

# *Substance Abuse*

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# **Terminology**

1. Substance Abuse
2. Dependence (Addiction)
3. Tolerance
4. Intoxication

# 1. What is a “**Substance**” ?

**Drugs of abuse are any chemical agents (natural or artificial) that affect the mind and are known to be used in an abusive manner.**

- ✓ Alcohol
- ✓ Illegal street drugs (cannabis, cocaine or amphetamine)
- ✓ Addictive prescription drugs (like tramadol, pethidine)
- ✓ Over the counter drugs (like corex D or even mouthwash)
- ✓ Other mind altering substances (like glue, UHU, opioids)

# *Substance Abuse*

- Use of substances is causing problems in life (failure to fulfill major role obligations at work, school, or home)
- If diagnosed with **substance abuse** is not considered to be **addicted** or dependent (otherwise the diagnosis would be substance dependence)

## **2. Substance Dependence**

Certain changes in the way the person relates to the substance. Shows **all the signs of abuse** plus some additional problems.

ANY OBJECTION  
TO TRYING A  
BIT OF HEROIN?

ER...  
NO



# *Dependency features*

- ✓ Withdrawal signs when not using
- ✓ lacking the control of the onset, amount and termination of the substance usage.
- ✓ Devotes a lot of time and energy to getting and using
- ✓ Needs more and more to get the same effect (tolerance)
- ✓ Gives up things that used to be important in order to use
- ✓ Compulsions or cravings to keep using



"Just a small glass for me."



## **3. Tolerance**

Needs more and **more of the drug** to get the same effect as before.

E.g.: initially one glass of liquor to get the buzz, later needs 6-7 glasses to get the same buzz.

## **4. Intoxication**

- Transient syndrome
- due to recent substance ingestion which produces
- physical or
- psychological impairment

# **Withdrawal**

- Symptoms and signs specific for specific drug abused.
- Impairment in social, occupational etc

# *Risk factors*

## 1. Biological

- Genetic
- Biochemical – substance make them addicted

## 2. Psychological

- Developmental influences – disturbance of sense of self, ego
- Personality – pessimism, impulsivity

- **Socio-cultural**

- socio-learning – children likely to use substances if parents do so
- Conditioning – pleasurable effects ->positive reinforcement to use the substance
- Culture and ethnicity
- Mental illness – BAD, depression, schizophrenia, anxiety

# *ICD 10 Guidelines on Dependence*

- (a) a strong desire
- (b) difficulties in controlling substance-taking
- (c) withdrawal state when substance use has ceased or been reduced.
- (d) tolerance.
- (e) progressive neglect of alternative pleasures or interests
- (f) persisting with substance use despite clear evidence harmful consequences .

**Any of 3 or more present sometime during the last 12 month period**

# **Characteristics of Dependence**

- ✓ Chronic
- ✓ Primary
- ✓ Progressive
- ✓ Relapsing

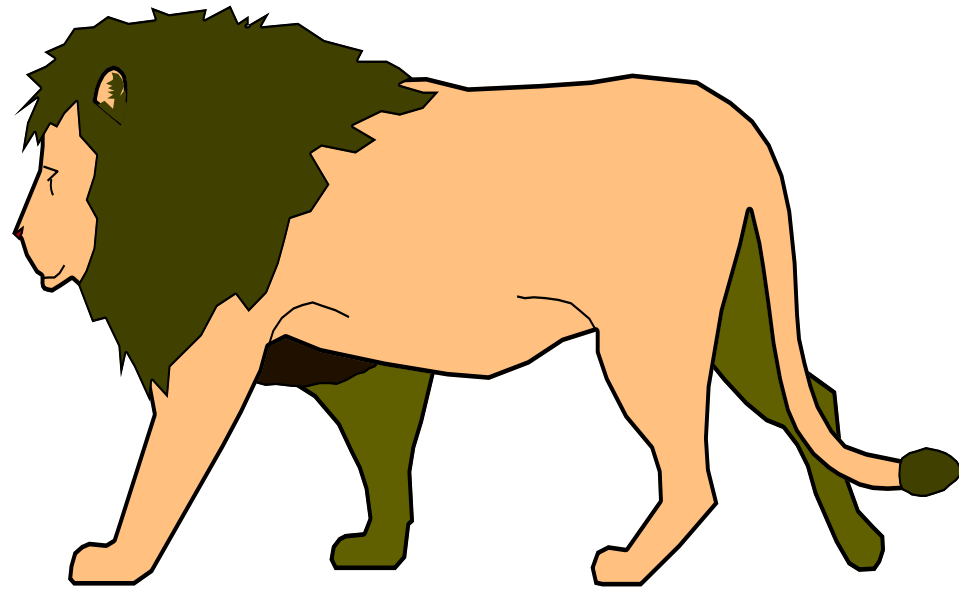
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***Alcohol***





**Is there a lion in you ?**



- **Spectrum of alcohol use /abuse**

1. Social drinker

2. Heavy drinker

3. Binge drinker

4. Alcohol abuser

5. Dependent or addicted drinker

# *Social drinker*

Occasional drinker

Regular but moderate



# *Heavy drinker*

- regular and heavy drinker



# *Binge drinker*

- irregular and heavy drinker



# *Alcohol abuser*

- **physical, psychological and social problems**



# *Dependent or addicted drinker*

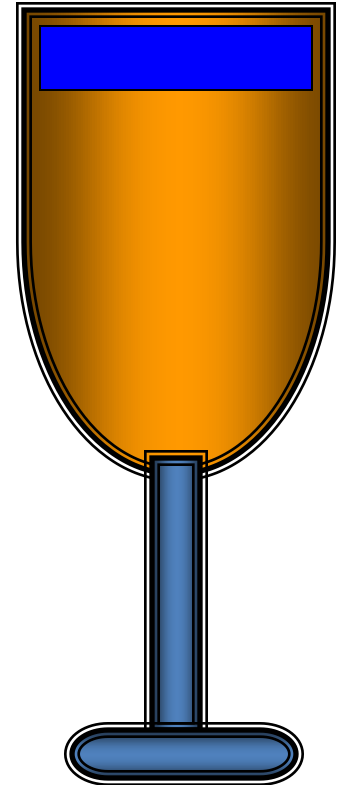
- tolerant
- obvious **physical, psychological and social** problems



# SAFE LEVELS

Males – 21 Units / week

Females – 14 Units / week





**These are all equal to approximately one standard drink**



**Low alcohol  
beer (3.5%)**

1.5 pints, total  
volume 375ml



**Regular beer  
(4.9%)**

1 pint, 285ml



**Table wine  
(12%)**

1 small glass,  
100ml



**Alcoholic  
soda (5.5%)**

3/4 of a 330ml  
bottle



**Mixed drinks**

1 glass, 30 ml  
of spirits (40%)  
plus mixer



**Spirits or  
liqueurs (40%)**

1 nip, 30ml



**Low alcohol  
beer (3.5%)**

1 can, 375ml



**Regular beer  
(4.9%)**

3/4 stubby,  
375ml

# **Alcohol dependence**

( 3 or more needed for diagnosis )

- Tolerance
- Physiological withdrawal state
- Compulsion to drink
- Difficulty in controlling
- Neglect of alternative pleasures
- Persisting despite clear evidence of harmful effects

## Long-term effects of alcohol

### Nervous system

- tingling and loss of sensation in hands and feet

### Heart

- high blood pressure
- irregular pulse
- enlarged heart

### Lungs

- greater chance of infections including tuberculosis

### Muscles

- weakness
- loss of muscle tissue

### Liver

- severe swelling and pain
- hepatitis
- cirrhosis
- liver cancer

### Pancreas

- inflamed pancreas causing pain

### Sexual organs

#### Males

- impotence
- shrinking of testicles
- damaged/less sperm

#### Females

- greater risk of gynaecological problems
- damage to foetus if pregnant

### Blood

- changes in red blood cells

### Brain

- brain injury
- loss of memory
- confusion
- hallucinations

### Skin

- flushing
- sweating
- bruising

### Stomach

- inflamed lining
- bleeding
- ulcers

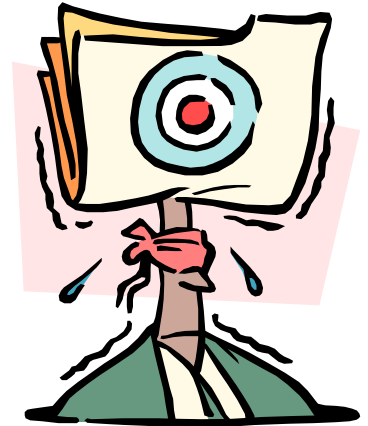
### Intestines

- inflamed lining
- ulcers



# ALCOHOL WITHDRAWAL

- a) Tremulousness - “the shakes”
- b) Agitation - easily startled
- c) Nausea, retching & sweating
- d) Illusions
- e) Hallucinations
- f) Seizures ( rum fits )
- g) Delirium tremens



# Toxic / Nutritional conditions

- Wernicke's encephalopathy
- Korsakov's psychosis
- Alcoholic dementia

# WERNICKE'S ENCEPHALOPATHY

- a. Memory defect
- b. Disorientation
- c. Impairment of consciousness
- d. Ataxia
- e. Ophthalmoplegia

ACUTE  
SYNDROME

# Korsakov's Psychosis

CHRONIC SYNDROME

- a. Impairment of memory and learning
- b. Confabulation

# OTHER PSYCHIATRIC DISORDERS

## A. Personality deterioration

Self centredness

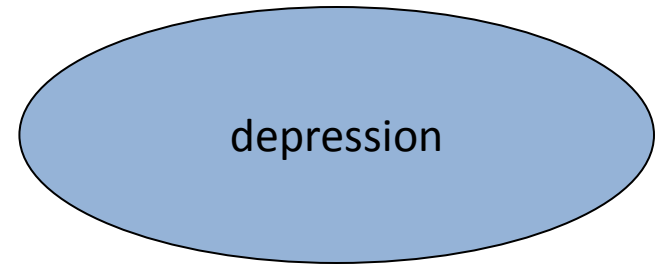
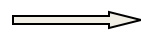
Responsibilities evaded

Decline in standards of conduct

Dishonest and deceitful



B. Mood disorders



C. Suicidal behaviour

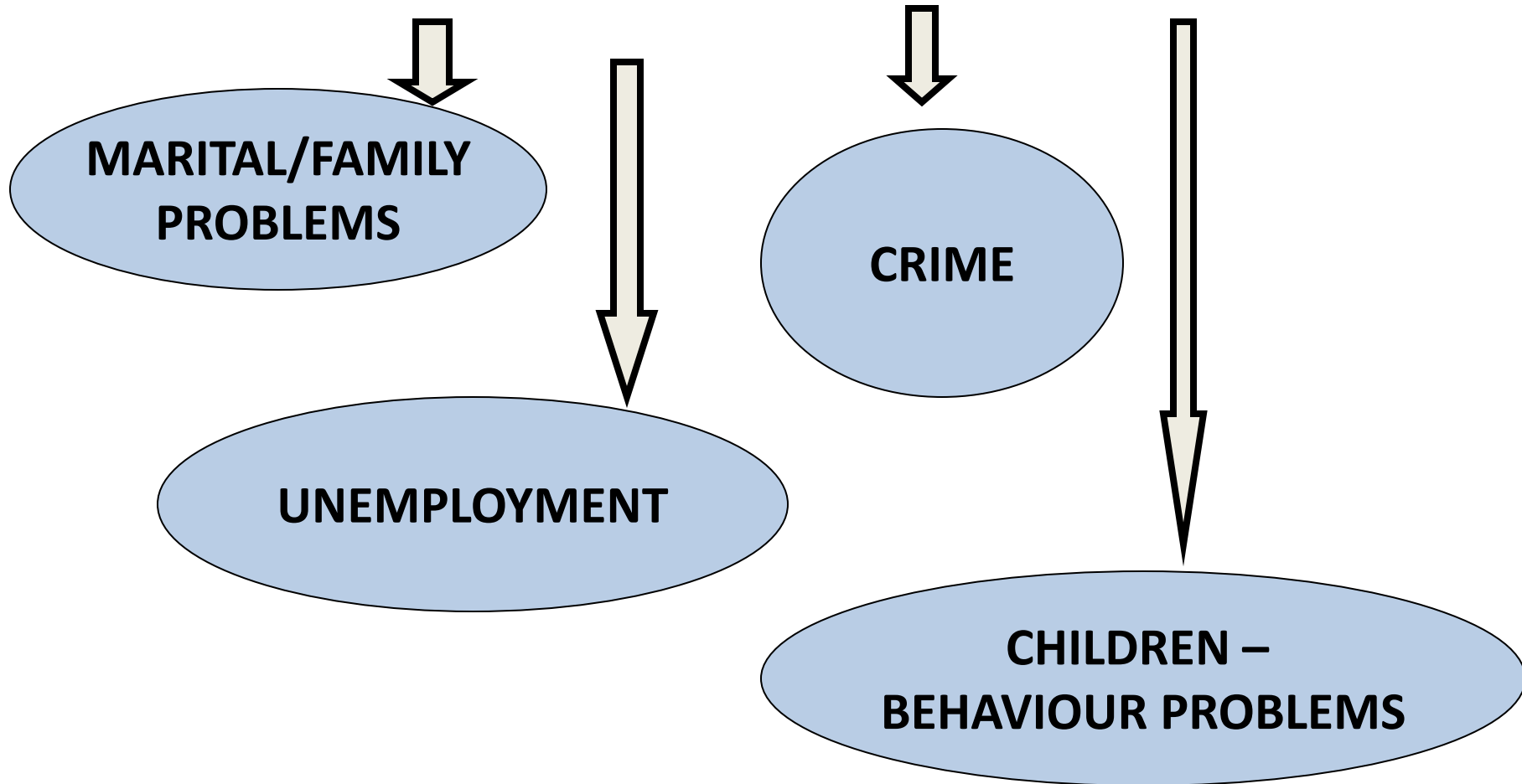
D. Impaired psychosexual function

Erectile impotence

Delayed ejaculation

## E. Morbid jealousy

# SOCIAL DAMAGE

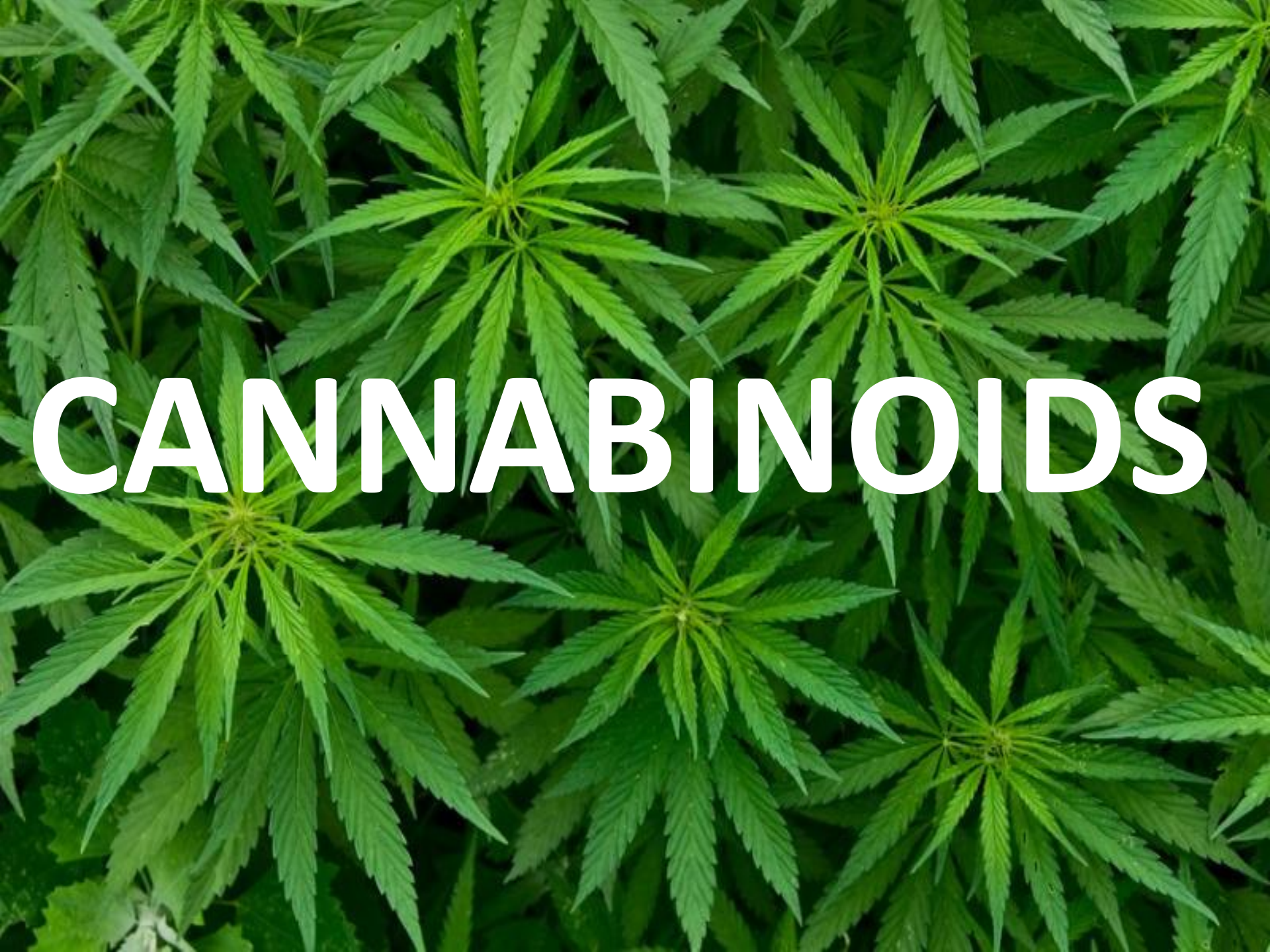




**A man**



...or a mouse



# CANNABINOIDS



# SYMPTOMS MARIJUANA USE

## OVERALL SYMPTOMS

- Increased Agitation
- Paranoid Delusions
- Depression
- Hallucinations
- Exaggerated Thoughts of Suicide
- Feeling of Impending Doom
- Panic Attacks
- Heart Attacks

Many of these symptoms may be life threatening and may change suddenly.

“Glazed”  
expression,  
red eyes

Psychosis

Inability to  
Speak

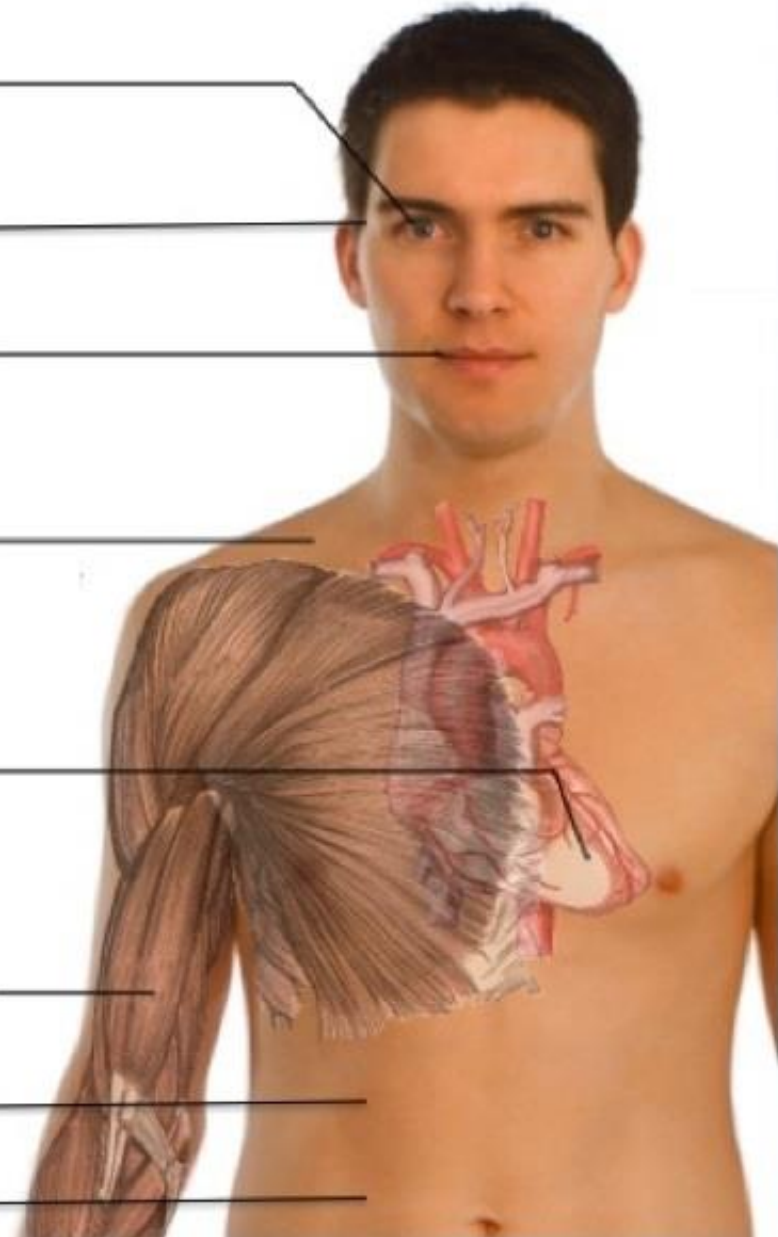
Body  
Temperature  
Fluctuation,  
Inability to Feel  
Pain, Seizures

Increased Blood  
Pressure and  
Heart Rate,  
Heart Attack

Temporary  
Paralysis,  
Cramping

Kidney Failure

Vomiting

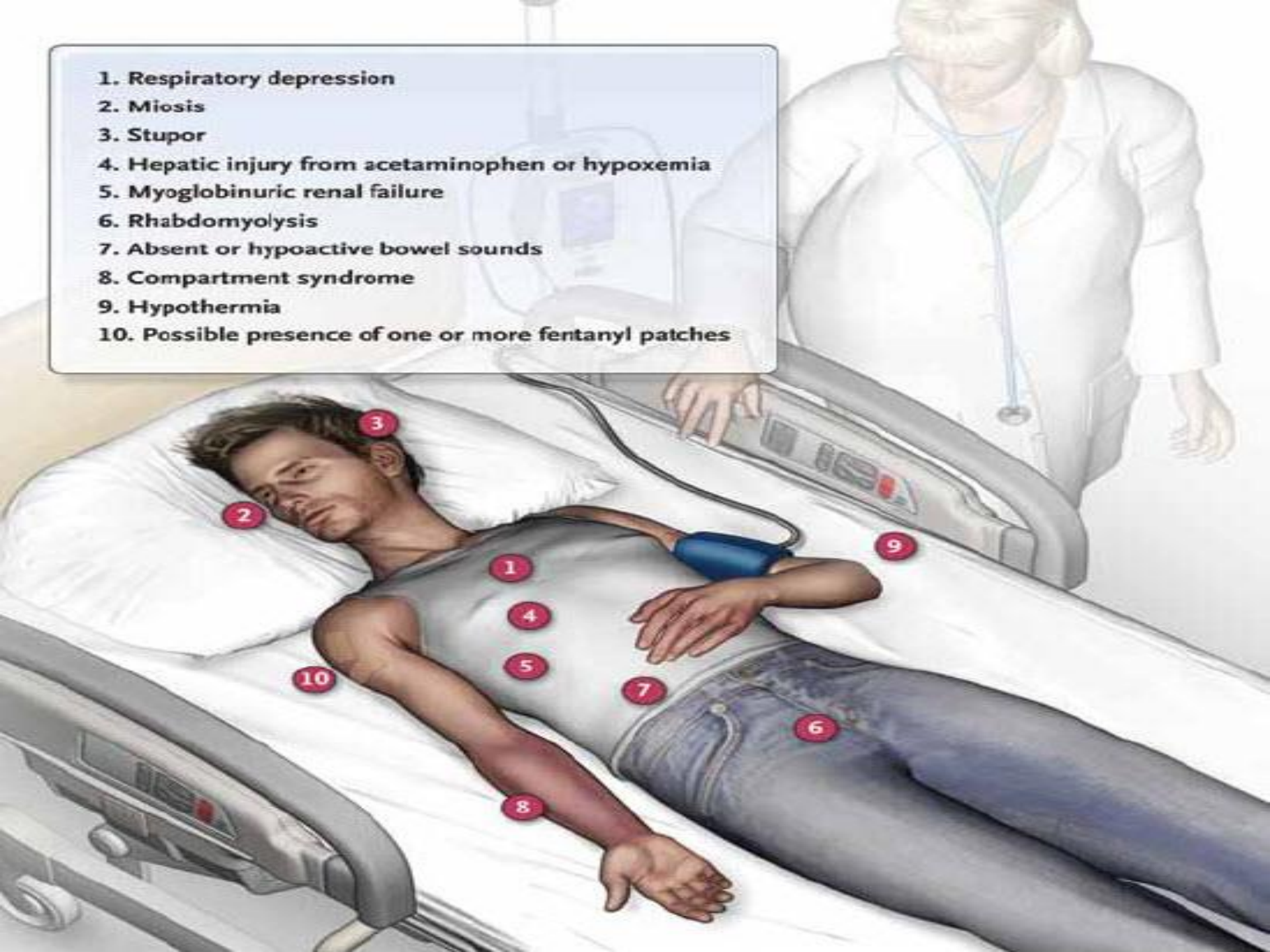


# *Opiates*





1. Respiratory depression
2. Miosis
3. Stupor
4. Hepatic injury from acetaminophen or hypoxemia
5. Myoglobinuric renal failure
6. Rhabdomyolysis
7. Absent or hypoactive bowel sounds
8. Compartment syndrome
9. Hypothermia
10. Possible presence of one or more fentanyl patches





# ***MCQ session***

***Thank You***