Psychotic disorders
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Faculty Disclosure
- I have no financial relationships to disclose relating to the subject matter of this presentation

At the end of this session you will be able to:
- Appreciate the prevalence of various psychotic illnesses
- Describe the key features of various psychotic illnesses
- Understand how to differentiate between psychotic illnesses
- Select psychopharmacologic treatment for various psychotic illnesses
- Apply general principles on how to approach a patient with psychosis

Let's start with a case
- 29 yo woman was brought to the emergency room by the police after she started screaming at Starbucks then threw coffee at the barista. In the emergency room she stated "I need to be taken to jail. I think I contaminated someone with a virus and I need to go to jail. Don't get near me...I will make you sick too."

Other information gathered
- Blood work revealed mildly elevated WBC at 11.2, mild hypokalemia at 3.2, otherwise all labs including lfts, lytes unremarkable.
  - Utox is negative
  - BP: 135/78, HR 82 and regular, physical exam unremarkable
  - Pt is fully oriented and has not exhibited a waxing/waning level of consciousness

- The patient appears psychotic
- Given the information you have what diagnoses are on your differential?
Cast a broad differential dx net

Differential Diagnoses for psychotic disorders
- Mood Disorders with Psychotic Features
- Schizophrenia and Schizophreniform Disorder
- Substance-Induced Psychotic Disorder
- Delusional Disorder
- Psychotic Disorder due to General Medical Condition
- Psychotic Disorder NOS

Other diagnoses that can masquerade as psychotic illnesses
- Delirium- pts often have paranoia, visual hallucinations
- Paranoid and schizotypal personality disorders dance very near the edge of psychosis
- Obsessive compulsive disorder- at times obsessions can be difficult to discern from psychosis

Borderline Personality disorder
- When dysregulated a borderline patient can appear paranoid and think they hear people talking trash about them

So how do you figure out how to identify the diagnosis?

- Are psychotic sx only present when mood symptoms present?
- Does the patient have a medical condition that can cause psychosis?
• Is the patient using drugs/ETOH - if yes need to have sx present after at least a month of sobriety otherwise is attributed to substance(s)

• Does the patient have prominent negative symptoms?
• Is the patient delusional or psychotic?
• What is the nature of the psychotic symptoms? Are they mood congruent (depressive themes associated with the psychosis) or incongruent?

A word about hallucinations
• Hallucinations are defined as false sensory perceptions not associated with real external stimuli.

A word about delusions
• Delusions are defined as a false believe based on incorrect inference about external reality that is firmly held despite what most everyone else believes and despite what constitutes incontrovertible and obvious proof of evidenced to the contrary.
• Always keep in mind cultural norms
  - UFOs?
  - Astral travel?
  - Paranormal activity?

Mood incongruent
• Mood incongruent themes include delusions of control, persecution, thought broadcasting and thought insertion.

Mood congruent
• Delusions or hallucinations consistent with themes of a depressed mood such as personal inadequacy, guilt, disease, death, deserved punishment. For manic mood themes of worth, power, knowledge, special relationship to a deity.

Psychotic illnesses
Mood disorders with psychotic features

- Major depressive disorder with psychotic features
- Bipolar disorder, manic or mixed
- Schizoaffective disorders

Major depressive disorder (MDD) with psychotic features

- Patient meets criteria for major depressive episode and also has psychotic symptoms while depressed
- Does not have psychotic symptoms during times of euthymia
- Psychotic features occur in ~18.5% of patients who are diagnosed with MDD

Treatment- Meds

- Cornerstone of treatment is initiation of antidepressants but need antipsychotic as well
- Antidepressant+antipsychotic treatment was superior to monotherapy with either drug class in the acute treatment of psychotic depression.
- See psychopharm lecture for how to select an antidepressant and antipsychotic

Treatment- ECT

- ECT is very effective for psychotic depression—particularly in elderly and pregnant.

ECT

- ECT in nonpsychotic depression versus psychotic depression and found a remission rate of 95% in patients with psychotic depression compared with an 83% remission rate in patients with nonpsychotic depression.
- ECT treatments with bilateral or right unilateral electrode configuration can be superior to combination

Bipolar I disorder, manic or mixed with psychotic features

- Patient had bipolar disorder and is manic or mixed and exhibiting psychotic features
- Estimated to occur in ~25% of Bipolar I patients


Arusha Farahani, Christoph Correll Are Antipsychotics or Antidepressants Needed for Psychotic Depression? A Systematic Review and Meta-Analysis of Trials Comparing Antidepressant or Antipsychotic Monotherapy With Combination Treatment J Clin Psychiatry 2019;80:122–33.
Treatment

- Treat with mood stabilizer AND antipsychotic
- If patient mixed or not responding to meds consider ECT
- Keep in mind catatonia which is most commonly associated with bipolar disorder. Cornerstone of treatment for catatonia- benzodiazepines.

Schizophrenia

- Two or more of the following present for a significant portion of the time during a 1 month period:
  - Delusions*
  - Hallucinations* (See link on website for examples)
  - disorganized speech*
  - grossly disorganized or catatonic behavior*
  - negative symptoms (affect flattening, alogia, avolition, apathy)

  *denotes positive symptoms

Schizophrenia

- Must have at least one of these core positive sx: delusions, hallucinations, disorganized speech
- Must cause significant social/occupational dysfunction
- Continuous signs of disturbance for 6 months
- < 6 months = schizophreniform

Epidemiology

- It affects 1-2% of the population
- Onset symptoms in males peaks 17-27 yrs
- Onset symptoms in females: 17-37 yrs
- Only 10% new cases have onset after 45 years
- Presence of proband with schizophrenia significantly increases the prevalence of schizoid and schizotypal personality disorders, schizoaffective disorder and delusional disorder

Etiology

- Studies of monozygotic twins suggest approximately 50% schizophrenia risk genetic as there is 40-50% concordance
- Estimated: the other 50% due to as of yet unidentified environmental factors including in utero exposure
Pathophysiology

- Possibly due to aberrant neuro-developmental processes such as increase in normal age-associated pruning frontoparietal synapses that occur in adolescence and young adulthood
- Excessive activity in mesocortical and mesolimbic dopamine pathways

Schizophrenia and addiction

- 47 percent have met criteria for some form of a drug/ETOH abuse/addiction.
- The odds of having an alcohol or drug use disorder are 4.6 times greater for people with schizophrenia than the odds are for the rest of the population: the odds for alcohol use disorders are over three times higher, and the odds for other drug use disorders are six times higher.

Schizophrenia illness course

- Negative symptoms thought to be more debilitating in regards to social and occupational impairment
- >90% of pts do not return to pre-illness level of social and vocational functioning
- 10% die by suicide

Schizophrenia illness course

- Generally marked by chronic course with superimposed episodes of symptom exacerbation
- ⅓ have severe symptoms & social/vocational impairment and repeated hospitalizations
- ⅓ have moderate symptoms & social/vocational impairment and occasional hospitalizations
- ⅓ have no further hospitalizations but typically have residual symptoms, chronic interpersonal difficulties and most cannot maintain employment

Treatment

- Positive symptoms respond better than negative
- Antipsychotics are mainstay of treatment.
- Atypical antipsychotics: used first to reduced risk of Tardive Dyskinesia (TD) but can have weight gain, metabolic syndrome including elevated lipids and type 2 diabetes
- Risk of TD approximately 3-5% per year for typical antipsychotics. Highest in older women with affective disorders
- Risk of dystonic reaction highest in young males
Schizoaffective disorder

- Uninterrupted period: either major depressive, episode or mixed episode after criterion for schizophrenia met
- Periods where delusions or hallucinations present for >2 weeks without prominent mood symptoms
- Symptoms that meet criteria for a mood disorder are present for a substantial portion of the illness
- Lifetime prevalence rates is 0.7%

Schizoaffective disorder treatment

- Antipsychotics are mainstay
- If depressed type: add antidepressant
- If Bipolar type: mood stabilizers as well

Substance induced psychotic disorder

- A. Prominent hallucinations or delusions.
- B. There is evidence from the history, physical examination, or laboratory findings of either (1) or (2):
  - (1) the symptoms in Criterion A developed during, or within a month of Substance Intoxication or Withdrawal
  - (2) substance use is etiologically related to the disturbance

The diagnosis cannot be made if the symptoms occurred before the substance or medication was ingested, or are more severe than could be reasonably caused by the amount of substance involved.

- If the disorder persists for more than a month after the withdrawal of the substance, the diagnosis is less likely with the exception of methamphetamines.

Substances associated with inducing psychosis:

- Alcohol
- Cocaine
- Amphetamines
- Cannabis
- LSD, PCP
- NMDA, Ketamine
- Inhalants
- Opioids
Treatment
• Stop the drug use
• Chemical dependence treatment if indicated
• Consider antipsychotics depending on how psychotic the patient is and how long the symptoms have been present

Psychotic disorder due to a General Medical Condition (GMC)
- Brain tumors
- Seizure disorders
- Delirium
- Huntington’s disease
- Multiple Sclerosis
- Cushing’s syndrome
- Vitamin deficiencies
- Electrolyte abnormalities
- Thyroid disorders
- Uremia
- SLE
- HIV
- Wellbutrin
- Anabolic steroids
- Corticosteroids
- Antimalarial drugs

What to do?
- Search for and treat underlying cause
- May or may not have to treat with antipsychotics

Delusional disorder
- Delusions of at least one months duration
- Criterion A for Schizophrenia never met
- Apart from impact of delusions functioning not markedly impaired
- Not due to mood disorder or substance
- Specifier for bizarre type
Epidemiology

- Lifetime prevalence = 0.03%
- Mean age of onset is ~40 years
- Slightly higher in females compared to males (1:2-1:6:1)

Delusional disorder subtypes

- Erotomanic
- Grandiose
- Persecutory
- Jealous
- Somatic
- Mixed

Delusional disorder treatment

- Generally regarding as treatment resistant
- For somatic delusions of parasitosis, antipsychotics are helpful
- Focus on therapeutic alignment with non-confrontational approach
- Focus on the stress of their experience and how to reduce the distress

Brief psychotic disorder

- Presence of one or more of the following
  - delusions
  - Hallucinations
  - Disorganized speech
  - Disorganized or catatonic behavior
- Duration of episode is <1 month with eventual return to premorbid level of functioning

Psychosis Disorder Due to Another Medical Condition

- If pt has psychotic sx but does not meet criteria for any diagnosis they get the Psychosis NOS diagnosis

Getting back to our case

- 29 yo woman was brought to the emergency room by the police after she started screaming at Starbucks then threw coffee at the barista. In the emergency room she stated “I need to be taken to jail. I think I contaminated someone with a virus and I need to go to jail. Don’t get near me…I will make you sick too.”
- PE, VS, lab work all unremarkable
Mental status exam

- Appearance: disheveled, anxious
- Behavior: mild PMR, poor eye contact
- Speech: soft, constricted prosody
- Mood: “beyond terrible”
- Affect: mood congruent, depressed
- Thought process: perseverative on belief she must go to jail because of perceived wrong doing
- Thought content: +delusions she has harmed someone, +paranoia, -AH, passive SI stating she deserves to die without plan, -HI, -TI, -TB, -IOR
- Cognition: fully oriented
- Insight/judgement: poor

Lets get back to our differential diagnoses for Psychotic disorders

- Mood Disorders with Psychotic Features?
- Schizophrenia and Schizophreniform Disorder?
- Substance-Induced Psychotic Disorder?
- Delusional Disorder?
- Psychotic Disorder due to General Medical Condition?
- Psychotic Disorder NOS?
- Look alikes: BPD, OCD, PPD, schizotypal pd?

Given just what you know what is the most likely dx?

MDD with psychotic features

- Leading diagnosis given depressive themes to psychosis, depressed mood, negative uotox, no abnormalities in labs, normal PE and lack of negative sx

To rule in the DX

- Pt needs to currently meet criteria for a major depressive episode and not have other reasons for psychosis for example

What information would you need to r/o other dx?

- No history of manic episodes- t/o BAD
- No drug/ETOH use in recent past- t/o SIPD
- No medical issues such as hypothyroidism- t/o psychotic disorder due to a GMC
- Does not meet criteria for schizophrenia
Clinical pearls

How to approach a psychotic pt

- Acknowledge you believe they are experiencing what they are reporting
- Try not to collude with the pt
- Try to establish rapport before confronting psychotic beliefs
- Don't be overly friendly or it can feed into the paranoia

Take home points

- Psychotic disorders can be primary or secondary
- Cornerstone of treatment is antipsychotics if primary psychotic illness
- If secondary psychotic illness treat underlying cause and often will also need to use antipsychotics
- There are approaches as outlined earlier that can make interactions with patients more effective