TREATING PSYCHOSIS IN THE CONTEXT OF SUBSTANCE USE

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GENERAL DISCLOSURES

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✓ No conflicts of interest
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OBJECTIVES

1. Describe the epidemiology of comorbid substance use and psychotic symptoms
2. Identify distinguishing features of substance induced psychosis vs primary psychotic disorders and appropriate treatment for each
3. Develop an evaluation and treatment approach for patients presents with substance use and psychotic symptoms
LET’S START WITH A CASE

• A 46-year-old M comes in for his monthly clinic visit.
  
  – Schizoaffective Disorder and multiple SUD’s (stimulants, opioids, cannabis, others in the past)
  – HIV (adherent with ART, VL undetectable, CD4 normal)
  – Meds: Olanzapine 10 mg BID, Suboxone 32 mg daily, Mirtazapine 30 mg nightly, and Biktarvy daily
CASE CONTINUED

• Urine drug screens (weekly) have been negative for opioids (+bup), positive for cannabis and intermittently amphetamines

• Most recent urine drug screen positive for opiates in addition to amphetamines and cannabis
CASE CONTINUED

• Used heroin due to “extreme anxiety”
• Anxiety caused by “beings from other dimensions, other versions of me, that have entered this world and are after me to take over my body”
• Entities are following, watching him, and intermittently “attack” him
• Using heroin to cope
WHAT TO DO NEXT

A. Increase Olanzapine dose
B. Discuss with pt other treatment options - methadone vs sublocade vs observed clinic suboxone dosing
C. Make no med changes but review with pt that meth and cannabis may cause psychotic symptoms, advise he stop using
D. Send pt to ED and recommend psychiatric hospitalization
E. Refer for inpatient SUD treatment (28 day program)
PSYCHOSIS IN THE CONTEXT OF SUBSTANCE USE – A COMMON PROBLEM

• Psychotic symptoms more common among people who use substances
  – Amphetamines, cocaine, alcohol, and cannabis associated with greatest risk
  – Severity, duration of use, age at first use, vulnerability to psychosis influence risk
PREVALENCE OF PSYCHOTIC SYMPTOMS AMONG USERS OF SPECIFIC SUBSTANCES (SMITH ET AL., 2009)

- Compared to incidence of psychotic symptoms (NOT schizophrenia) in general population – 4.8% to 8.3%

<table>
<thead>
<tr>
<th>Substance</th>
<th>Users w/o diagnosis</th>
<th>Users w/ severe dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis</td>
<td>12.4%</td>
<td>80%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>6.7%</td>
<td>88.7%</td>
</tr>
<tr>
<td>Opiates</td>
<td>6.7%</td>
<td>58.2%</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>5.2%</td>
<td>100%</td>
</tr>
</tbody>
</table>
SUBSTANCE-INDUCED PSYCHOSIS CAN PROGRESS TO SCHIZOPHRENIA

• Pts with diagnosis of SIPD in Swedish registry followed for mean of 84 months (Kendler et al., 2019)
  – 11.3% converted to schizophrenia
  – Lowest risk for alcohol-induced, highest for cannabis-induced
  – Predicted by early age of SIPD dx, male sex, further substance use, family history of psychotic illness
Figure 1. Cumulative Probability of Receiving a Schizophrenia Spectrum Disorder Diagnosis (N = 18,478)
SUBSTANCE USE IN THE CONTEXT OF PSYCHOSIS – ANOTHER COMMON PROBLEM

- Substance use is more common among people with psychotic disorders than the general population
  - Individual with Schizophrenia diagnosis – up to 50% lifetime prevalence of SUD
  - SUD associated with poor outcomes (increased symptoms and lower treatment adherence)
  - Nicotine, alcohol, cannabis, cocaine are common

Winklbaur et al., 2006
SO WHICH ONE IS IT (THE HARDEST PROBLEM?)

• Difficult to distinguish substance-induced psychotic disorder (SIPD) from primary psychotic illness (PPD)

• DSM V Definition of S/MIPD
  – Hallucinations and/or delusions
  – Developed within 1 mo of intox/withdrawal
  – Not better explained by a psychotic disorder
  – Not exclusively during a delirium
DURATION OF SYMPTOMS IN SUBSTANCE-INDUCED PSYCHOSIS

• Persistence of symptoms beyond 4 weeks in the context of abstinence generally considered no longer SIPD

• Difficult to study given nature of substance abuse

• In lab setting (participants administered amphetamines) psychotic symptoms resolved within 6 days

• Cannabis-induced psychotic symptoms resolve in several days – 1 month depending on study

Schukit et al., 2007
DIFFERENCES BETWEEN PPD WITH CONCURRENT SUBSTANCE USE AND SIPD

• 400 people presenting to ED with psychotic symptoms, had used drugs in the past 30 days
  – At initial encounter 44% diagnosed as SIPD, 56% as PPD
    • Predictors of SIPD dx were family history of substance use, dx of dependence on any drug, and visual hallucinations
    • PPD dx – less insight, more severe symptoms

Caton et al., 2005
FOLLOW UP

• At 1 year follow up 25% of those initially diagnosed as SIPD now met criteria for PPD
  – Poorer premorbid functioning, less insight, greater family history of psychotic illness

• At 2 year follow up
  – Participation in outpatient treatment increased in PPD group, decreased in SIPD group
  – Both groups improved over time (reduction in psychotic symptoms, substance use, improved psychosocial functioning) but no evidence that SIPD group improved more

Caton et al., 2007; Drake et al., 2011
A REVIEW OF THE LITERATURE

• Studies comparing SIPD to PPD + SUD found that those with SIPD have
  – Weaker family history of psychosis
  – Greater degree of insight
  – Fewer symptoms (positive and negative)
  – More depression and anxiety symptoms

Wilson et al., 2017
<table>
<thead>
<tr>
<th>Primary psychosis (eg, schizophrenia)</th>
<th>Cannabis-induced psychosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis urine toxicology sometimes positive</td>
<td>Positive cannabis urine toxicology</td>
</tr>
<tr>
<td>Variable reported cannabis use (25% prevalence of positive cannabis urine toxicology in schizophrenia)</td>
<td>Heavy cannabis use within past month</td>
</tr>
<tr>
<td>Symptoms appear before heavy substance use</td>
<td>Symptoms appear only during periods of heavy substance use/sudden increase in potency</td>
</tr>
<tr>
<td>Symptoms persist despite drug abstinence</td>
<td>Symptoms abate or are reduced with drug abstinence</td>
</tr>
<tr>
<td>Antipsychotics markedly improve symptoms</td>
<td>Antipsychotics may/may not improve symptoms</td>
</tr>
<tr>
<td>Most often presents with delusions, hallucinations, and thought disorder</td>
<td>Often associated with visual hallucinations and paranoid ideation (eg, features of an “organic” psychosis)</td>
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<tr>
<td>Less insight about psychotic state</td>
<td>More aware of symptoms/insight about disease</td>
</tr>
<tr>
<td>Disorganized thought form (eg, loose associations, tangential or circumstantial speech)</td>
<td>Thought form more organized and sequential</td>
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WHY DOES IT MATTER?

• Correct diagnosis = correct treatment
  – PPD – continue medication, outpatient mental health treatment including regular psychiatry visits
  – SIPD – substance abuse treatment, may taper off medication when stable, continue close monitoring for psychotic symptoms

• Unnecessary exposure to antipsychotic medication/side effect burden for those with SIPD

• Enabling substance use by medicating negative effects???
APPROACH TO A PATIENT PRESENTING WITH PSYCHOTIC SYMPTOMS AND SUBSTANCE USE

• Assess safety
  – Need for hospitalization/inpatient SUD treatment?
• Careful history when possible
  – Timing of symptoms
  – Periods of abstinence?
    • Psychotic symptoms may continue if substance use continues
  – Atypical presentation may suggest SIPD
  – Dx of primary psychotic disorder doesn’t rule out SIPD
TREATMENT OF PSYCHOSIS IN THE CONTEXT OF SUBSTANCE USE

• Treatment guidelines less clear for SIPD than for PPD
  – SUD treatment and psychiatric monitoring for persistent/recurrent psychotic symptoms at minimum for SIPD

• Treatment likely needed before diagnosis is established
  – Treat SUD
  – Assess need for antipsychotic medication
    • Degree of impairment, pt preference
    • Is period of observation w/o antipsychotic possible/safe?

• Dual diagnosis treatment programs are ideal for those with PPD and SUD

• Psychoeducation and building rapport are key
MEDICATION SELECTION AND DURATION OF TREATMENT

• No evidence that certain medications are more effective (either in SIPD or PPD with comorbid substance use)
• Evidence for increased risk of TD in people who use substances (especially alcohol)
• 2nd generation antipsychotics first line
• No consensus about duration of medication treatment for suspected SIPD
  – Consider risk factors
MEDICATIONS FOR AMPHETAMINE PSYCHOSIS

• RCT data for olanzapine, haloperidol, aripiprazole, quetiapine, risperidone
  – All reduced psychotic symptoms
  – No drug clinically superior
  – Some but not all studies showed more side effects with haloperidol

Fluayu et al., 2019
MEDICATIONS FOR CANNABIS PSYCHOSIS

• Olanzapine, aripiprazole, haloperidol have been studied
  – All effective, consider side effect profiles

• Possibly a role for mood stabilizers
  – Case reports of benefit from valproic acid, carbamazepine
Figure. Treatment of cannabis-induced psychosis

Patient presents with signs of CIP

Treat symptoms with trial of second-generation antipsychotic (eg, olanzapine, aripiprazole)

Symptoms reduce/resolve?

Yes

Assess willingness to discontinue cannabis use

Yes

Continue second-generation antipsychotic to prevent CIP relapse

No

Begin PI

No

Switch antipsychotic

Symptoms abate?

Yes

No

Consider adjunct antiepileptic

CIP, cannabis-induced psychosis; PI, psychosocial intervention.
ROLE OF PSYCHOTHERAPY AND PSYCHOSOCIAL INTERVENTIONS

• Best treatment for substance induced psychosis is abstaining from that substance
• Psychotherapy and other psychosocial interventions (NA/AA, other groups, etc) are the best and often only treatments for SUD
• Delay in intensive psychosocial treatment associated with more negative symptoms compared to delay in antipsychotic medication in people with psychosis
• RCT of MI in addition to TAU in young people with psychosis who use cannabis
  – Participants who received MI had a greater reduction in cannabis use and greater confidence to change cannabis use at 3 and 6 mo, not at 12 mo (Bonsack et al., 2011)
MORE CASES

• A 25 year old M presents to clinic for initial appointment, 7 days s/p hospitalization for “unspecified psychotic disorder, r/o SIPD.” No psychiatric history prior. On admission was agitated, paranoid, had been threatening neighbors. Urine + amphetamines. Stabilized on Risperidone 2 mg BID. Says he is taking the medication and not using any drugs. Now wants to discontinue, “I know it was the meth, I don’t need this med.”
OPTIONS

A. Obtain a urine tox and if negative tell patient it is ok to discontinue the Risperidone

B. Advise patient that it is safest to taper the Risperidone slowly (over 1-2 months) and continue to monitor for symptoms

C. Advise patient it is safest to continue Risperidone for 3-6 months before tapering off while continuing to monitor symptoms

D. Refer patient to outpatient SUD treatment
MORE CASES

- A 38 year old M with a history of schizoaffective disorder and multiple substance use disorders (opioids, stimulants, hallucinogens, PCP, cannabis, etc) presents for follow up. Recent successfully transitioned from methadone to suboxone, stable on 24 mg daily. Has not used any substances except MJ (heavy daily use) in many years. On Lurasidone 60 mg daily for diagnosis of schizoaffective disorder for years, disagrees with diagnosis, wants to taper off. Not interested in reducing MJ use.
OPTIONS

A. Continue current Lurasidone dose given the history of psychosis

B. Taper Lurasidone slowly (by 10-20 mg every 1-2 months) and continue to monitor symptoms closely

C. Advise patient that you could taper the Lurasidone if he agreed to decrease MJ use

D. Advise patient that you could taper the Lurasidone if he stopped using MJ (negative Utox)
MORE CASES

• A 19 yo F presents for evaluation for depression. Reports escalating depressive symptoms for the past 6 months. Started on Escitalopram 10 mg daily by PCP, helped “kind of.” Over the past 2 months parents have become concerned about odd behavior, very isolative, talking to self, paranoid about phone. Smoking MJ daily (0.5-1g/day), feels like it helps. A few episodes of binge drinking in the past. No other substance use. Denies SI/HI.
OPTIONS

A. Send patient to the ED and recommend psychiatric hospitalization
B. Increase Escitalopram dose
C. Start an antipsychotic
D. Make no med changes at this time but counsel patient to reduce and ideally stop MJ use
REFERENCES