAL CONDITIONS ASSOCIATED WITH PSYCHOSIS

Neurological	Brain tumors Huntington's disease Parkinson's disease Temporal lobe epilepsy)	Delirium Dementia Traumatic brain injury Multiple sclerosis
Endocrine	Hypoglycemia, Steroid-producing tumors, Adrenal dysfunction, Thyroid/Parathyroid disease	
Infections	CNS infections, Neurosyphilis, HIV, Herpes simplex encephalitis	
Metabolic	Hypoglycemia, Wilson's disease, Electrolyte abnormalities , Acute intermittent porphyria	
Immunological	Systemic lupus erythematosus (SLE), NMDAR encephalitis	
Nutritional deficiencies	Niacin (vitamin B3), Thiamine (vitamin B1), Vitamin B12	

IS THE PATIENT USING DRUGS/ALCOHOL?

- If yes → need to have symptoms present after at least a month of sobriety otherwise is attributed to substances
- Timeline of psychosis onset coincides with substance use



SUBSTANCE/MEDICATION-INDUCED PSYCHOTIC DISORDER

- **Withdrawal**
 - alcohol, benzodiazepines
- **Intoxication**
 - amphetamines, cocaine, hallucinogens, PCP, inhalants, cannabis, bath salts
- **Prescribed medications**
 - steroids, dopamine agonists, stimulants

PRIMARY PSYCHOTIC DISORDERS

Diagnosis	Distinctive features
Schizophrenia	Symptoms must be present for 6 months and active for 1 month Chronic and more severe course
Schizoaffective disorder	Prominent mood symptoms (depression or mania) and psychotic symptoms Psychosis for >2 weeks without prominent mood symptoms
Bipolar I disorder with psychotic features	Episodes of depression or mania Psychosis resolves when euthymic
Major depressive disorder with psychotic features	Major depressive episode and psychotic symptoms while depressed No psychotic symptoms when euthymic
Delusional disorder	Delusion for over a month, no other symptoms of psychosis

KEY POINTS ASSESSMENT

- **You cannot clearly make a diagnosis of the underlying causative illness based upon the psychotic symptoms alone**
- Schizophrenia is a diagnosis of exclusion
- Has a reversible cause been ruled out?
- Are cognitive deficits prominent?
- Collateral information is often necessary for diagnosis
- Understand the timeline of symptoms
 - recent onset/ episodic/chronic
- Is there evidence of a decline in level of functioning?
- Look for family history

INITIAL WORK-UP FOR FIRST-EPIISODE PSYCHOSIS

- Medical and family history
- Physical exam
- Focused neuro exam
- Vital signs
- Weight and height, BMI
- CBC, electrolytes
- BUN, creatinine
- LFTs
- Thyroid function tests
- Vitamin B12
- HIV
- Syphilis serology (FTA-ABS)
- Urine analysis
- ECG (ex. QTc)
- Pregnancy test
- Urine toxicology screen

MEDICAL WORK-UP FOR FIRST-EPIISODE PSYCHOSIS

If clinically indicated

- EEG
- Chest radiograph
- Lumbar puncture
- Heavy metal screen
- Rheumatologic workup (eg, antinuclear antibody)
- Anti-NMDA receptor antibody

MEDICAL WORK-UP FOR FIRST-EPIISODE PSYCHOSIS

- There is evidence to always recommend MRI for new onset psychosis



MEDICAL WORK-UP FOR FIRST-EPIISODE PSYCHOSIS

- Diagnostic yield low for MRI/CT if localizing neurological findings absent
- Consider MRI if
 - new, severe, unremitting headache
 - focal neurologic deficits
 - history of recent head trauma
 - atypical clinical presentation
 - unusual/treatment-refractory course

Lubman et al, 2002; Fujii et al, 2014

WHAT TO DO NEXT?

- **Safety assessment**
 - suicide/homicide risk
 - grave disability (ex. inability to care for oneself)
- **Psychiatric hospitalization** if safety concerns
 - voluntary/involuntary
- Referral for **psychiatric consultation**
 - new onset and chronic psychosis
 - diagnostic clarification
 - worsening symptoms after trial of antipsychotic
 - treatment guidance
 - difficult to manage side effects
- Start an **antipsychotic**

CHOOSING AN ANTIPSYCHOTIC FOR FIRST-EPIISODE PSYCHOSIS

- Side-effect profile
- Symptomology
- Medical co-morbidities
- Cost and formulations available
- Patient's preference
- Patient's drug response history

CHOOSING AN ANTIPSYCHOTIC FOR FIRST-EPIISODE PSYCHOSIS

- Trial of Atypical Antipsychotic other than Clozapine and Olanzapine
 - Risperidone
 - Aripiprazole, Ziprasidone, Lurasidone
 - if dyslipidemia, diabetes, or obesity
 - Quetiapine
 - if prior EPS/ severe sleep disturbance
- Usually require lower antipsychotic dosing
- Close monitoring due to greater sensitivity to medication side effects
- Lack of consensus on considering Typical Antipsychotics as option for first episode

ADVERSE EFFECTS OF COMMONLY USED ANTIPSYCHOTICS

	Low Potency FGAs	High Potency FGAs	Aripiprazole (Abilify)	Clozapine (Clozaril)	Olanzapine (Zyprexa)	Quetiapine (Seroquel)	Risperidone (Risperdal)	Ziprasidone (Geodon)
Anticholinergic effects	+++	+	0	+++	+	+	0	0
Dyslipidemia	++	+	0	+++	+++	++	+	0
EPS	+	+++	+	0	+	0	++	+
Hyperprolactinemia	++	+++	0	0	+	0	+++	+
NMS	+	++	+	+	+	+	+	+
Postural Hypotension	+++	+	+	+++	+	++	++	+
Prolonged QT interval	++	+	+	+	+	+	+	++
Sedation	+++	+	+	+++	++	++	+	+
Seizures	+	+	+	+++	+	+	+	+
Sexual dysfunction	+++	++	+	+	+	+	++	+
Type 2 diabetes	+	+	+	++	++	+	+	+
Weight gain	++	+	+	+++	+++	++	++	0

0 = rare; + = lower risk; ++ = medium risk; +++ = higher risk

FGA's= first generation antipsychotic; SGA's = second generation antipsychotic

TYPICAL ANTIPSYCHOTICS

Generic Name	Brand Name	Dose Range	Equivalent Dose
Chlorpromazine	Thorazine	30-800 mg	100 mg
Thioridazine	Mellaril	150-800 mg	100 mg
Perphenazine	Trilafon	12-64 mg	8 mg
Trifluoperazine	Stelazine	10-20 mg	5 mg
Fluphenazine	Prolixin	1-40 mg	2 mg
Thiothixene	Navane	6-40 mg	4 mg
Haloperidol	Haldol	1-20 mg	2 mg
Loxapine	Loxitane	20-250 mg	10 mg

ATYPICAL ANTIPSYCHOTICS

Generic Name	Brand Name	Dose Range	Equivalent Dose
Clozapine	Clozaril	300-900 mg	~50 mg
Risperidone	Risperdal	2-6 mg	~2 mg
Olanzapine	Zyprexa	5-20 mg (max 30)	~5 mg
Quetiapine	Seroquel	150-750 mg	~100 mg
Ziprasidone	Geodon	20-160 mg	~25 mg
Aripiprazole	Abilify	15-30 mg	~5 mg
Paliperidone	Invega	3-12 mg	~2 X risperidone
Asenapine	Saphris	10-20 mg	~5 mg
Iloperidone	Fanapt	12-24 mg	~8 mg
Lurasidone	Latuda	40-160 mg	~40 mg
Brexpiprazole	Rexulti	1-4 mg	~1 mg
Cariprazine	Vraylar	1.5-6 mg	~1.5 mg