Substance-Induced Disorders

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Withdrawal from cannabis: symptoms include irritability, restlessness, anxiety, and difficulty sleeping; has significant effects on mood; lasts ≥2 wk (in heavy users); typically resolves without additional concerns

Physical manifestations of substance use disorders (SUD): dilated pupils; mild restlessness; running nose (in absence of cold or other illness)

Opioid withdrawal: mimics many psychiatric problems; profound anxiety and dysphoric mood components (occurring soon after discontinuation) may be mistaken for depression or anxiety disorder; other symptoms — gastrointestinal (GI) problems; sweat; chills; muscle aches; pupillary dilation; running nose or eyes; “goose pimples”; yawning

Predisposition to opioid addiction: suggested in patient who experiences increased energy (rather than sedation, tiredness, or nausea) after legitimate medical use

Updates on cannabinoids: screening for synthetic cannabinoids now available; early and heavy exposure to marijuana likely contributes to earlier onset or onset of schizophrenia and other persistent psychologic disorders; synthetic cannabinoids — poorly tolerated (reports of paranoia and altered perceptions common after first use); oral ingestion shows stronger link with psychologic symptoms and moods associated with psychosis

Substance use (SUD) during onset of psychiatric disorders: in speaker’s experience, 50% of patients who abstain from substances still develop persistent problems; contributive potential of cannabis of great concern

Alcohol-related dangers: 50% of major trauma cases and 22% of minor trauma classified as alcohol-related; consuming ≥5 drinks during single occasion doubles individual’s risk for injury-related death (≥9 drinks triples this risk)

Ruling out SUD: nearly all mental health diagnoses have inclinations obligating practitioners to consider whether symptoms may be better accounted for by substances of abuse (or other external physiologic causes)

Substance-induced Problems

Criteria for substance-induced anxiety disorder: prominent anxiety, panic attacks, or obsessive compulsions; evidence from history, physical examination, or laboratory findings showing symptoms developed during or within month of intoxication or withdrawal

Educational Objectives

The goal of this program is to improve the recognition, diagnosis, and treatment of substance use disorders (SUD). After hearing and assimilating this program, the clinician will be better able to:

1. Screen for substance use, dependence, and abuse during routine visits with patients.
2. Differentiate substance-induced disorders from psychiatric issues which may predate substance use or manifest in isolation.
3. Implement simple interventions to educate patients about at-risk behavior and reduce substance use.
4. Determine whether patients with SUD are likely to benefit from inpatient hospitalization.

General guidelines: withdrawal state and symptoms typically persist for ≥1 mo; with unexpected durations (in absence of delirium), consider whether symptoms better accounted for by disorders unrelated to SU; all disorders include significant distress or impairment in social, occupational, or other areas of functioning

Anxiety component: prevalent across many intoxication and withdrawal states; may persist for weeks to months in patients recovering from alcohol or sedatives (particularly associated with protracted withdrawal); opioid withdrawal causes significant anxiety; caffeine consumption — screen all patients; can exacerbate or cause anxiety symptoms; other contributors — cannabis intoxication or withdrawal; cocaine, hallucinogen, or inhalant use

Criteria for substance-induced mood disorders: tendency toward depression or mania; prominent persistent symptoms of depression include depressed mood and marked or diminished interests or pleasures; mania includes elevated, expansive, or irritable moods; evidence establishing substances as direct cause and time-correlating symptoms

Substances associated with depression: alcohol; sedatives; regular use of opiates; cocaine and cannabis withdrawal

Irritability and mood swings: may be associated with any intoxicating substance; sudden onset constitutes classic symptom or sign of oncoming SU problem; occurs in all withdrawal states

Sleep issues: SU frequently associated with light sleep or inability to stay asleep; in contrast, depression associated with early morning awakening; patients should be educated to expect poor or abnormal sleep during withdrawal (medications often fail to provide relief)

New-onset psychotic symptoms: speaker treats cannabis dependence as primary concern; prominent hallucinations or delusions; diagnosis requires evidence (including timing of use) establishing substances as direct cause, with symptoms not better accounted for by other primary or axis I disorder; seen with hallucinogens, stimulants, and “bath salts”

Evaluating SUD

Subtypes and specifiers of substance-induced disorders: mood disorders — may include depressed, manic, or mixed features; anxiety — may present as generalized anxiety, panic attacks, compulsive symptoms, or phobic symptoms; occurrence during intoxication vs withdrawal

Assessment: patients with substance-related disorders often have difficulty maintaining honesty; speaker views dishonesty as symptom of disease (related to other forms of, eg, denial, minimization, rationalization, justification); information from outside sources (eg, family, friends, previous providers) may be useful; speaker encourages regular use of substance screening in all settings; substance-induced diagnoses require timeline to

5. Use opioid agonists and antagonists to prevent relapse among patients being treated for opiate dependence.

Faculty Disclosure

In adherence to ACCME Standards for Commercial Support, Audio-Digest requires all faculty and members of the planning committee to disclose relevant financial relationships within the past 12 months that might create any personal conflicts of interest. Any identified conflicts were resolved to ensure that this educational activity promotes quality in health care and

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determine whether any symptoms predate SU (thus indicating different disorder); in cases in which timeline or causes remain unclear, not otherwise specified diagnosis allows continued evaluation while moving forward

**Contracts**: recommended for patients with history of SU who deny any current substance issues; involves negotiating with patients extent to which they can abstain or cut back; follow-up relies on discussing contract in nonchalant and nonjudgmental manner; inability to uphold contract establishes criteria for diagnosis of dependence; extends timeline, and allows time to obtain collateral information and results of urine screenings and laboratory testing

**Diagnostic process**: diagnose or rule out SU problems before all else; differentiate between symptoms related to substances and symptoms of axis I disorders; identify co-occurring conditions (eg, depression)

**Alcohol Use Disorders Identification Test (AUDIT-C)**: 3-question test with efficacy comparable to full-length test; questions — “how often do you have a drink containing alcohol?”; “how many drinks containing alcohol do you have on that typical day?”, “how often do you have six or more drinks?”; speaker’s *addendum — “what’s the most you can drink on a heavy day?” (asked in enticing manner)

**Alcohol guidelines**: patients advised to consume ≤3 drinks daily or ≤7 drinks weekly (≤4 daily or ≤14 weekly for men); assessed in patients with psychiatric problems, older age, or use of medications with potential for interactions; *antidepressants* — present greatest concern, since alcohol may exacerbate depression; always discuss importance of limiting drinking; *at-risk individuals* — >40% of heavy drinkers (exceeding recommendations) do not meet criteria for SUD, but 21% remain at risk

**Assessing adolescents**: avoid having parents present; assure patients of their privacy (if imminent danger or seriously dangerous activities not involved); *CRAFFT screening tool* — asks whether, during past 12 mo, patients have used significant amounts of alcohol, marijuana (or related substances), or anything to “get high”; patients who answer “yes” require full CRAFFT assessment; even if patients answer “no,” ask about use in automobile (eg, whether, during past 12 mo, patient has driven in car with someone who has used substances or alcohol); straightforward nonjudgmental questions incorporate criteria for substance dependence or abuse diagnosis

**Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)**: assessment tool developed by World Health Organization for primary care; given by, eg, nurses and physician assistants, or self-administered

**Questions from speaker’s unstructured assessment**: screening for at-risk drinking (≥5 drinks daily in men or ≥4 in women) during past year; frequency of tobacco, prescription medication, and illegal SU (assessment ends if patients answer “no” to all question); *substance history* — lifetime use of any substance (ask about every type); SU during past 3 mo (further questioning should establish openness toward regular use); *diagnostic criteria* — frequency of strong desire to cut down usage for each substance; health, social, legal, or financial problems associated with SU; substance-related failure to fulfill role obligations during past 3 mo; expressions of concern by friends or relatives about SU; failure to control, cut down, or stop using; intravenous use

**Assessment results: moderate risk for SUD** — requires discussion and monitoring; referrals may be unnecessary, but physicians must discuss extent of SU and any associated problems; *dependence* — symptoms and withdrawal or tolerance issues typically warrant specialized care

**Urine screens**: encouraged by speaker as source of objective information for providers; frequent and routine screening reduces resistance among patients; routinely used when prescribing stimulants or buprenorphine plus naloxone (Suboxone); valuable when clinician forced to confront patients, or to verify their honesty about usage; random screenings most effective, but even routine screens help

Comorbidity: risk for SUD increased 2-fold in patients treated for mood or anxiety disorders; in patients diagnosed with SUD, risk for other axis I disorder increases 2-fold; many diagnoses associated with marked increase in SUD (eg, tobacco, cannabis; cocaine [with schizophrenia]); bipolar disorder, posttraumatic stress disorder, antisocial personality disorder, and borderline personality disorder frequently complicated by SU

**Simple Interventions**

**Initial steps**: identify goals (eg, cutting back); customize feedback based on amount of use; educate on standardized drinking; discuss different types of drinkers (eg, define “at-risk” drinkers); acknowledge that usage stated out as “fun”; tactics for changing SU (eg, activities to replace time spent under influence); drinking agreement; talk through risky situations (eg, how to refuse alcohol)

**Hospitalization**: *indications* — >1 SU issue (particularly alcohol plus sedatives, due to risk for, eg, seizures, delirium tremens); history of withdrawal complications; complicated or co-occurring psychiatric conditions likely to worsen during withdrawal; serious medical conditions (eg, heart problems, diabetes, hypertension, seizure disorders); history of failed outpatient treatment; home environment with SU or poor support; emotional, behavioral, cognitive, and psychiatric issues and suicide risk taken into consideration; *considerations for adolescents* — readiness to engage in treatment; relapses or continued use; home environment

Findtreatment.samhsa.gov: nationwide list of SU treatment providers

**Medical problems and SU**: alcohol and cocaine associated with cardiac problems; cancer linked to regular alcohol use; diabetes and other endocrine issues associated with use of alcohol, opiates, and stimulants; alcohol causes cirrhosis in patients with hepatitis C; opiates can cause granulomas in liver; regular use of any substance increases risk for infectious diseases (screening for hepatitis C recommended in all “baby boomers”); patients with specific issues require thorough screening for SU problems (eg, seizures and strokes, GI issues associated with alcohol, constipation due to opiates, ischemic problems due to cocaine, inhalants and aspiration problems associated with pneumonia, renal problems due to opiates)

### Opioid Addiction

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**Heroin**: short-acting opioid; requires multiple injections daily

**Methadone**: long-acting oral opioid; innocuous when properly dosed; stops cravings and allows patients to resume productive lives; limited by strict regulations

**Buprenorphine**: opioid with benefits similar to methadone (superior or inferior, depending on patient); available by prescription from physician’s office (unlike methadone), thus allowing employed or matriculated patients to receive regular doses without joining strict methadone program; *abuse potential* — exists, but mediated by partial agonism of opioid receptors (limits associated “high” and seals off receptors to more potent opiates); reduced by combination with opiate receptor antagonist (eg, naloxone)

**Buprenorphine and naloxone**: one daily sublingual or film-based dose prevents cravings and allows normal functioning; naloxone component remains inactive with proper oral use, but neutralizes effects of buprenorphine when injected (preventing diversion and inappropriate use)

**Methadone and buprenorphine maintenance**: efficacy comparable; long-term treatments; significantly reduce relapse rates

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Addiction as memory: produces reflex associated with intense cravings in response to environmental or social cues previously associated with substances; thus, returning detoxified patients to their original environments often results in relapse; long-term treatment necessary

Benefits of maintenance treatment: although detoxifying from methadone or buprenorphine may take years, patients often function well during treatment; prevents overdose if patients relapse (common occurrence after incarceration)

Detoxification: often, first step in treatment; gradually reducing dose of opioids eases withdrawal; since relapse often occurs soon after withdrawal, speaker recommends direct transfer to maintenance therapy (without full detoxification)

Treatment of withdrawal symptoms: clonidine — antihypertensive capable of blocking symptoms; lofexidine — currently in trials; goals — detoxify opiate-dependent patients without need for additional opioid; caveat — ineffective without relapse prevention medication

Opiate receptor antagonists: high affinity for opioid receptors prevents relapse by blocking uptake of opiates; antagonists do not activate these receptors, and thus cannot induce pleasure or euphoria; naltrexone — short-acting antagonist; naltrexone — long-acting antagonist; given as daily or bi-daily oral dose, or long-term injectable medication in extended-release (ER) preparation (Vivitrol)

Injectable ER naltrexone: approved by Food and Drug Administration for prevention of relapse to heroin addiction; useful substitute for daily opioid agonists; naltrexone has long history as treatment of choice for medical professionals with opioid addictions; increasingly given upon release from prison

Discontinuation: patients doing well with maintenance treatments should continue indefinitely (with monitoring by physician); speaker strongly disagrees with forcing total detoxification against patient’s will

Treatment options: detoxification; short-term residential treatment; long-term therapeutic community with intensive psychotherapy; relapse-prevention medication; opioid agonists provides most secure, easy, and reliable treatments; rapid opioid detoxification — not recommended; not superior to slower detoxification; associated with case reports of fatalities

Acknowledgements

Dr. Whiteman was recorded at the Indiana Psychiatric Society Fall Symposium: Prescribing Controlled Medications for Risky Populations — When to Say Yes!, held September 15, 2012, in Indianapolis, IN, and sponsored by the American Psychiatric Association and the Indiana Psychiatric Society. Information about other programs presented by the Indiana Psychiatric Society can be found at indianapsychiatricsociety.org. Dr. O’Brien’s lecture is from our newest continuing medical education program, The Audio-Digest Psychiatry Board Review Course, a comprehensive review with approximately 60 hours of lectures presented by faculty from a variety of prominent teaching institutions across the country. This audio course offers participants a chance to benefit from first-hand expert guidance on the essential examination areas. For those not preparing for the exam, the course provides an excellent update and overview of psychiatry. For more information, please visit www.audiодigest.org/psbr. The Audio-Digest Foundation thanks the speakers and the sponsors for their cooperation in the production of this program.

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5. Take posttest

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1. Among heavy users, cannabis withdrawal typically lasts for:
   (A) 1 mo  (B) 2 wk  (C) 1 wk  (D) 48 to 72 hr

2. Patients who experience increased energy after legitimate medical use of opioids may be predisposed to addiction.
   (A) True  (B) False

3. Consuming _______ drinks during a single occasion doubles an individual’s risk of dying from an injury-related death.
   (A) ≥9  (B) ≥7  (C) ≥5  (D) ≥3

4. Protracted withdrawal is most likely in patients who have been abusing:
   (A) Alcohol  (B) Sedatives  (C) Stimulants  (D) Inhalants

5. Individuals with substance-induced disorders often experience _______, while those with true clinical depression are more likely to experience _______.
   (A) Light sleep or inability to remain asleep; early morning awakening  
   (B) Difficulty falling asleep; light sleep or inability to remain asleep 
   (C) Early morning awakening; light sleep or inability to remain asleep 
   (D) Difficulty falling asleep; early morning awakening

6. Standard alcohol guidelines recommend limiting drinking to:
   (A) ≤4 drinks daily or ≤10 drinks weekly for women, ≤5 drinks daily or ≤18 weekly for men 
   (B) ≤3 drinks daily or ≤7 drinks weekly for women, ≤4 drinks daily or ≤14 weekly for men 
   (C) ≤2 drinks daily or ≤5 drinks weekly for women, ≤3 drinks daily or ≤10 weekly for men 
   (D) ≤1 drinks daily or ≤4 drinks weekly for women, ≤2 drinks daily or ≤7 weekly for men

7. Routine urine and laboratory testing for substance use is not recommended, as only random tests yield useful information.
   (A) True  (B) False

8. Use of _______ is associated with the development of granulomas in the liver.
   (A) Opioids  (B) Alcohol  (C) Sedatives  (D) Cocaine

9. The effect of buprenorphine on opioid receptors is classified as:
   (A) Agonism  (B) Partial agonism  (C) Antagonism  (D) Partial antagonism

10. Which of the following antihypertensive agents is commonly used to reduce the symptoms of opioid withdrawal?
    (A) Propranolol  (B) Amlodipine  (C) Clonidine  (D) Prazosin

Answers to Audio-Digest Psychiatry Volume 42, Issue 21: 1-D, 2-D, 3-A, 4-B, 5-B, 6-C, 7-A, 8-A, 9-C, 10-A

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