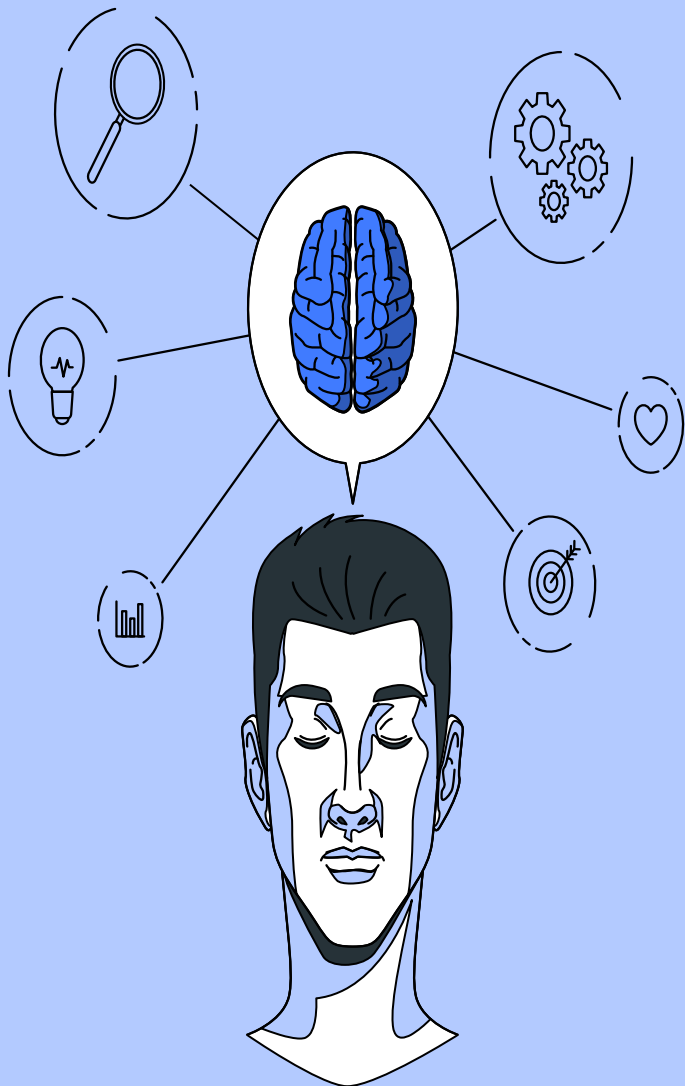


# Substance Abuse



Objectives:

Not found

Done by: Lina Alohali, Lujain  
Alzaid and Norah Alkadi

# Introduction

- Many implications for brain research & clinical psychiatry.
- Affect mental state and behavior.
- Sx similar to the psychiatric disorders.
- Difficult to differentiate between mania or psychosis caused by psychiatric disease or medical disease and substance induced.

## What is addiction?

- In Aug 2011, The American Society of Addiction Medicine (ASAM) has officially recognized Addiction as Mostly a primary chronic brain problem  
Primary; because the predisposition to be an addict is genetic.  
E.g during the Vietnamese war, heroin was commonly used by soldiers. When the soldiers returned to the U.S only 5% of those who used heroin became addicts. Other example, twin studies showed that separated twins were both addicts.
- Addiction is not a choice, but choice still plays an important role in getting help.

## Terminology

**Abuse:** self-administration of any substance in a culturally disapproved manner that causes adverse consequences.

e.g if I use (دوريات) in the southern regions of Saudi Arabia it will not be considered “abuse” because use of such substance is known in that area

**Intoxication** **تسمم** in toxicology **أو سكر** in medicine: the transient effect (physical and psychological) due to recent substance ingestion, which disappears when the substance is eliminated.

**Withdrawal** **أعراض الانسحاب**: a group of symptoms and signs occurring when the drug is withdrawn or reduced in amount.

**Dependence** **Changes in nerves and central nervous system:** the physiological state of neuroadaptation produced by repeated administration of a drug, necessitating continued administration to prevent appearance of withdrawal state.  
I.e I take the substance to prevent withdrawal symptoms

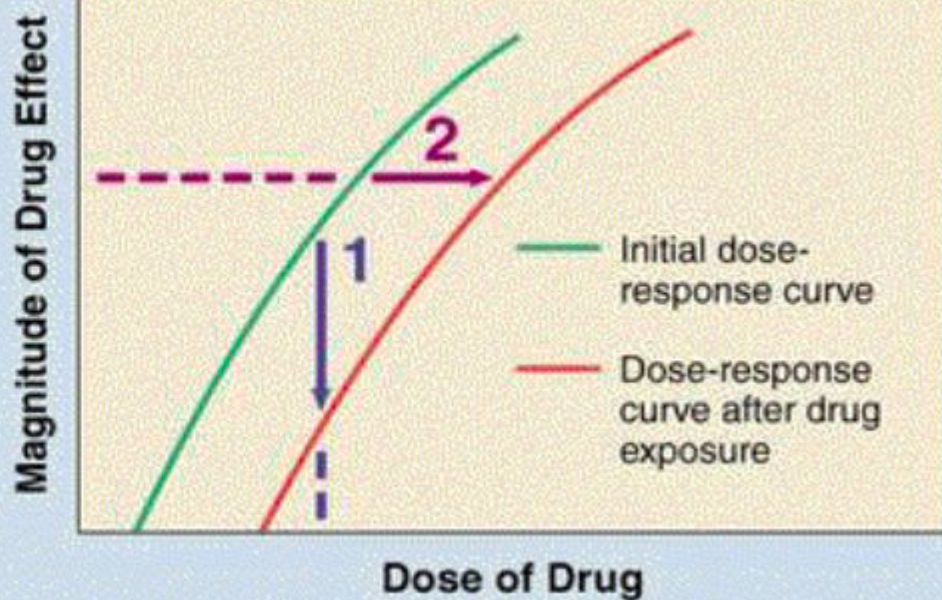
**Addiction:** a nonscientific term that implies dependence and associated deterioration of physical mental health as well as high tendency to relapse after discontinuation.  
Used to indicate poor prognosis and outcome



- When the dose increases the effect increases.
- After a period of time tolerance occurs and the curve shifts to the right.
- With frequent use of the same dose the drug effect decreases, an additional dose is required to reach the desired drug effect.

Drug tolerance is a shift in the dose-response curve to the right. Therefore,

- 1** In tolerant subjects, the same dose has less effect
- 2** In tolerant subjects, a greater dose is required to produce the same effect



In addiction (dependence) two things happen:

1. Tolerance
2. Withdrawal signs When decreasing the dose

## Complications

- Psychological E.g Anxiety Alterations in performance and concentration, Psychosis, Depression, Insomnia
- Social Divorce, loss of job, financial problems
- medical Paresis from alcohol, Liver failure, Myocardial infarction, Brain atrophy

## Basic classification important

CNS Suppressants → Alcohol ,Sedatives , Inhalants :Glue, benzene, other volatile substance ,Opioids :Heroin, morphine.

CNS Stimulants → Amphetamine ,Cocaine,

Mixed Effect → Cannabis

## Assessment

- ABC
- Collateral history. And examinations Check for abnormal smell and other signs of abuse
- Urine screening tests. If the patient presents in a critical state to the ER start with blood tests
- blood screening tests (alcohol, barbiturates).
- Pattern of abuse
  - What? (type, dose, route, effect: nature and duration).
  - How? (frequency, duration, how long, source, and situation)
  - why? (psychosocial problem )
  - Dependence?
- Complications
  - Psychosocial
  - Physical

# Alcohol and Related Mental Disorders

## Alcohol Kills More Than AIDS, TB or Violence-WHO report (Feb 2011)

- Alcohol causes nearly 4% of deaths worldwide more than AIDS, tuberculosis or violence.
- Alcohol is the world's leading risk factor for death among males aged 15-59.
- Alcohol is a causal factor in 60 types of diseases and injuries.

## Risk factors of Alcohol abuse

- **Vulnerable personality:** impulsive, gregarious, less conforming, isolated or avoidant persons.
- **Vulnerable occupation:** senior businessmen (with genetic predisposition), journalists, doctors.
- **Psychosocial stressors:** social isolation, financial, occupational or academic difficulties, and marital Conflicts.
- **Emotional problems:** anxiety, chronic insomnia depression.

## Alcohol abuse

### Still Not addicted

- **Excessive consumption: harmful use.**
- **Problem drinking:** drinking that has caused disability but not dependence.
- **Alcohol dependence:** This usually denotes alcoholism.
- **Alcohol-related disability:** physical, mental and social.

## How much is too much?



- Tequila, whisky are hard liquor
- A rig? is one glass of either one of these
- 1 glass of wine = 1 shot of hard liquor = 1 pint of beer

## Clinical presentation

- **Alcohol intoxication:** sense of well-being (Warm feeling) then emotional lability after that irritability and then incoordination → to ataxia and slurred speech (Effect on cerebellum).
  - (bl > 300 mg/ml): → alcoholic coma & death.
- Acute intoxication may mimic:
  - panic attacks
  - depression
  - acute psychosis with delusions +/- hallucinations

These effects depend on number of drinks and body weight; when comparing a man weighing 100 kg and women weighing 50 kg the same concentration of alcohol in the blood in both individuals require double the amount in the male compared to the female. Therefore the limit of drinking when driving is 1 glass for a Female compared to 2 glasses for males in Canada.

# Alcohol intoxication

## Ethanol plasma concentrations Vs. CNS effects

the higher the ethanol concentration in the blood the higher the effect

Blackouts: a type of anterograde amnesia. e.g when a patient starts drinking at 9 pm, at 11pm or 12am almost all intoxication effects have occurred, by 1 am the patient cannot store in his memory anything that is happening. In the following day he cannot recall anything that happened between 1 am and 4 am.

Ethanol plasma concentration (mg/dL)	Impairment
	Feeling of relaxation, euphoria
20-30	Slowed thinking
30-80	Motor incoordination
80-200	Cognition, judgement, lability
200-300	Slurring, ataxia, nystagmus, blackouts
>300	Vital signs, coma, possible death due to respiratory failure

## Clinical presentation (cont.)

## Alcohol dependence

- **Alcohol withdrawal:**
  - Sx may begin after 6 hours of cessation peak by 48 hours.
  - Sx subside over the course of 5-7 days.
- epileptic generalized tonic clonic seizures may develop within 12-24 hours after cessation of alcohol intake.
- Delirium tremens may develop after about 48 hours
- 15-20 years before evident
- dependence is most common in those aged 40 – 55 years.
- Alcoholics who continue drinking have a shortened life-span of 15 years why?  
Due to : حوادث الدعس ، medical complications, killed in altercation, overdose, and suicide.

## Complications of chronic alcohol abuse

Medical	Psychiatric	Social
<ul style="list-style-type: none"> <li>● Neurological: Cerebral degeneration, Seizures, Peripheral neuropathy. Optic nerve atrophy</li> <li>● Alimentary Tumors (esophagus, liver), Gastritis, peptic ulcer, Pancreatitis, Hepatitis, liver cirrhosis.</li> <li>● Cardiomyopathy</li> <li>● Anemia</li> <li>● Gynaecomastia</li> </ul>	<ul style="list-style-type: none"> <li>● Amnesic disorder</li> <li>● Delirium</li> <li>● Dementia</li> <li>● Psychosis</li> <li>● Depression</li> <li>● Reduced sexual desire</li> <li>● Insomnia</li> <li>● Personality deterioration</li> <li>● Increased risk of suicide</li> <li>● Morbid jealousy</li> </ul>	<ul style="list-style-type: none"> <li>● Social isolation</li> <li>● Job loss</li> <li>● Marital conflicts</li> <li>● Family problems</li> <li>● Legal troubles</li> <li>● Social stigma</li> </ul>

# Alcohol withdrawal

How does withdrawal occur?

- Within 6 h from stopping or decreasing the dose withdrawal happens.
  - peak withdrawal state is reached after 2 days.
  - After that blood concentration starts declining and the patients situation improves.
- \* however withdrawal can take up to a week. Therefore if a patient came with symptoms of withdrawal we don't discharge them after 2 days.
- Why did he come to begin with? Most likely he had a seizure, stopped suddenly, or had little or more than usual, some try to stop for therapy so the develop alcoholic generalized tonic clonic seizure, and this usually occurs after 24 hours from stopping.
  - If they overdosed they may present with coma. (more common)
  - Delirium tremor may occur 2 , 3 or 5 days after presentation. Therefore if the patient improved after 2 days we cannot discharge him Because we expect delirium tremors after 3,4,5 days after presentation

## Screening

### CAGE questionnaire

- **Have you ever:**
  1. Wanted to cut down on your drinking?
  2. Felt annoyed by criticism of your drinking
  3. Felt guilty about drinking?
  4. Take a drink as an "eye-opener" to prevent the shakes? Due to toleranceIf 2 or more are positive that's a good indication of being a heavy drinker,

## Laboratory Tests

- **Identify acute and/or heavy drinking (> 5 drinks/day):**
  - Blood Alcohol Levels (BAL).
    - Similar to hemoglobin A1c for diabetics , if high it indicates chronic use of alcohol
    - MCV ( mean corpuscular volume) : can also indicate chronic/ heavy use.
  - Gamma-glutamyltransferase (GGTP > 35 IU/L)
  - Erythrocyte mean corpuscular volume (MCV >91.5  $\mu$ 3)
  - High AST/ALT

## Treatment

- **Treating Alcohol Intoxicated Patient:**
  - Conscious : supportive, antipsychotic if agitated.
  - Unconscious: ABC
- **Treating Alcohol Withdrawal:**
  - -Supportive, thiamine & long acting BDZ  $\pm$  anticonvulsants for seizure. Then we start to reduce ( taper) slowly\
- **Maintaining Abstinence:**
  - Disulfiram – blockade of aldehydedehydrogenase  $\rightarrow$  accumulation of acetaldehyde - nausea, flushing, tachycardia, hyperventilation, panic.
  - Naloxone – reduces alcohol-induced reward.
  - **Acamprosate – anti-craving effects.**
- **Psychological:**
  - Individual, group Rx, relapse prevention (Most important).

# Delirium Tremens (DTs)

- Severe form of alcohol withdrawal after 2-3 days:
  - gradual onset of delirium and gross tremors.
- Other features:
  - autonomic disturbance.
  - dehydration and electrolyte disturbance.
  - insomnia.
- Peaks on 3rd or 4th day.
- Lasts 3-5 days.
- Worse at night and followed by a period of prolonged deep sleep after which the pt has amnesia.

- Complications include:

1. Violent behavior
2. Seizures (chest infection & aspiration)
3. Coma
4. Death (mortality rate: 5-15%) *If not treated*

- Causes:
  1. Volume depletion
  2. Cardiac arrhythmias
  3. Electrolyte imbalance
  4. Infections

## Treatment

1. DT is a serious MEDICAL emergency      detection and treatment – ICU or medical ward
2. Avoid antipsychotics *In delirium caused by medical conditions we usually give antipsychotics, but avoid them in alcohol induced delirium because they increase the probability of seizures.*
3. Guard against seizures
4. Rehydration
5. Thiamine (B1) *To prevent wernicke's or korsakoff encephalopathy because they do not eat well.*
6. Adjust surroundings



# OPIOIDS

1. Opium
2. Heroin
3. Morphine
4. Codeine Found in solpadeine( a powerful cough suppressant)
5. Pethidine Used Post-op
6. Methadone Replacement for people addicted on heroin.
  - naturally occurring (e.g. opium, codeine), synthetic or semi-synthetic.
  - medical use - pethidine or substance of abuse - heroin
  - The medical use - powerful analgesic effect
  - Abused for - euphoriant effect
7. Tramadol

## Opioid intoxication

Presentation	Treatment
<ul style="list-style-type: none"> <li>● Euphoria</li> <li>● Relaxation</li> <li>● Analgesia</li> <li>● Disturbed</li> <li>● Consciousness</li> <li>● Small pupil (initially)</li> <li>● Bradycardia</li> <li>● Reduced appetite</li> <li>● Constipation</li> <li>● Respiratory depression, followed by coma and death</li> </ul>	<ul style="list-style-type: none"> <li>● ICU:                             <ul style="list-style-type: none"> <li>○ -Monitoring</li> <li>○ -Naloxone</li> <li>○ Open airway – oxygen – IV fluids</li> </ul> </li> </ul>

## Opioid withdrawal

Presentation	Treatment
<ol style="list-style-type: none"> <li>1. Lacrimation, rhinorrhea &amp; yawning.</li> <li>2. Dysphoric mood.</li> <li>3. Insomnia.</li> <li>4. Muscle and joint aches.</li> <li>5. Cold and hot flushes.</li> <li>6. Nausea, vomiting and diarrhea.</li> <li>7. Fever, sweating, piloerection.</li> </ol>	<ul style="list-style-type: none"> <li>● Short-term: supportive therapy                             <ul style="list-style-type: none"> <li>○ Painkillers, sedatives, observation</li> <li>○ Clonidine</li> </ul> </li> <li>● Long-term: Not imp                             <ul style="list-style-type: none"> <li>○ Harm reduction strategies</li> <li>○ Methadone</li> <li>○ Buprenorphine/Naloxone</li> </ul> </li> </ul>

- Intense craving begins 6 hours after the last dose and peaks after 36-48 hours
- Untreated withdrawal result in no serious medical sequence - but they cause great distress.
- Tolerance can develop very rapidly (esp. in IV use) leading to increasing dosage - then it diminishes very rapidly.
- Opioid intoxication is more dangerous the opioid withdrawal , and alcohol withdrawal is more dangerous than opioid withdrawal



# Complications of injecting

- Bacterial, local and systemic. **Local or systemic**
- Blood-borne viruses. **HIV, Hepatitis**
- Vascular damage.

- In this case:
  - Track marks
  - Early cellulitis
  - Multiple injections over a short period suggests cocaine use



# Inhalants

Adeeb is a 16 year old boy who lives with his divorced mother. He presented with slurred speech, **facial rashes**, incoordination and nausea.

- Volatile organic substances –acetone, benzene, etc.
- Brain depressants.
- Adolescents – experimentations.
- Intoxication – similar to other brain suppressants.
- Complications:
  - Physical: multiple organ damages.

# Sedatives, Hypnotics, and Anxiolytics

- E.g **Benzodiazepines and barbiturates**
- Similar clinical manifestations and withdrawal to alcohol.
- Risk of cross-tolerance and cross-dependence? **If there is tolerance for alcohol than there will be tolerance for benzodiazepines as well and the opposite is true.**
- Withdrawal depends on substance.
- BDZ have a large margin of safety & less addiction potentials. **Compared to barbiturates**
- **Flumazenil** is a BDZ receptor antagonists used in BDZ overdose. **Antidote**
- E.g on Benzo's : diazepam, lorazepam, Alprazolam(xanax), clonazepam (rivotril)( roche 2)



# Psychostimulants

Rakan is a 20-year old male brought to the ER by police who arrested him because of reckless driving (drifting with high speed) and violent behavior. He looked over-suspicious, agitated, and over-talkative. **drug induced mania most likely amphetamine**

- Commonly used Stimulants:
  - Nicotine
  - Caffeine
  - Cocaine – Freebase/crack
  - Amphetamine/Methamphetamine
  - Methylenedioxymethamphetamine (MDMA) **Ecstasy**
  - Appetite suppressants (e.g. phentermine and diethylpropion)

## Psychological FX of non dependent use

- Recurrent intoxication **due to short half life (effect is fast and withdrawal is fast)**
- Some users may self-medicate with antidepressants and/or benzodiazepines **to get down from the high**
- After-effects: termed 'crash' or 'come down' **to elevate the mood they may use benzo or anti depressants**
  - Dysphoria
  - Depressed mood
  - Anxiety
  - Reduced appetite
  - Restlessness

## Clinical effects of stimulants

Psychological	Physical
<ul style="list-style-type: none"><li>• Enhanced cognitive function. <b>Students take caffeine or amphetamine</b></li><li>• Elevated mood.</li><li>• Over activity.</li><li>• Increased confidence, self-esteem and sociability.</li><li>• Overtalkativeness.</li><li>• Insomnia.</li><li>• In high doses/prolonged use:<ul style="list-style-type: none"><li>-Restlessness, irritability.</li><li>-Paranoid psychosis, <b>hallucinations (visual)</b>.</li><li>-Aggressiveness, hostility.</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Reduced sense of fatigue.</li><li>• Reduced appetite (anorexia). <b>Used by models</b></li><li>• Dilated pupils. <b>In Contrast to opioids</b></li><li>• Tremors.</li><li>• In high doses/prolonged use:<ul style="list-style-type: none"><li>-Nausea, vomiting, hyperthermia, cardiac arrhythmias, severe hypertension, CVA, seizures <b>occur in intoxication whereas in sedatives seizures occur during withdrawal</b> ,</li><li>dizziness, respiratory distress,</li></ul></li></ul>

# Cocaine

- Forms of cocaine:
  - Free base
  - Crack

- Routes of use:
  - Intranasal ينحط زي الخط على مرأية اوجزاة ويسحب بالشفاط use more by high socio-economic status.
  - Intravenous/SC low socio-economic status.

## Captagon (Fenethylamine)



## Treatment

- Symptomatic use of antipsychotic.
- Antidepressant sometimes useful.
- Psychotherapy (individual, family & group).

# Hallucinogens

- These are group of substances that induce hallucination and produce loss of contact with reality
- Natural and synthetic substances that are also called psychedelics or psychotomimetics
- Natural e.g. psilocybin (magic mushroom) or synthetic like lysergic acid diethylamide (LSD)
- No medical use and high abuse potential
- Does not cause dependence; because it doesn't work on dopamine. Substance that work on dopamine all cause addiction
- Users may experience sudden flashbacks or experience the same effect after years due to sudden activation of serotonin systems? In the brain

## Clinical effects

Psychological	Physical
<ul style="list-style-type: none"><li>• Marked perceptual distortion (changing shapes and colors). <b>Synesthesia</b>: يسمع الالوان ويشوف الأصوات</li><li>• Hallucination (visual and tactile).</li><li>• False sense of achievement and strength.</li><li>• Euphoria, anxiety, panic.</li><li>• Paranoid ideation</li><li>• Homicide and suicide tendencies.</li><li>• Flashbacks.</li><li>• Delirium.</li></ul>	<ul style="list-style-type: none"><li>• Tachycardia</li><li>• Hypertension</li><li>• Cerebellar signs</li><li>• Wide pupils</li><li>• Hyperemic conjunctiva</li><li>• Blurred vision</li><li>• Hyperthermia</li></ul>

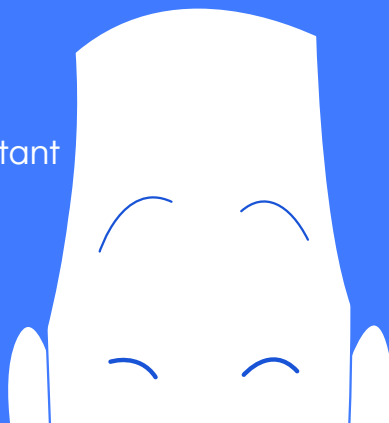
## Effects of LSD

Effects of drug come on in about 30 min

- first signs are autonomic activation
- followed by overt behavioral signs - loosening of emotional inhibitions
  - giddiness, laughter for no reason
  - mood euphoric and expansive, but labile
  - mood swings notable
- abnormal color sensations, luminescence
- colors reported as more brilliant
- space and time disorders
- added depth with loss of perspective - up/down altered
- close in space influenced more than distant
- general slowing of time reported

## Tolerance/Dependence

- Not significant producers of tolerance or dependence
- No withdrawal either
- Problems related to the things people do while under the influence:
  - Accidents
  - Suicide
  - Aggression/violence
  - Toxic reactions



# New Psychoactive Substances (NPS)



- Variable quantity and potency (up to 10,000 x morphine).
- Synthetic Cathinones.
- Synthetic Cannabis.
- Synthetic Benzodiazepines.

## Cannabis

Bandar is a 32-year old male brought to outpatient clinic by his wife because of recurrent periods of being over- suspicious, euphoric, and talkative. He admitted abusing cannabis in the weekends. استخدم حشيش

### What is Cannabis (marijuana)?

Cannabis sativa.

- psychoactive cannabinoids, (delta 9-THC) is most abundant.
- From flowering tops of the plants or from the dried, black- brown, resinous exudates from the leaves (hashish) 10X stronger than marijuana.
- Common names: marijuana, grass, pot, weed, tea, and Mary Jane.
- marijuana is the leaf itself whereas hashish is a brown substance or paste considered the extract of the plant.

### What are the acute effects?

- When smoked, euphoric effects appear within minutes, peak in about 30 minutes, and last 2 to 4 hours.
- If ingested, short term effects begin more slowly, usually 0.5 to 1h.
- After few min. heart begins beating, the bronchial passages relax and became enlarged, and the blood vessels in the eyes look red he will carry eye drops. Effect on beta receptors
- THC activates the reward system - releasing dopamine. Therefore cause addiction and withdrawal effects
- A pleasant sensation, color and sounds may seem more intense hallucinogenic effect, and time appears to pass very slowly.
- Mouth feels dry and he or she become very hungry and thirsty.
- THC disrupts coordination and balance.(prone to traffic accidents due to disturbed distance coordination),
- Anxiety +/- panic attacks.
- High doses may cause acute toxic psychosis.
- Chronic use cause Amotivational syndrome . They don't want to study or do anything.

Intoxication: dryness, severe hunger and thirst.

Withdrawal can cause loss of appetite and other effects

# Effect on physical health?

- Increases difficulty in trying to quit smoking tobacco.
- Red eyes, tachycardia. At high doses: orthostatic hypotension, increased appetite & dry mouth.
- Heavy users are at risk for chronic respiratory disease.
- Also associated with: cerebral atrophy, seizure susceptibility, chromosomal damage, birth defects, impaired immune reactivity, alterations in testosterone conc. & dysregulation of menstrual cycles.
- Same carcinogenic hydrocarbons in conventional tobacco.

## Treatment

- Same principles as Rx of other substances of abuse-abstinence and support
- Education is cornerstone for both abstinence & support.
- Support through individual, family, and group psychotherapies.
- Antipsychotic medication
- Anti-anxiety/antidepressant drug may be useful

## Alcohol Abuse

A 43-year-old admitted into the hospital for an elective minor surgery. Five hours post-surgery He showed high blood pressure (180/110), a sharp increase in the pulse rate to 120, and a **gross tremor** to both hands. An interview with the wife documented **history of alcohol abuse**.



### Factors associated with high risk of alcohol abuse

- **Vulnerable personality:** impulsive, gregarious, less conforming, isolated or avoidant persons.
- **Vulnerable occupation:** senior businessmen, journalists, doctors.
- **Psychosocial stresses:** social isolation, financial, occupational or academic difficulties, and marital conflicts.
- **Emotional problems:** anxiety, chronic insomnia, depression.

Alcohol abuse may mean any one of the following specific terms:

**Excessive consumption:** harmful use.

**Problem drinking:** drinking that has caused disability, but not dependence.

**Alcohol dependence:** This usually denotes alcoholism.

**Alcohol-related disability:** physical, mental and social.

Alcohol is the major substance of abuse all over the world. Mixed abused of alcohol and other substances is very common. Recreational alcohol drinking gradually grades into problem drinking and dependence. Most alcohol abusers go unrecognized by clinicians until their physical health and psychosocial life have been significantly harmed; therefore, early recognition is important. Many people go through prolonged periods (average 15 – 20 years) of gradual dependence on alcohol before clinical symptoms or signs are evident. Alcohol depresses the central nervous system. Clinically, it may appear to be a stimulant because of early disinhibition due to suppression of inhibitory control mechanisms. Alcohol drinking may occur in the late teens but dependence is most common in those aged 40 – 55 years.

### Terminology in psychoactive substance abuse:

**Abuse:** Self-administration of any substance in a culturally disapproved manner that causes adverse consequences.

**Intoxication:** The transient effects (physical and psychological) due to recent substance ingestion, which disappear when the substance is eliminated.

**Withdrawal:** A group of symptoms and signs occurring when a drug is withdrawn or reduced in amount.

**Tolerance:** The state in which the same amount of a drug produces a decreased effect, so that increasingly larger doses must be administered to obtain the effects observed with the original use.

**Dependence:** The physiological state of neuro-adaptation produced by repeated administration of a drug, necessitating continued administration to prevent the appearance of the withdrawal state.

**Addiction:** A nonscientific term that implies dependence and associated deterioration of physical and mental health as well as a high tendency to relapse after discontinuation.

### Detecting patients with alcohol problems :

It is important to recognize alcohol problems as soon as possible, because treatment is more likely to be successful in early stages of alcohol abuse. Clinician should have high index of suspicion of alcohol abuse in the following circumstances:  
**1. High-risk groups** (vide supra). **2. Psychiatric conditions** associated with alcohol abuse: e.g., memory impairment, sexual dysfunction, and morbid jealousy. **3. Medical conditions:** GI (nausea, vomiting, gastritis, peptic ulcer, or liver disease) or CNS (headache, sweating, flushing, blackouts, peripheral neuropathy, fits, or repeated falls). **4. Social conditions:** poor work records, interpersonal problems (with parents, spouse or children), financial stresses, isolated life style. **5. Legal conditions:** e.g. reckless driving.

## The stages of alcohol dependence;

Stage	Comment
1 <sup>st</sup> ; The early stage	The drinker has not lost control of his health. Relatives and friends do not find anything unusual. He drinks for stress relief or mood elevation.
2 <sup>nd</sup> ; Stage of excessive consumption	He drinks so much and for no reasons, loses control of physical and mental capacity, and sometime may become a nuisance. Relatives and friends become aware that he has a problem with alcohol and he still believes that he can quit alcohol at any time.
3 <sup>rd</sup> ; Stage of complications	The chronic stage of alcoholism; physic and mental complications. Trails to stop drinking with repeated failure.

## CLINICAL PRESENTATIONS

- **Alcohol intoxication:**

Early intoxication includes a sense of well-being, liveliness and a smell of alcohol on the breath, grading into emotional lability, irritability, and incoordination, which grades into apathy, ataxia, and slurred speech. Heavy intoxication (blood alcohol level above 300 mg/ml) can lead to alcoholic coma. Alcohol acute intoxication may mimic many psychiatric conditions (panic attacks, depression, and acute psychosis with delusions +/- hallucinations).

## Blood Alcohol levels and Impairment;

Level	Impairment
20 - < 30 mg/dL	Slowed thinking and motor performance.
30 - < 80 mg/dL	Observable cognitive and motor impairment.
80 - < 200 mg/dL	Deterioration in cognition with impaired judgment and mood lability.
200 - < 300 mg/dL	Marked slurring of speech, ataxia , nystagmus, and alcoholic blackouts.
>300 mg/dL	Impaired autonomic nervous system functions, disturbed vital signs, coma and possible death.

When you suspect alcohol abuse, ask the patient clearly about alcohol ingestion and determine the pattern of abuse. Carry out a physical examination for alcohol – related medical complications.

**Laboratory test:** abnormal high values of gamma glutamyl transpeptidase (GGT) and mean corpuscular volume (MCV) point to the possibility of alcohol abuse.

## ★ Complications of Chronic Alcohol Abuse:

Medical	Psychiatric	Social
<p><b>Neurological</b></p> <ul style="list-style-type: none"> <li>Cerebellar degeneration</li> <li>Seizures / head trauma</li> <li>Peripheral neuropathy</li> <li>Optic nerve atrophy</li> </ul> <p><b>Alimentary</b></p> <ul style="list-style-type: none"> <li>Gastritis, peptic ulcer.</li> <li>Pancreatitis/hepatitis / cirrhosis.</li> <li>Tumors (esophagus, liver..)</li> </ul> <p><b>Others:</b></p> <ul style="list-style-type: none"> <li>Cardiomyopathy.</li> <li>Anemia / Obesity.</li> <li>Impotence / Gynecomastia.</li> </ul>	<ul style="list-style-type: none"> <li>• amnesic disorder</li> <li>• delirium</li> <li>• dementia</li> <li>• psychosis</li> <li>• depression</li> <li>• reduced sexual desire</li> <li>• insomnia</li> <li>• personality deterioration</li> <li>• increase risk of suicide</li> <li>• morbid jealousy</li> </ul>	<ul style="list-style-type: none"> <li>• social isolation</li> <li>• job loss</li> <li>• marital conflicts</li> <li>• family problems</li> <li>• legal troubles</li> <li>• social stigma</li> <li>• others</li> </ul>



## **Treating Alcohol Intoxicated Patient**

### The conscious patient:

- Observation, with protective and supportive approach.
- In case of agitation, hyperactivity or risk of violence: restrain the patient and give antipsychotic drugs (e.g. haloperidol 5 – 10 mg im)
- Avoid sedatives because they may potentiate depressant effects of alcohol on CNS.
- Wait for the alcohol to be metabolized.

### The unconscious patient:

- Hospitalization is required: protection of the airways, vital signs monitoring, prevention of further loss of body heat, correction of hypovolemia, and forced diuresis with maximal alkalization of the urine. In extreme situation, hemodialysis is necessary.

## **Detoxification (Planned Alcohol Withdrawal)**

People with alcohol-related disorders usually come to treatment because of fear that continued drinking would have a fatal outcome, or because of pressure from a spouse or an employer. A sudden cessation of drinking may cause severe withdrawal state with serious complications including seizures, delirium tremens or coma. Therefore, detoxification should be carried out under close **medical supervision**.

Long-acting benzodiazepines (e.g. diazepam or chlordiazepoxide) are generally prescribed to reduce withdrawal symptoms because of 1. lower risk of abuse compared to short-acting benzodiazepines & the smooth reduction of the drug levels in the blood (a smooth course of withdrawal).

Benzodiazepines are then gradually discontinued over 2-3 weeks; otherwise, the patient may become dependent on them.

- \* Vitamin supplements, especially vitamin B1 (thiamine).
- \* Monitoring of vital signs, consciousness and orientation.
- \* Good hydration and glucose intake.
- \* Anticonvulsants may be used to control seizures.

## **Maintaining Abstinence:**

Disulfiram (anta-abuse) helps those whose drinking pattern is impulsive and who are highly motivated to stop drinking. It blocks the oxidation of alcohol so that acetaldehyde accumulates with consequent unpleasant flushing of the face, choking sensations, headache, nausea, vomiting, tachycardia and anxiety. There is a risk of cardiovascular complications. Therefore, the drug should be used in specialist practice and should not be within 12 hours after the last ingestion of alcohol.

Citrated calcium carbimide is another drug used in maintaining abstinence; it induces a milder reaction with alcohol, and has fewer side effects.

## **Psychological treatment:**

To explore the reasons for drinking, alternative ways are worked out. For instance, instead of using alcohol in social situations to reduced anxiety, learn anxiety management and assertiveness techniques. Provision of information about the hazards of alcohol.

Group therapy: about 7-12 patients and a staff member in a specialist unit attend regular meetings. It provides an opportunity for frank feedback from other members of the group concerning the problems that the patient faces and to work out better ways of coping with their problems.

### Alcohol withdrawal:

Occurs in the dependent state, in those who have been drinking heavily for years and who have a high intake of alcohol (e.g. when patient is admitted into hospital and has no access to alcohol). The symptoms may begin after six hours of cessation or reduction of alcohol and peak by 48 hours. They follow a drop in blood concentration; characteristically appear on waking from sleep, after the fall in concentration during sleep. The symptoms subside over the course of 5 - 7 days. Epileptic generalized tonic-clonic seizures may develop within 12 - 48 hours after cessation of alcohol intake. Delirium tremens may develop after about 48 hours. The minimal quantity and frequency of alcohol consumption that may lead to physical dependence and withdrawal is not known. Severe withdrawal is more likely with the higher the levels of chronic alcohol consumption (e.g. 150 grams of alcohol per day), but individuals with lower levels can experience severe withdrawal and withdrawal complications. The severity of withdrawal is only moderately predicted by amounts of alcohol consumed. Duration of heavy alcohol use for 6 years or longer increases the odds of developing withdrawal symptoms 15 times.

### The stages of alcohol withdrawal syndrome;

Stage	Onset	Features
I	6 - 8 hours	<b>Autonomic hyperactivity</b> , tremor, agitation, diaphoresis, anxiety, tachycardia, , nausea, vomiting, anorexia, headache, insomnia, and craving for alcohol.
II	10-30 hours	<b>Hallucinations</b> (auditory or visual, tactile, olfactory or mixed), illusions, disordered perception, + autonomic hyperactivity of stage 1.
III	12 - 48 hours	<b>Grand mal seizures</b> ; 3-4% of untreated patients progress to stage 3; more than 50% have multiple seizures; >30% have Delirium Tremens if untreated.
IV	≥ 2-3 days	<b>Delirium tremens (DTs)</b> , see below.



### Delirium Tremens (DTs)

**Definition & Criteria:** it is a **severe form of alcohol withdrawal** starting 2 – 3 days after last alcohol intake; it may be precipitated by infections, and characterized by: **delirium, gross tremor (tremens)**, and **other features** : electrolyte disturbances & dehydration, autonomic disturbances (fever, dilated pupils & unstable BP, pulse and respiratory rates), and insomnia.

**Course:** It usually peaks on 3<sup>rd</sup> or 4<sup>th</sup> day, lasts for 3 – 5 days, worsens at night, and followed by a period of prolonged deep sleep, from which the person awakes with no symptoms and has amnesia for the period of delirium.

**Complications include:** **Violence** ( may lead to homicide or suicide), **Seizures** (may lead to aspiration, chest infection, & coma), and **Death** (it can be due to: suicide / cardiac arrhythmias/ electrolyte imbalance/aspiration/ chest infection/ volume depletion . Mortality rate: 5 -15%.

[youtube.com/watch?v=EosAtSpu1Pw](https://www.youtube.com/watch?v=EosAtSpu1Pw)



### Screening for alcohol dependence;

**CAGE questionnaire.** Ask the patient: "Have you ever;

- 1.wanted to **cut** down on your drinking?
2. felt **annoyed** by criticism of your drinking?
3. felt **guilty** about drinking?
4. taken a drink as an "**eye opener**" (to prevent the shakes)?"

≥ 2 "yes" answers are considered a positive screen.

One "yes" answer should arouse suspicion of abuse.

**Cut Annoyed Guilty Eyes**

### Treatment:

1. It should be in an **ICU or a medical ward** because it is a serious **medical emergency**.
2. **Avoid antipsychotics** (because they lower seizure threshold).
3. **Guard against seizures**; benzodiazepines (e.g. diazepam) +/- magnesium sulfate & an anticonvulsant Rx .
4. **Rehydration** is a vital step.
5. **Thiamine (B1)** supplement is essential for glucose metabolism (B1 is usually low in DTs patients).
6. Keep the patient in a quiet, well lit-room; avoid over and under stimulation. Frequently reorient, reassure and explain procedures clearly to the patient.

## Abuse of Anxiolytics, Sedatives & Hypnotics.

This class of substances includes all controlled antianxiety and sleeping medications:

- Benzodiazepines ( e.g. clonazepam, lorazepam )
- Benzodiazepine - like drugs ( e.g. zolpidem, zopiclone )



Clonazepam (Rivotril), alprazolam (Xanax) and flunitrazepam (Rohypno) have become drugs of abuse.

These substances are brain depressants. Like alcohol, they can produce very significant levels of physiological dependence, marked by both tolerance and withdrawal.

- **Intoxication:** Similar to alcohol intoxication, features include:
  - slurred speech -incoordination- unsteady gait- nystagmus / ataxia.
  - impaired attention or memory- stupor or coma.



Abuse of sedative and hypnotic drugs causes clinically significant maladaptive psychological or behavioral changes, e.g. disinhibited behavior.

- **Withdrawal:** Similar to alcohol withdrawal, features include:
  - Autonomic hyperactivity ( e.g. sweating, tachycardia).
  - Nausea, vomiting, anorexia.
  - Insomnia.
  - Anxiety / agitation.
  - Perceptual disturbances (e.g. illusions... ).
  - Seizures.
  - Delirium.

The timing and severity of the withdrawal syndrome differ depending on the specific substances and its pharmacokinetics and pharmacodynamics. For example, withdrawal from substances with long-acting metabolites (e.g. diazepam) may not begin for 24 - 48 hours or longer; whereas withdrawal from substances with short-acting substances that are rapidly absorbed and have no active metabolites (e.g. triazolam) can begin within 4 - 6 hours after the substance is stopped. Withdrawal can be life-threatening which often requires hospitalization.

These substances are often taken with other brain depressants, like alcohol, which can produce additive serious effects (e.g. respiratory depression). Alcohol and all drugs of this class are cross-tolerant and cross-dependant, i.e., one drug is able to suppress the manifestations of physical dependence produced by another drug and to maintain the physical dependant state.

Despite the risk of dependence, benzodiazepines have less abuse potential than other drugs of this class, a higher therapeutic index, and a wide range of therapeutic indications. Therefore, **a patient should not be deprived of a benzodiazepine drug when it is clinically indicated** (e.g. anxiety, insomnia, akathisia).

## Abuse of Inhalants (Volatile Solvents) التشفيط

Adeeb is a 16-year-old boy lives with his divorced mother, presented with slurred speech, facial rashes, incoordination and nausea.



Inhalants are volatile organic substances (most are aromatic hydrocarbons) that can be inhaled for psychotropic effects. The active compounds in these inhalants are usually **acetone, benzene or toluene**.

The types of solvents, cleaners, and glues are numerous and include: gasoline, lighter fluids, spray paints, cleaning fluids, glues, typewriter correction fluids, & fingernail polish removers.

These agents generally act as brain depressants (similar to alcohol and sedative hypnotics in their effects). Use of inhalants occurs mainly among adolescents in lower socioeconomic groups, usually as occasional experimentation. This is often a group activity. Inhalants are inexpensive, easily available and legal substances. These factors contribute to the high use of inhalants among people who are poor. People often use inhalants with a partially closed container (e.g. a can), a plastic bag, a tube or an inhalant-soaked cloth through which a user can sniff the volatile substance through the nose, or huff and puff it through the mouth. Therefore, a recent abuse of inhalants can be identified by unusual breath or odor, rashes around the nose and the mouth or the residue on the face, hands or clothing. Other less specific identifying features include irritation of the patient's nose, mouth, eyes and throat. Inhalants are rapidly absorbed through the lungs and delivered, through the blood, to the brain. Their effects usually appear within 5 – 10 minutes and may last for several hours.

**Intoxication:** symptoms of mild intoxication are similar to intoxication with other brain suppressants (e.g. alcohol).

**In small doses,** these agents produce the attracting features: euphoria, excitement, pleasant floating sensations, and disinhibition.

**High doses can cause:** disturbed consciousness, perceptual disturbances, impulsiveness, assaultiveness, impaired judgment, sedation, slurred speech, nystagmus, ataxia, incoordination, nausea, and vomiting.

### **Complications:**

**Physical:** irreversible multi-organ damages (brain, lungs, liver, kidneys, muscles, peripheral nerves and bone marrow).

**Psychological:** depressions, conduct or personality disorders...etc.

**Social:** broken or abusive family life.

**Death** may occur during intoxication because of: respiratory depression, asphyxiation, aspiration of vomitus. cardiac arrhythmia or serious injury.

**Treatment:** a full range of biopsychosocial assessment and treatment is needed including physical and psychiatric rehabilitation. There is no specific drug treatment for inhalant abuse, but psychiatric complications (e.g. psychosis, depression) may require drug treatment. Teenagers should receive education and counseling about the general topic of substance abuse.

## Abuse of Opioids



A 53-year-old man was referred for psychiatric consultation by his physician who discovered him abusing large quantities of a codeine-containing medicine. He had come into the hospital for a severe abdominal pain which is relieved only by methadone or morphine (he claimed). His condition fluctuates during the day.

Opioids include several narcotic substances: (**opium, heroin, morphine, codeine, pethidine, methadone**).

The pharmacological effects of opiates are mediated through interaction with endogenous opioids (enkephalins, endorphins and dynorphins) and opiate receptors (mu, kappa and delta) which are involved in many mental functions: pain perception (analgesics), mood (feeling of pleasure). The medical use of opioids is mainly for their **powerful analgesic effects**. They are abused for **their powerful euphoriant effects** (especially when taken intravenously).

### Opioid Intoxication

**Initial Phase:** euphoria, analgesia, and relaxation.

**Then:** apathy, dysphoria, drowsiness, slurred speech psychomotor retardation (or agitation), disturbed consciousness, impairment in attention, memory, and judgment. Sexual desire diminishes with repeated use.

**Opioids effects on the pupils ;** (Important in the clinical assessment of the degree of opioids intoxication).

Pupillary constriction.



In severe overdose: Pupillary dilatation.



**Treatment;** in ICU: monitor vital signs, give antidote (**naloxone**) to normalize respiration and to restore consciousness. Open airway - oxygen - IV fluids.



[youtube.com/watch?v=5g9-55XxTIU](https://www.youtube.com/watch?v=5g9-55XxTIU)

### Features:

### Opioid Withdrawal

1. Rhinorrhea (runny nose).
2. Lacrimation.
3. Pupillary dilation.
4. Yawning.
5. Insomnia.
6. Fever / sweating/piloerection.
7. Muscle/joint aches.
8. Nausea or vomiting.
9. Diarrhea.
10. Dysphoric mood.
11. Craving (desperate searching for opioids).



### Treatment:

**Short-term;** painkillers, sedatives, & observation. Clonidine can be used to control the release phenomena (sympathetic overactivity, nausea, vomiting and diarrhea).

**Long-term;** *methadone harm reduction strategies:* methadone is used as a patch for heroin addicts. It provides a slow, steady delivery that replaces the sharp highs and drops. Thus, it allows addicts to stabilize their cravings that are hard to resist. It can also be taken as syrup once a day. Frequent Counseling.

[youtube.com/watch?v=NaMgdUcsko](https://www.youtube.com/watch?v=NaMgdUcsko)

**Tolerance develops rapidly** (especially in IV usage) leading to **rapid dependence and withdrawal** (6 hours after the last dose, reach a peak after 36 - 48 hours, and then wane). However, untreated withdrawal results in **no serious** medical sequence and rarely threatens the life of someone in a reasonable physical health, though they cause great distress.

**Tolerance also diminishes rapidly** and this can result in **immediate death** (an accidental overdose during time of IV self-injection because of **immediate serious respiratory depression**). This occurs when a previously tolerated high dose is resumed after a drug-free interval (e.g. after a stay in hospital or prison).

**Complications of IV Usage:** AIDS, hepatitis, endocarditis, septicemia.

**CNS Stimulants :** amphetamine [captagon], cocaine [crack] .



Rakan is a 20-year-old male brought to Emergency Department by police who arrested him because of reckless driving (drifting with high speed) and violent behavior. He looked over-suspicious, agitated, and over-talkative.

**Main features:**

- hypervigilance/Hyperactivity / agitation/ - Suspiciousness >>>>> paranoid delusion.
- Overconfidence >>>>> grandiosity.
- Aggression & violence.
- Insomnia.
- Euphoria or irritable mood.
- Hallucinations (visual more than auditory).
- Confusion and incoherence.

**Treatment:** Inpatient setting.

Symptomatic use of an antipsychotic medication e.g. olanzapine 10-20mg. For 4- 6 months). Upon abstinence some patients develop headache and depression, and may require antidepressants (e.g. paroxetine 20 mg/ day or 6 months). Psychotherapeutic methods (individual, family, and group psychotherapy) are usually necessary to achieve lasting abstinence.

However , it can be indistinguishable from functional psychosis (e.g. brief psychotic disorder, schizophreniform), and schizophrenia) and only the resolution of the symptoms in a few days or a positive finding in a urine drug screen test eventually reveals the diagnosis.

**Cannabis (marijuana/hash/ hashish)**



Bandar is a 32-year-old male brought to outpatient clinic by his concerned wife because of recurrent brief periods of being over-suspicious, euphoric, and talkative. He admitted abusing cannabis in the week-ends.



**Main features:**

- Euphoria/heightened perception/talkativeness/sensation of slowed time & disinhibition.
- Physical effects :  
Red conjunctiva / dry mouth / mild tachycardia/ increased appetite respiratory tract irritation & impaired motor coordination.
- Impaired cognitive functions & judgment.
- Anxiety +/- panic attacks with depersonalization and derealization (in high doses).
- Brief psychosis (transient paranoid ideation is more common than florid sustained psychosis).

Features may be correlated with preexisting personality traits (e.g. borderline / paranoid/...).

**Treatment:** Usually outpatient setting.

An antipsychotic medication (e.g. risperidone 3 mg /day) for 6 months.

Psychotherapeutic methods (individual, family, and group psychotherapy) are usually necessary to achieve lasting abstinence.

Cannabis may trigger anxiety / panic attacks & can induce delirium. Following discontinuation of cannabis, some patients may develop depressive features. Chronic use of cannabis can lead to a state of apathy and amotivation (**amotivation syndrome**) but this may be more a reflection of patient's personality structure than an effect of cannabis.

# Cases

- A 41-year-old businessman came to the emergency department complaining of insomnia for 3 days after he ran short of his sleeping pills. He was asking for a specific drug manufactured by ROCHE Company. He knows that each tablet is 2 mg. He said he uses 5 tablets each night to sleep. The most likely problem of this patient is:  
A. Heroin abuse.  
B. Benzodiazepines abuse.  
C. Methadone abuse.  
D. Abuse of painkillers.

Ans: b

- A 33-year-old single man was caught by police officers and put in prison because he was driving his car recklessly with high speed at 3am in the highway. Next day he started to show excessive **lacrimation, runny nose, repeated vomiting**, and abdominal cramps. However, his consciousness was intact. The most likely problem of this patient is:  
A. Cannabis abuse.  
B. Methadone intoxication.  
C. Abuse of naloxone.  
D. Opioid withdrawal.

Ans: d

- A 32-year-old man became increasingly irritable, insomniac, hypervigilant for the **past 4 weeks** with unpredictable mood and accusing his wife with extramarital sexual relationships. The most likely diagnosis is:  
A. Heroin abuse.  
B. Generalized anxiety disorder.  
C. Amphetamine abuse.  
D. Paranoid Schizophrenia

Ans: c

- A 43-year-old man has episodic behavioral disturbances including; euphoria, talkativeness, and disinhibition. **His eyes look red** most of the time. The most likely diagnosis is:  
A. Alcohol abuse.  
B. Cannabis abuse.  
C. Amphetamine abuse.  
D. Cocaine abuse.

Ans: b

- A 16-year-old boy presented with slurred speech, incoordination and nausea. Physical examination revealed facial rashes around his mouth and nose. When asked about substance abuse his reply was affirmative. The most likely substance is:  
A. Cannabis.  
B. Alcohol.  
C. Volatile substance.  
D. Morphine.

Ans: c

# Questions:

1-: patient presented to ER with slurred speech and pinpoint eyes what is the substance abuse?

A. Cocaine B. Heroin C. Opioid D. Alcohol

Ans: C

2- A 48-year old man admitted for hernia repair, he told the surgeon that he drinks alcohol for 10 years, the surgeon is concern about withdrawal seizure, at which time withdrawal seizures most commonly occur?

A. 6-11 hours B. 12-24 hours C. 49-72 hours D. 73-100 hours

Answer: B

3- Multiple pains all over his body with huge argue to get a strong painkiller with normal physical exam what is the diagnosis:

A. Opioid abuse B. Factitious disorder C. Somatic symptom disorder D. Dissociative disorder

Answer: A

4- A 33 year old with chronic history of drowsiness and slurred speech and repeated venous embolism

A. Cannabis B. Depression C. Opioid abuse D. Volatile substance abuse

Answer: C

5- Which medication is used to help abstain from alcohol?

A. Naloxone B. Disulfiram C. Protamine sulfate D. Methadone Patch

Answer: B

6- Patient Came to you after 48 hours of alcohol withdrawal, which of the following most likely symptom you will see?

A. Autonomic hyperactivity B. Hallucinations C. Grand mal seizures D. Delirium tremens

Answer: D

7- Patient Came with hyperactivity, agitation and paranoid delusion, what is the most likely substance the Patient used?

A. heroin B. hash C. amphetamine D. alcohol

Answer: C

8- Patient Came with red eyes, dry mouth and is euphoric, what is the most likely substance the Patient used?

A. Cannabis B. Cocaine C. Morphine D. Amphetamine

Answer: A

9 In alcohol withdrawal symptoms. Hallucinations usually appear in which of the following time intervals?

A. 6-8 hours B. 10-30 hours C. 12-48 hours D. 48.-72 hours

Answer: B

10- Old man came to the emergency department because of lung embolism, his record showed that he came yesterday with unpleasant multiple pains all over his body. What is the most likely problem of this patient?

A. Opioid abuse B. Malingering C. Dissociative disorder D. Psychogenic pain disorder

Answer: A

11-: A 52 years old male with deterioration of short memory and poor erection which one of the following will guide you to the most likely cause?

A. heroin abuse. B. Alcohol abuse. C. hearing voices. D. loss of interest.

Answer: B



# Questions:

12- A 43 years old man seen at emergency semiconsues . his physical examination showed severe pupillary constriction, his brother give a Hx of substance abuse, what is most likely?

A. Heroin intoxication. B. Cocaine withdrawal. C. Gat intoxication. D. Lithium.

Answer: A

13- A 52 year old male complaining of progressive difficulty in retention of new information. He is conscious and oriented. In order to know the cause of his problem, what is the most important question would you ask about?

A. Personal history B. Hx of fits C. Alcohol abuse D. If he had any trauma

Answer: C

14- A 15 year old boy seen at neurology clinic with uncoordinated gait, nystagmus, slurred speech and nausea. His father gave history of substance abuse. What is the most likely cause of his symptoms?

A. Volatile substance abuse B. Amphetamine abuse C. Cannabis abuse D. Heroin abuse

Answer: A

15- A 29-year-old man has episodic short lived behavioral disturbances including inappropriate excessive laughter, euphoria, talkativeness and increased appetite. What is the most likely diagnosis?

A. Bipolar mood disorder B. Cannabis abuse C. Amphetamine abuse D. Brief psychosis

Answer:B

16- A police officer has arrested this guy who was found talking to people on streets and put him in jail.

[video](#)

Q1: the police department chief contacted you and asked for an advice for what to do with him. What would be your advice?

-breath test for alcohol and urine toxicology screen.

-insure safety and Observe the pt assess if he substance abuse or alcohol dependence

-When he stable Admit the patient to psychiatric and manage his case if it substance abuse or any other psychiatric problem

-History and mental state examination to the patient to know what is the problem

-contacts family

Q2: Mention one clinical tool that you would help you to screen if this patient is alcohol-dependent or not?

CAGE questionnaire.