

**UW PACC** Psychiatry and Addictions Case Conference UW Medicine | Psychiatry and Behavioral Sciences

### TREATING PSYCHOSIS IN THE CONTEXT OF SUBSTANCE USE

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### **GENERAL DISCLOSURES**

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### **GENERAL DISCLOSURES**

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### **SPEAKER DISCLOSURES**

 $\checkmark$  No conflicts of interest



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### $\checkmark$ No conflicts of interest

### **PLANNER DISCLOSURES**

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### **OBJECTIVES**

- 1. Describe the epidemiology of comorbid substance use and psychotic symptoms
- 2. Identify distinguishing features of substance included psychosis vs primary psychotic disorders and appropriate treatment for each
- 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%

Substance	Users w/o diagnosis	Users w/ severe dependence
Cannabis	12.4%	80%
Cocaine	6.7%	88.7%
Opiates	6.7%	58.2%
Amphetamines	5.2%	100%

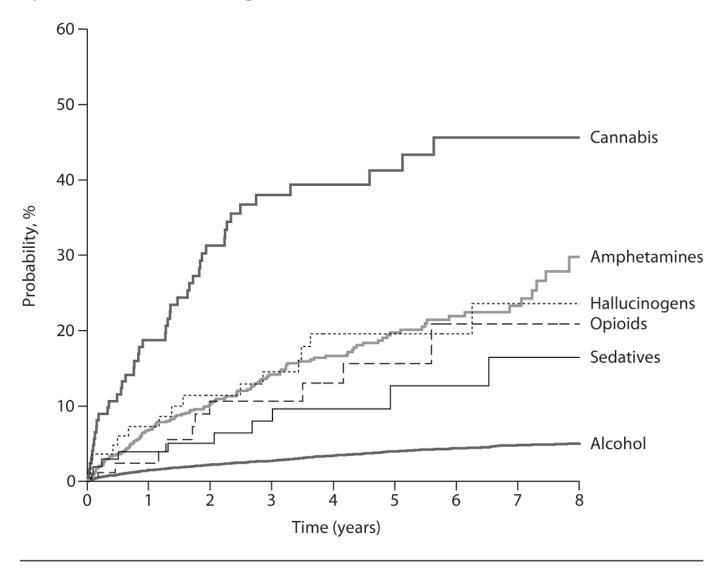


### SUBSTANCE-INDUCED PSYCHOSIS CAN PROGRESS TO SCHIZOPHRENIA

- 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



# 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



### 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



TABLE. A comparison of the clinical features of idiopathic versus cannabis-induced psychosis		
Primary psychosis (eg, schizophrenia)	Cannabis-induced psychosis	
Cannabis urine toxicology sometimes positive	Positive cannabis urine toxicology	
Variable reported cannabis use (25% prevalence of positive cannabis urine toxicology in schizophrenia)	Heavy cannabis use within past month	
Symptoms appear before heavy substance use	Symptoms appear only during periods of heavy substance use/sudden increase in potency	
Symptoms persist despite drug abstinence	Symptoms abate or are reduced with drug abstinence	
Antipsychotics markedly improve symptoms	Antipsychotics may/may not improve symptoms	
Most often presents with delusions, hallucinations, and thought disorder	Often associated with visual hallucinations and paranoid ideation (eg, features of an "organic" psychosis)	
Less insight about psychotic state	More aware of symptoms/insight about disease	
Disorganized thought form (eg, loose associations, tangential or circumstantial speech)	Thought form more organized and sequential	



### 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)
- 2<sup>nd</sup> 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



### **MEDICATIONS FOR CANNABIS PSYCHOSIS**

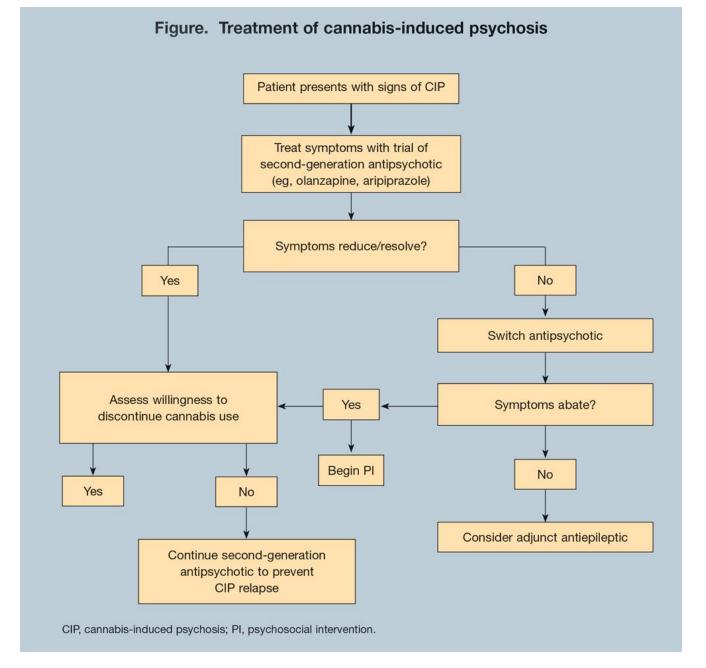
• Olanzapine, aripiprazole, haloperidol have been studied

- All effective, consider side effect profiles

- Possibly a role for mood stabilizers
  - Case reports of benefit from valproic acid, carbamazepine



Grewal and George 2017





Grewal and George 2017

### 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.





- 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

- Thirthalli J, Benegal V. Psychosis among substance users. Curr Opin Psychiatry. 2006;19:239–245.
- Niemi-Pynttäri JA, Sund R, Putkonen H, et al. Substance-induced psychoses converting into schizophrenia: a register-based study of 18,478 Finnish inpatient cases. The Journal of Clinical Psychiatry. 2013 Jan;74(1):e94-9.
- Kendler KS, Ohlsson H, Sundquist J, Sundquist K Prediction of onset of substance-induced psychotic disorder and its progression to schizophrenia in a Swedish National Sample. Am J Psychiatry. 2019;176:711–719.
- Nuevo R, Chatterji S, Verdes E, Naidoo N, Arango C, Ayuso-Mateos JL. The continuum of psychotic symptoms in the general population: a cross-national study. Schizophr Bull. 2012;38:475–485.
- Smith MJ, Thirthalli J, Abdallah AB, Murray RM, Cottler LB. Prevalence of psychotic symptoms in substance users: a comparison across substances. Compr Psychiatry. 2009;50:245–250.
- Winklbaur B, Ebner N, Sachs G, Thau K, Fischer G. Substance abuse in patients with schizophrenia. Dialogues Clin Neurosci. 2006;8:37–43.
- Schuckit MA, Smith TL, Danko GP, Pierson J, Trim R, Nurnberger JI, Kramer J, Kuperman S, Bierut LJ, Hesselbrock V: A comparison of factors associated with substance-induced versus independent depressions. J Stud Alcohol Drugs 2007; 68:805–812.
- Caton CL, Drake RE, Hasin DS, et al. Differences Between Early-Phase Primary Psychotic Disorders With Concurrent Substance Use and Substance-Induced Psychoses. Arch Gen Psychiatry. 2005;62(2):137–145.
- Caton CL , Hasin DS , Shrout PE , Drake RE , Dominguez B , First MB , Samet S , Schanzer B: Stability of early-phase primary psychotic disorders with concurrent substance use and substance-induced psychosis. Br J Psychiatry 2007; 190:105–111.
- Drake RE, Caton CL, Xie H, Hsu E, Gorroochurn P, Samet S, Hasin DS. A prospective 2-year study of emergency department patients with early-phase primary psychosis or substance-induced psychosis. Am J Psychiatry. 2011 Jul;168(7):742-8.
- Wilson L, Szigeti A, Kearney A, Clarke M. Clinical characteristics of primary psychotic disorders with concurrent substance abuse and substance-induced psychotic disorders: A systematic review. Schizophr Res 2017; 197:78–86.
- Grewal RS, George TP. Cannabis-Induced Psychosis: A Review. Psy Times. 2017 Jul 14;34(7).
- Oliveira AA, Kiefer MW, Manley NK (1990). Tardive dyskinesia in psychiatric patients with substance use disorders. American Journal of Drug and Alcohol Abuse 16, 57–66.
- Fluyau D, Mitra P, Lorthe K. Antipsychotics for Amphetamine Psychosis: A Systematic Review. Front Psychiatry 2019; https://doi.org/10.3389/fpsyt.2019.00740
- Bonsack C, Manetti SG, Favrod J, Montagrin Y, Besson J, Bovet P, Conus P: Motivational intervention to reduce cannabis use in young people with psychosis: a randomized controlled trial. Psychother Psychosom 2011;80:287–297.

