MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

DND Primary Care Paramedicine

Module: 06

Section: 03

Introduction

- Mental and substance abuse disorders are a significant cause of life-years lost to disability among all medical illnesses
- The diagnostic and statistical manual of mental disorders (DSM-5) and the 10th revision of the international classification of diseases (ICD-10), is the commonly used book to guide mental health practice
- The need for improved prevention strategies and for more definitive and effective interventional treatments remains a global concern

Your Role

- When emergency medicine and mental health collide…
- Advocate for your patient
  - Emergency interventions may be unnecessary
  - But your actions could make a huge difference as a navigator of the health care system
    - And on how patient reacts to it
  - Be skeptical of the current health care system and ask yourself, “is it meeting the needs of patients with mental health issues?”

Behavioural Emergencies

- Behaviour
  - Person's observable conduct and activity
  - Abnormal is a very subjective term
- Indications of a behavioural problem
  - If it interferes with core life functions
  - Threat to life or well-being
  - Significant deviation from societal norms

Psychiatric Assessment

- Determine
  1. The CC from the patient's viewpoint
  2. HPI
  3. ADL/IADL/neurovegetative signs (poor appetite and sleep)
  4. Previous disorders, their nature and extent of their treatment
  5. Current or past substance abuse
  6. The family history
  7. The personal history, childhood abuse etc.
  8. Current level of functioning, i.e. socio-economic, education, employment

Mental Status

- General appearance
- Behavioral observations
- Orientation
- Memory
- Sensorium
- Perceptual processes

Mental Status

- Mood and affect
- Intelligence
- Thought processes
- Insight
- Judgment
- Psychomotor

Affect

- The expression of emotion or feelings displayed to others through facial expressions, hand gestures, voice tone, and other emotional signs such as laughter or tears
  - Broad affect
    - Normal range of emotional reactivity
  - Reduced affect (emotional blunting) and flat affect
    - Reduced or lack of emotional reactivity
    - May be a symptom in autism, schizophrenia, depression, PTSD
    - May be a side effect of medications (antidepressants, antipsychotics)
  - Inappropriate affect
    - Outward display of emotion out of context

MEDAVIE HealthEd ÉduSanté

Dementia and Delirium

ORGANIC CAUSES TO PSYCHIATRIC EMERGENCIES

Delirium

- Rapid onset of widespread disorganized thought
  - Inattention
  - Memory impairment
  - General clouding of consciousness
- Fluctuating
- May be due to medical condition, intoxication, withdrawal
- Confusion is the hallmark
- Agitation

Dementia

- Gradual development of memory impairment and cognitive disturbances
  - Pervasive impairment of abstract thinking
- Develops over months, usually irreversible
- Most commonly caused by:
  - Alzheimer's disease
  - Parkinson's disease
  - Trauma and substance abuse

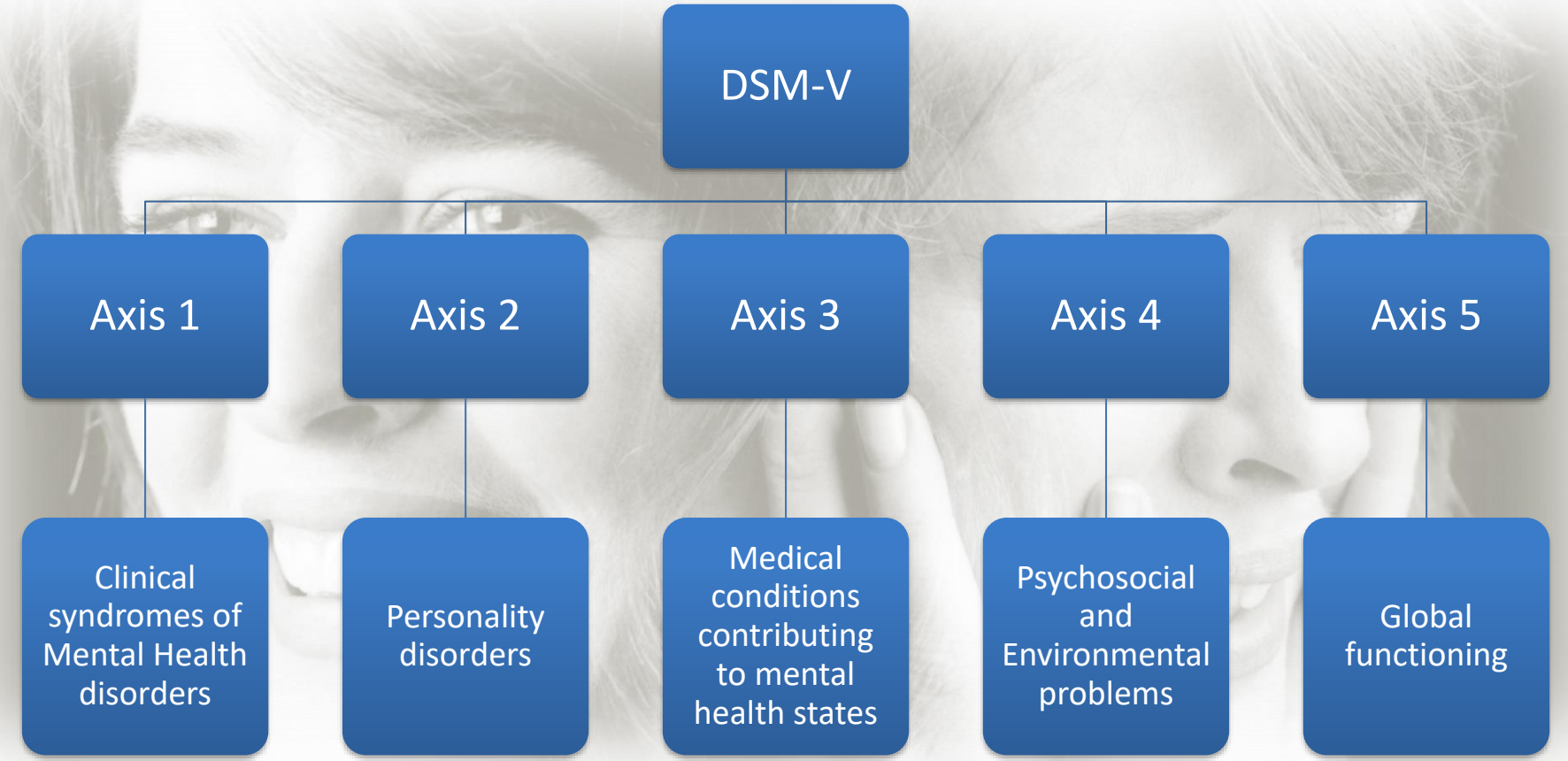
Dementia

- Causes more disability than any other disease state
- Caregiver burnout
- Over half remain at home
  - Limited LTC facility space
  - Prehospital support
    - ECP and similar programs

Presentation

- One or more of:
  - Aphasia
  - Apraxia
  - Agnosia
  - Disturbance in executive functioning
- Significantly impaired social or occupational functioning

Mental Health



Axis 1

Axis1

- Psychoses
- Substance- related Disorders
- Malingering
- Mood disorders
- Anxiety disorders
- Sleep disorders
- Eating disorders
- Factitious disorders
- Somatoform disorders
- Dissociative disorders

Psychosis

- Psychosis is set of symptoms in which pts mental capacity, affective response, capacity to recognize reality, communicate and relate to others is impaired
- Schizophrenia is a disorder in which psychosis is a prominent feature (it is not synonymous with psychosis, but is just one of many causes of psychosis)

Psychosis

- Potential signs and symptoms
  - Rapid fluctuations in mood (emotional lability) or showing very little emotion or facial expression
  - Unreasonable suspiciousness
  - Insomnia; restlessness and pacing at night
  - Unusual or bizarre behavior
  - Unusual perceptual experiences including hypersensitivity, illusions and/or brief intermittent hallucinations
  - Difficulties in thinking such as organizing and/or expressing thoughts

Anxiety Disorders

- Up to 1 in 5 patients presenting to primary care will have symptoms of an anxiety disorder
- Suicide rates are 10 times higher than rates in the general population
- Up to 75% of those who are diagnosed with an anxiety disorder have at least one other comorbid psychiatric condition
- Earlier age of onset compared to other mood disorders
- Risk factors
  - Female
  - Introverts
  - Stressful life event
  - Family history
  - Comorbid psychiatric disorder

Anxiety Disorders

- Anxiety becomes a problem, and a disorder should be considered when:
  - It is of greater intensity and (or) duration than usually expected
  - It leads to impairment or disability in daily life
  - Daily activities are disrupted by the avoidance of certain situations or objects in an attempt to diminish the anxiety
  - Can include obsessions, compulsions, and intrusive recollections or memories of trauma

Anxiety Disorders

- DSM-V:
  - Typically lasting 6 months or more duration
  - Individuals with anxiety disorders typically overestimate the danger or avoid
  - Many of the anxiety disorders develop in childhood and tend to persist if not treated
  - Most occur more frequently in females than in males (approximately 2:1 ratio)
  - Each anxiety disorder is diagnosed only when the symptoms are not attributable to the physiological effects of a substance/medication *or to another medical condition or are not better explained by another mental disorder*

MEDAVIE HealthEd ÉduSanté

Types of Anxiety Disorders

Type	Description
Panic disorder	Frequent and unexpected abrupt panic attacks with persistent anxiety concerning recurrence
Generalized anxiety disorder	worry and anxiety out of proportion for a number of events or activities on more days than not over a period of ≥6 months.
Specific phobia	Severe anxiety triggered by a specific feared object or situation and can lead to further avoidance of the situation
Selective mutism	Generally begins in childhood, and person chooses not speak in certain social situations
Separation anxiety disorder	Childhood fear of separation of important figures
Agoraphobia	2 or more situations causing significant fear and trepidation: examples include public transportation, open spaces, closed spaces, crowds, being outside of home alone. Leads to avoidance of these situations

Types of Anxiety Disorders

Type	Description
Anxiety disorder due to medical condition	Chronic disease
Substance/medication-induced anxiety disorder	Often a result of discontinuation of certain substances (alcohol, benzodiazepines)
Obsessive Compulsive Disorder	Obsessions are recurrent and persistent thoughts, impulses, or images that are experienced, that cause duress Compulsions are repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating works silently) that the person feels driven to perform as a result of an obsession

Signs and Symptoms

- Sympathetic system activation due to heightened arousal
- Hyperventilation
- Excessive fear or worry about real or imagined events
- Helplessness

Symptoms

- Palpitations
- Sweating
- Trembling
- Shortness of breath
- Feelings of choking
- Chest pain
- Nausea
- Abdominal distress
- Paraesthesias
- Chills or hot flashes
- Dizziness
- Fear of losing control
- Lightheadedness

Management

- Cognitive behavioral therapy
- Minimize stimulants (caffeine)
- Alcohol use should be minimal; it should not be used to control anxiety
- Exercise minimum 3x/week
- Proper sleep and sleep hygiene
- Medications

Management

- Pharmacotherapy
  - Short term
    - Benzodiazepines (lorazepam, clonazepam)
    - Buspirone
  - Long term
    - Antidepressants
      - Generally more effective at treating anxiety than depression

Types of Anxiety Disorders

Acute Stress Disorder

Post Traumatic Stress Disorder

- The relevance of ASD as a disorder distinct from PTSD has been questioned from its inception, and has generated discourse
- ASD is limited to between 2 days and 4 weeks, primary difference
- A lot of literature surrounding PTSD, few with ASD
- Despite many reports/media, only a minority of people involved in stressful events develop S/S of condition
  - Military prevalence lower than civilian

MEDAVIE HealthEd ÉduSanté

PCL-M Checklist

PTSD CheckList – Civilian Version (PCL-C)

Client's Name: _____

Instruction to patient: Below is a list of problems and complaints that veterans sometimes have in response to stressful life experiences. Please read each one carefully, put an "X" in the box to indicate how much you have been bothered by that problem *in the last month*.

No.	Response	Not at all (1)	A little bit (2)	Moderately (3)	Quite a bit (4)	Extremely (5)
1.	Repeated, disturbing *memories, thoughts, or images* of a stressful experience from the past?					
2.	Repeated, disturbing *dreams* of a stressful experience from the past?					
3.	Suddenly *acting or feeling* as if a stressful experience *were happening* again (as if you were reliving it)?					
4.	Feeling *very upset* when *something reminded* you of a stressful experience from the past?					
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, or sweating) when *something reminded* you of a stressful experience from the past?					
6.	Avoid *thinking about* or *talking about* a stressful experience from the past or avoid *having feelings* related to it?					
7.	Avoid *activities or situations* because they *remind you* of a stressful experience from the past?					
8.	Trouble *remembering important parts* of a stressful experience from the past?					
9.	Loss of *interest in things that you used to enjoy?*					
10.	Feeling *distant or cut off* from other people?					
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?					
12.	Feeling as if your *future* will somehow be *cut short*?					
13.	Trouble *falling or staying asleep*?					
14.	Feeling *irritable* or having *angry outbursts*?					
15.	Having *difficulty concentrating*?					
16.	Being *"super alert"* or watchful on guard?					
17.	Feeling *jumpy* or easily startled?					

PCL-M for DSM-IV (11/1/94) Weathers, Litz, Huska, & Keane National Center for PTSD - Behavioral Science Division

Table 1. Suggested PCL cut-point scores

Estimated Prevalence of PTSD	Typical Setting	Suggested PCL Cut-Point Scores
15% or Below	e.g. civilian primary care, Department of Defense screening, or general population samples	30-35
16-39%	e.g. specialized medical clinics (such as TBI or pain) or VA primary care	36-44
40% or Above	e.g. VA or civilian specialty mental health clinics	45-50

Note. These recommendations are general and approximate, and are not intended to be used for legal or policy purposes. Research is needed to establish optimal cut-point scores for a specific application.

ASD/PTSD

- "Shell shock" and other terms used to describe battlefield phenomenon we now know as PTSD, term originated in the 1980s
- Risk factors
  - History of prior trauma (i.e. childhood sexual abuse)
  - Family history of anxiety disorders
  - Female

PTSD

- Four diagnostic symptom clusters according to DSM-V occurring following a stressor
  - Re-experiencing
  - Avoidance
  - Negative cognitions and mood
  - Arousal

Comorbidities

Treatment

- We are not treating the memories, but the symptoms
- Larger developed from anxiety treatment
  - Unfortunately, in the infancy of PTSD treatment
- Nightmares
  - Insomnia managed in similar fashion to the general population
  - BPH meds used to treat nightmares
- Antidepressants
- Benzodiazepines
  - Generally discouraged
    - Higher rates of recurring PTSD with long term use

Prehospital support

- Non-judgmental approach
- Coach hyperventilating patient on proper breathing
- Reassurance
- Acute parenteral benzodiazepine administered by EMS should only ever be needed in a very small minority of patients who do not respond to means of communication and become a threat to themselves or others
- Know where additional resources and anticipate using them in difficult situations
  - Police, ALS

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

DEPRESSION

Depression

- Major depression accounts for roughly 50% of suicides, and 15% of patients with depression eventually die by suicide
- For every successful suicide, 18 - 20 attempts are made
  - Stigma of attention seeking
- Major depressive disorder is about 2 - 3 times as common in adolescent and adult females, as in adolescent and adult males
  - In prepubescent children, boys and girls are affected equally.
  - Rates in women and men are highest in the 25–44-year-old age group.

Depression

- Decreased prefrontal cortex (PFC), especially left PFC, blood flow and metabolism in depressed unipolar patients are the most consistently replicated findings
- Multifactorial
  - Social
  - Biological
  - Environmental
  - Genetic

Depression

- *DSM-IV-TR Diagnostic Criteria*
  - Frequent and constant depressed mood as indicated either by subjective account or observation made by others, for at least 2 years.
    - In children and adolescents, mood can be irritable and duration must be at least 1 year.
  - Presence, while depressed, of two (or more) of the following:
    - Poor appetite or overeating
    - Insomnia or hypersomnia
    - Low energy or fatigue
    - Low self-esteem
    - Poor concentration or difficulty making decisions
    - Feelings of hopelessness

Subtypes

- Major depressive disorder
  - With melancholic features
    - Anhedonia – loss of pleasure
  - With Atypical features
    - Include mood reactivity (that is, mood that brightens in response to a positive event) along with two or more of the following:
      1. Significant weight gain or increase in appetite
      2. Hypersomnia,
      3. Leaden paralysis (i.e., heavy, leaden feelings in arms or legs)
      4. A long-standing pattern of sensitivity to real or perceived interpersonal rejection
  - Psychotic features
- Post partum
- Seasonal affective disorder
- Dysthymic disorder
  - Chronic form of depressive illness that is less severe and can be associated significant disability, and is even more likely to go undiagnosed than major depression

MEDAVIE HealthEd ÉduSanté

SADIFACES

- Sleep
- Appetite
- Depressed mood
- Interests (lack of)
- Fatigue
- Anxiety
- Concentration
- Esteem
- Suicide

Depression

- Management
  - Antidepressants
- Prehospital
  - Assess if patient is a harm to themselves
  - Assess if patient has turned to substance abuse
  - Assess social supports
    - Family, friends
    - Employed
  - Be aware of social supports in your community
    - Interact with hospital social workers
- As a frontline healthcare worker, we should be the most informed of how to help pt on an outpatient basis in your community

Serotonin Syndrome

- Life threatening condition
  - Serotonergic medications (antipsychotics, antidepressants)
  - Single drug drug or, more commonly, by a combination of drugs that increase central serotonin neurotransmission
  - 2 to 24 hours after dosage
- The triad of cognitive, autonomic and neuromuscular effects is a classic feature
  - Fever, altered mental status, myoclonus
  - Most common cause of death is hyperthermia
- Approximately 25% of patients require endotracheal intubation and ventilator support.
- Be suspicious if pt taking serotonergic medication, increase dose or multiple serotonergic medications

MEDAVIE HealthEd ÉduSanté

Serotonin Syndrome

Mild

- Mydriasis
  Shivering
  Sweating
  Tachycardia (Mild)

Moderate

- Altered Mental Status
  - (agitation, disorientation, excitement)
- Autonomic Hyperactivity
  - (rigidity, tachycardia, hyperthermia of > 40°C)
- Neuromuscular Abnormalities
  - (tremor, clonus, hyperreflexia)

Life Threatening

- Delirium
- Hypertension
- Hyperthermia
- Muscle rigidity
- Tachycardia

Serotonin Syndrome

- Management
  - Cooling measures
  - IV rehydration
  - Prepare for mechanical ventilation
  - Benzodiazepines for seizures (ALS treatment)

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

BIPOLAR DISORDER

Bipolar

- Large cohort study found risk of suicide in men has higher in bipolar than any other psychiatric condition, second in women
- Medications that can precipitate mania
  - Antidepressants, corticosteroids, anabolic steroids, isoniazid, levodopa, caffeine, and OTC stimulants
- Most often people are euthymic
- Number 1 comorbidity is cardiovascular disease
- 70% are wrongfully diagnosed initially
  - Depression
  - Can take 8 years before diagnosis

Bipolar

- Type I
  - Requires a manic episode for the diagnosis
- Type II
  - Requires one or more depressive episodes and a hypomanic episode
- Cyclothymia
  - Cycling moods that do not meet criteria for depression or mania
- Manic or hypomanic episode with mixed features
  - Criteria met *during same time period* for hypomanic episode or manic episode with 3 or more features of depressive episode

Mania

- DSM IV criteria for mania:
  - Distinct period of abnormally and persistently elevated, expansive, or irritable mood for at least 1 week (or any duration if hospitalization is necessary)
- Examples of manic symptoms:
  - Inflated self-esteem or grandiosity
  - Decreased need for sleep (e.g. feels rested after only 3 hours of sleep
  - More talkative than usual or pressure to keep talking
  - Flight of ideas or subjective experience that thoughts are racing
  - Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli)
  - Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
  - Excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g. engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)

Hypomania

- A distinct period of persistently elevated, expansive, or irritable mood, lasting throughout at least 4 days
- Same symptoms as for mania, but milder and **not disabling**; *no* psychotic symptoms.

Management

- Psychoeducation
  - As helpful as cognitive behavioral therapy
- Many medications used to treat bipolar
  - Antiepileptics, lithium, anxiolytics, antipsychotics
- Medications can cause need for your services
  - Many adverse drug reactions
  - Narrow therapeutic index drugs

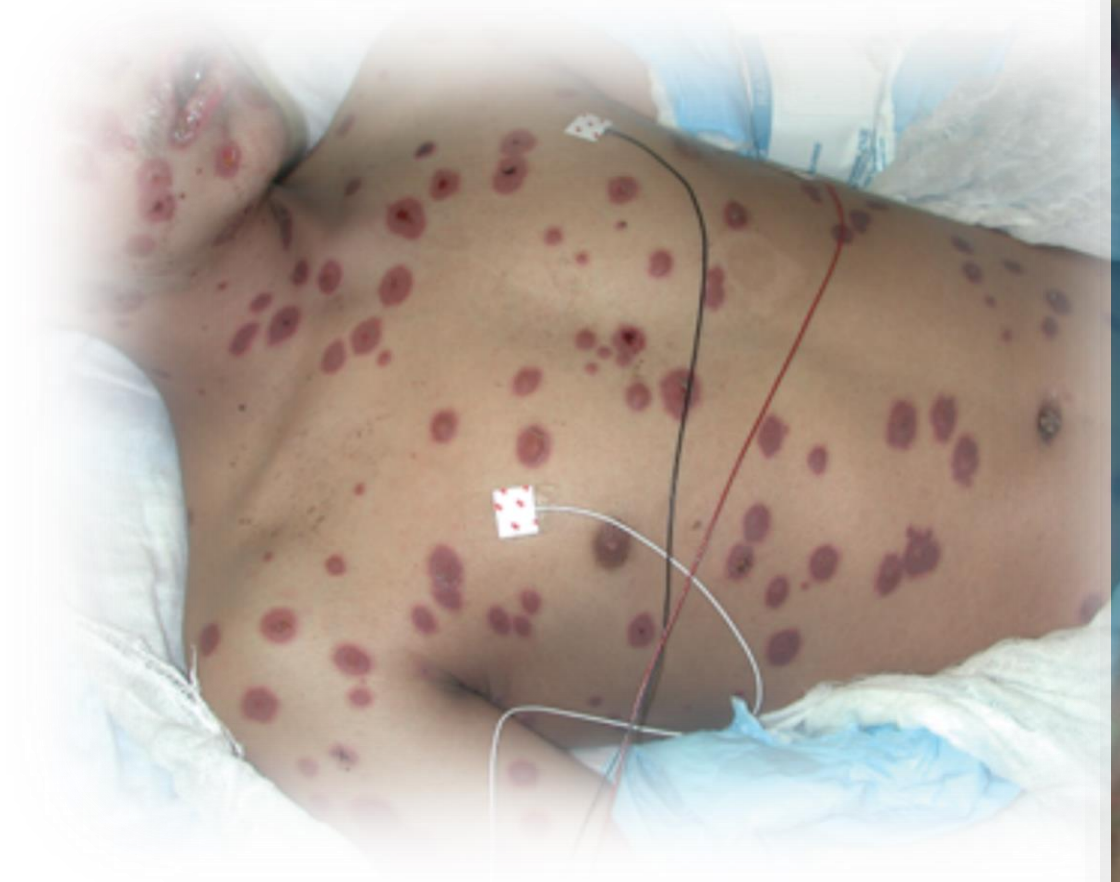
Acute Adverse Drug Reactions

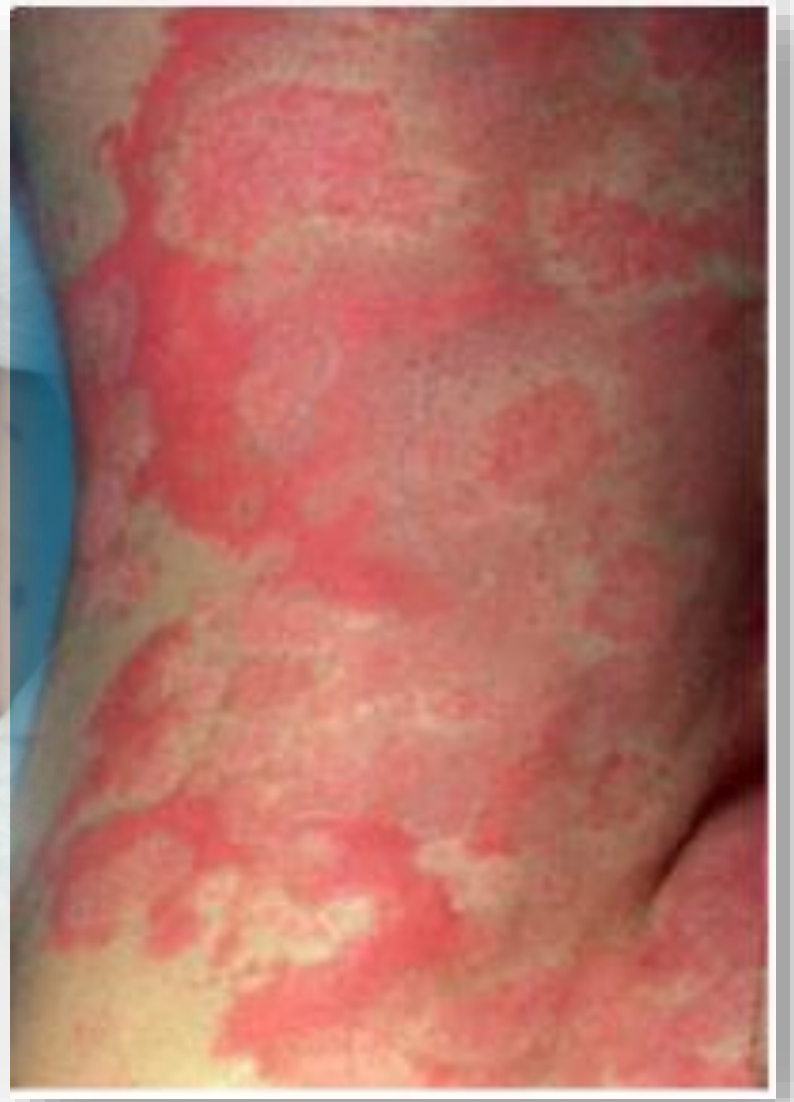
- Lithium levels
  - Acute mania 0.8-1.2mmol
  - Maintenance 0.6-1.0mmol
  - 1.5 - 2.0 mmol/L
    - Drowsy, ataxia, slurred speech, hypertonicity, tremor
  - > 2.0 mmol/L
    - Arrhythmias, decrease HR, seizure, coma, death

Acute Adverse Drug Reactions

- Steven Johnson Syndrome/toxic epidermal necrolysis (SJS/TENS)
  - Autoimmune response
- Culprit is often antiepileptic medications such as phenytoin, lamotrigine and carbamazepine
- Generally feel malaise/unwell prior to dermatological reaction, febrile
- Extensive skin blistering and degradation of dermal barrier
  - Reddish or purpuric macules on trunk and arms

SJS/TENS





SJS/TENS

- Steven Johnson Syndrome
  - Mortality 10%
- Toxic Epidermal Necrolysis
  - Mortality 30%
- Also seen in patients taking NSAIDs, Allopurinol
- Management
  - Burn ward
    - Dress skin with non-adhesive dressings
  - Associated with significant fluid loss from erosions, which results in hypovolemia and electrolyte imbalance
- No proven effective treatment.
  - Immunosuppressant's may be given in hospital
    - Controversial

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

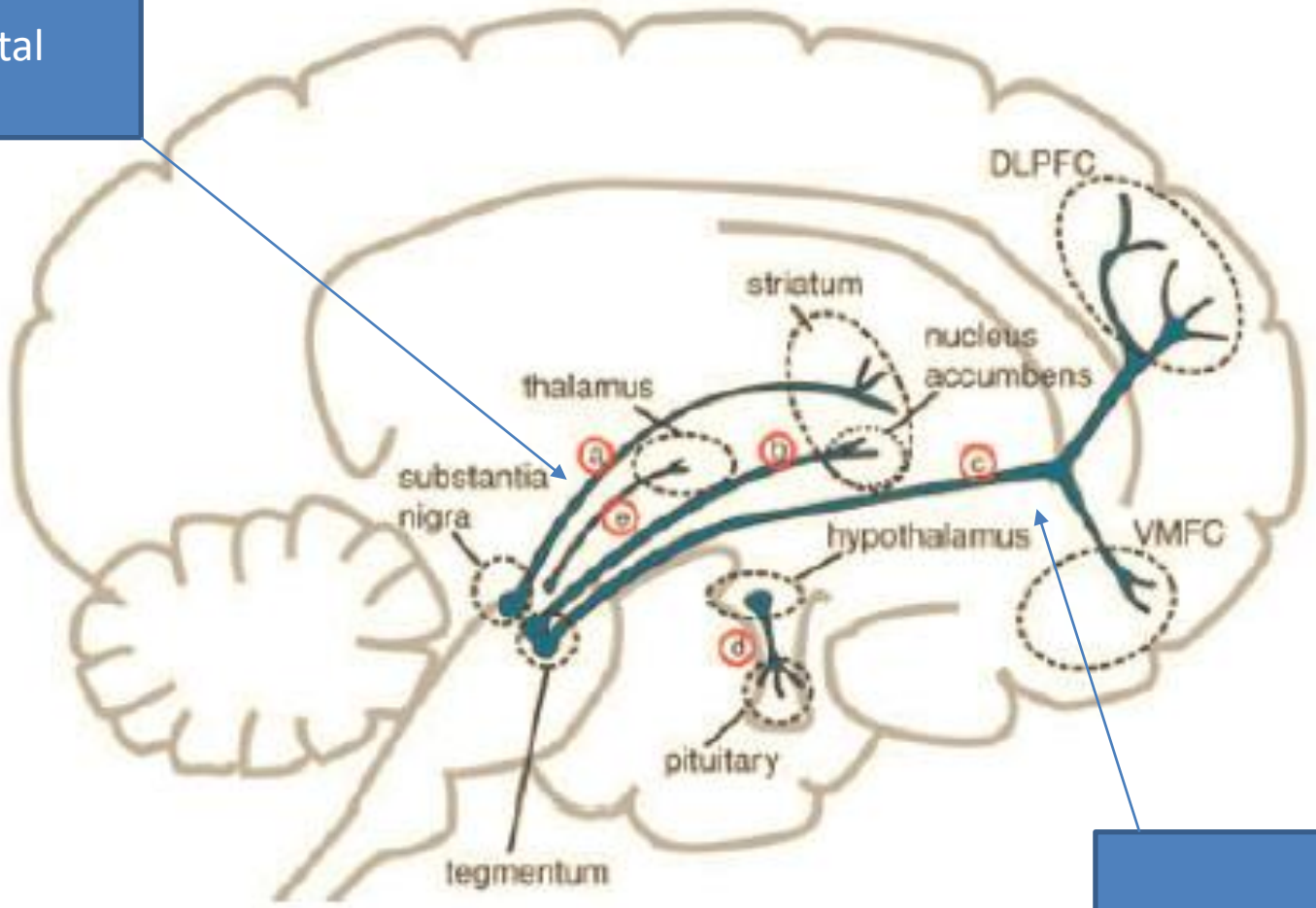
SCHIZOPHRENIA

Schizophrenia

- Traditionally the dopamine hypothesis was the guiding paradigm
- New hypothesis
  - Serotonin hypothesis
  - Glutamate hypothesis
- Most consistent structural finding seen with computed tomography and MRI is enlarged ventricles

Schizophrenia

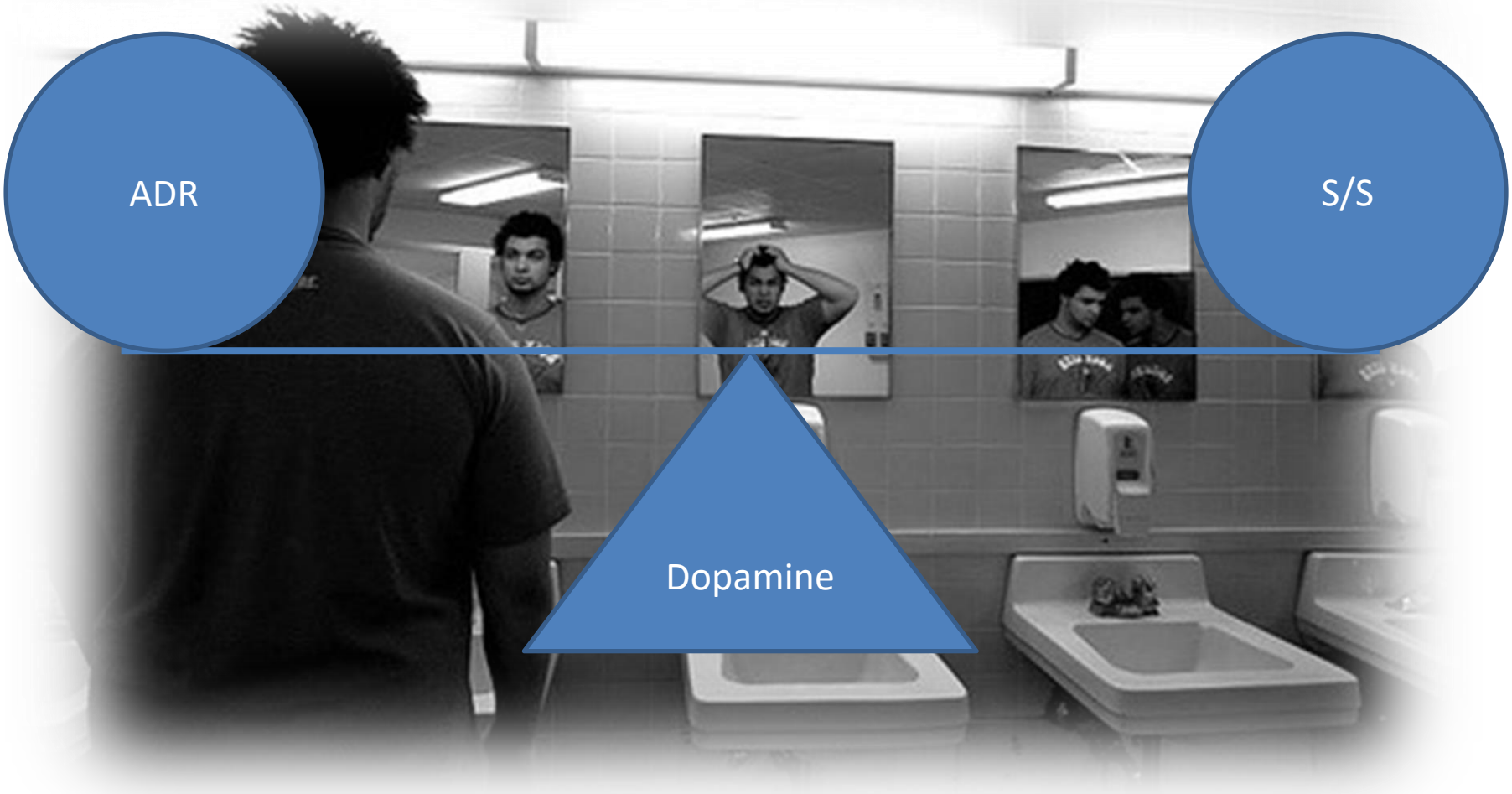
nigrostriatal



mesolimbic

MEDAVIE HealthEd ÉduSanté

Schizophrenia



Schizophrenia

- It is well known that the risk of schizophrenia is increased if another family member is affected
  - Exact mechanism unknown
- The onset of the disorder is quite variable.
- Classically, the onset is often gradual, with a prodromal phase of varying duration that occurs before the first psychotic episode
- At some point in lifetime up to 50% of patients attempt suicide
- ½ of patients have poor disease insight
- Early mortality occurs twice as often as in the general population

Schizophrenia

- Two (or more) of the following, each present for a significant portion of time during a 1 month period (or less if successfully treated). At least one of these must be 1, 2, or 3:
  1. Delusions
  2. Hallucinations
  3. Disorganized speech (e.g. frequent derailment or incoherence)
  4. Grossly disorganized or catatonic behavior
  5. Negative symptoms (i.e., diminished emotional expression or avolition)

Schizoaffective Disorder

- It is an uninterrupted period of illness in which symptoms of schizophrenia and mood disorder occur concurrently; during lifetime duration of illness, ≥2 weeks of delusions or hallucinations in absence of major mood episode; major mood episode is present > 50% of total duration of illness
- Often major depressive episode with concurrent mood-congruent (most common) or mood-incongruent psychotic symptoms (major depression with psychotic features)

Schizophrenia

Negative symptoms	Positive symptoms
Alogia	Hallucinations
Affective flattening	Delusions
Anhedonia	Disorganized Speech
Avolition	Catatonic behaviour
Asociality	Disorganized

Negative symptoms affect 20% of patients

Negative symptoms much more challenging to treat

Management of Schizophrenia

- Antipsychotics
- Benzodiazepines
- Anticholinergics, beta blockers
  - Used to treat symptoms of parkinsonism in patients taking antipsychotics

How Can We Help?

- Along with assessment principles mentioned earlier
  - Determine medication adherence
  - Take medical complaints seriously
    - If patient is having ischemic chest pain treat as any other
  - Determine if ADR from medications could be causing issue

75% discontinue meds in two years

Adverse Drug Reaction

- It is challenging to design drugs to 100% target what we want it to
- For schizophrenia the medications used to treat it target many receptors in the body and can lead to undesired effects

Blocking receptors	
Alpha	Hypotension, sexual dysfunction
Histamine	Sedation, weight gain
Cholinergic	This can cause undesirable side effects such as dry mouth, blurred vision, constipation, and cognitive blunting

Abrupt discontinuation is concerning

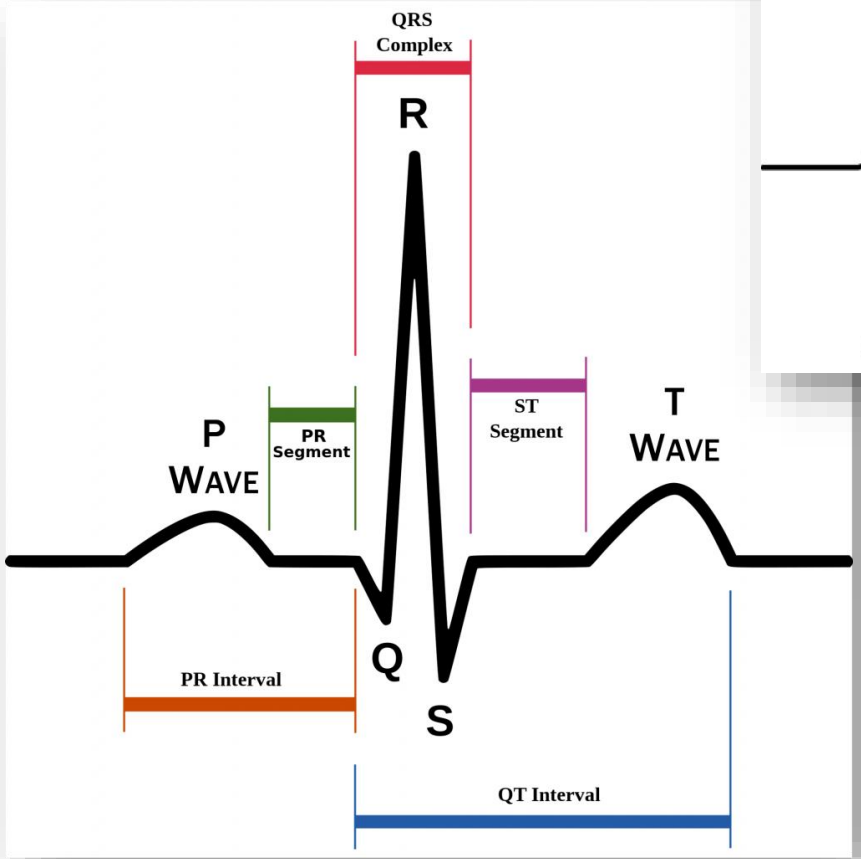
Serious Adverse Drug Reactions

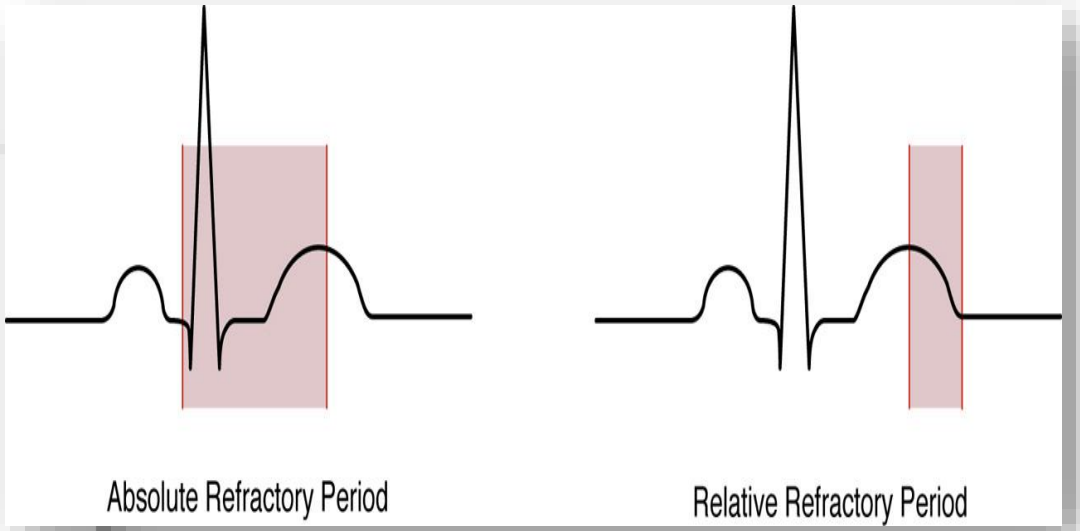
- Antipsychotic treatment
  - Neutropenia
  - Long QT syndrome
  - Neuroleptic malignant syndrome
  - Tardive Dyskinesia
  - Seizures
    - Treat as per normal guidelines
  - Syncope
    - Treat as per normal guidelines

Neutropenia

- Serious
  - ANC < 1.5 x 10/L
  - WBC < 2.0x10/L
  - Ask if they have had drug levels or CBC recently
- Often associated with the drug clozapine
  - Clozapine is often prescribed in refractory schizophrenia
  - Increased effectiveness in negative symptoms
- Determine if febrile or other signs of infection
- Requires assessment in emergency!

Long QT


QRS Complex
R
P Wave
PR Segment
ST Segment
T Wave
Q
S
PR Interval
QT Interval

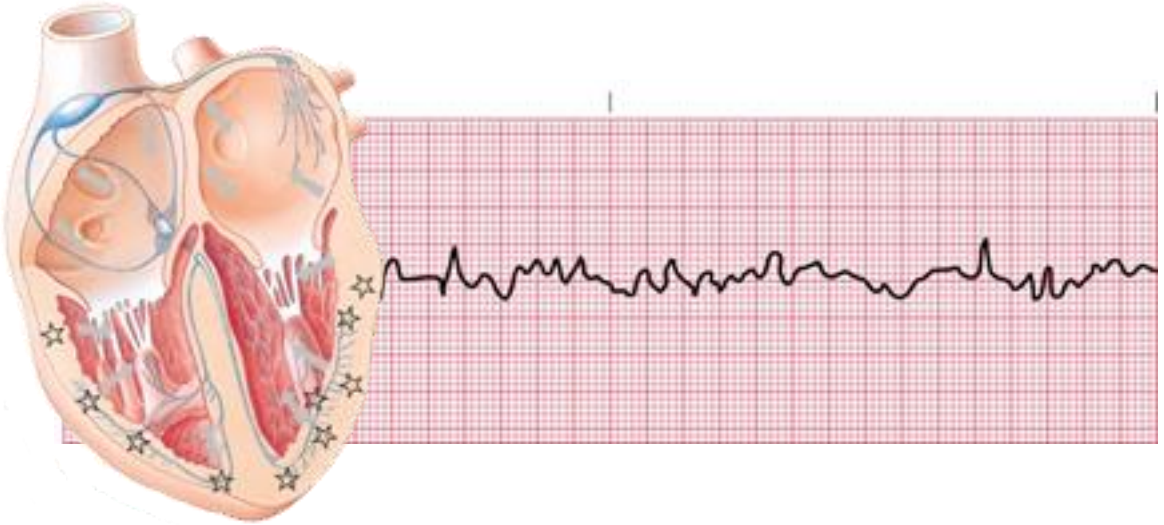

Absolute Refractory Period
Relative Refractory Period

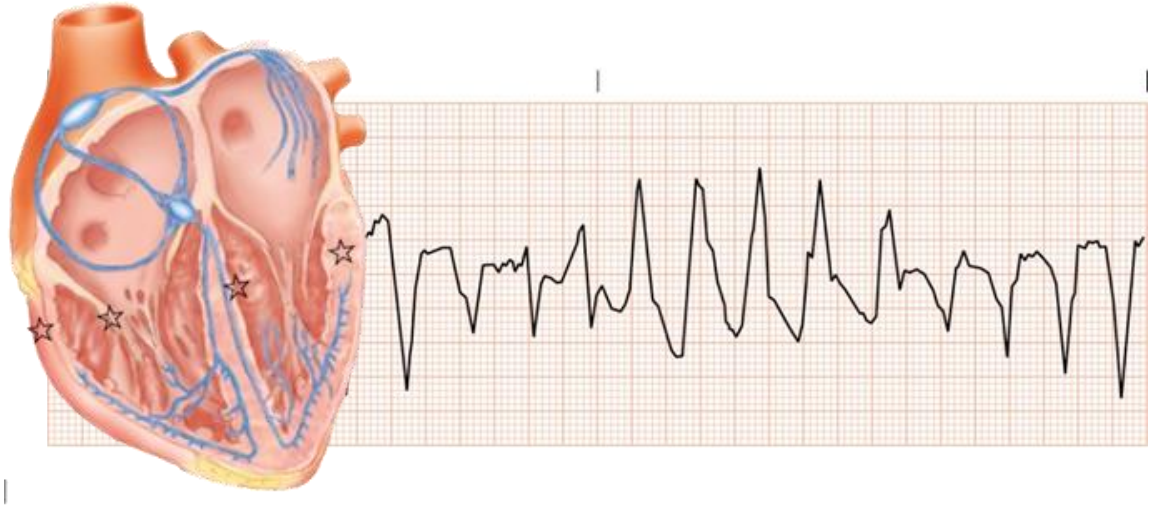
Long QT

- Drug should not increase the QTc by more than 30 ms
- Drug induced increase of more than 60 ms may result in torsades des pointes and sudden cardiac death
- defined as ≥470 ms in males and ≥480 ms in females
  - A scientific statement from the American Heart Association and the American College of Cardiology Foundation
- For both males and females, a QTc >500 ms is considered highly abnormal

The Dangers

- S/S
  - Near syncope
  - Syncope
  - TdP
    - SCD





Neuroleptic Malignant Syndrome (NMS)

- NOT AS A RESULT OF OVERDOSE
- Idiosyncratic hypodopaminergic event
- Most common at start of neuroleptic therapy or dosage adjustment, serum concentration of drug is in normal range when this occurs
- Characterized by the tetrad of fever, muscular rigidity (These two are major criteria), autonomic dysfunction, and altered mental status (including lethargy, agitation, mutism, or coma)
- Majority of cases occur within a month of starting a dopamine antagonist

NMS

- Life threatening emergency
  - Most deaths are a result of muscular rigidity
- Supportive care
  - Reduce temperature
    - Acetaminophen not effective
    - Dantrolene is used in hospital
  - Sedation may be needed
    - To reduce sympathetic activity and agitation, cause muscle relaxation
    - Benzodiazepines/dantrolene

Tardive Dyskinesia

- Involuntary movement disorder from use of dopamine blocking drugs
  - Not just antipsychotics
    - Long term use of metoclopramide
- More common in first generation antipsychotics than second generation (debatable)
  - More potent the dopamine antagonist the greater the risk
  - Larger dose, female and elderly at greater risk
- Be aware of abnormal movements
  - Tremor, chorea, athetosis, dystonia
- If possible stop offending agent or switch to less dopaminergic agent
  - If patients symptoms well managed on medication or was previously refractory, risk vs benefit becomes challenging
- Can be irreversible

Overall Schizophrenia Management

- Supportive and non-judgemental
- Decrease stimulation
- Allow patient to verbally vent feelings
- Pride yourself on effective communication with this patient population
  - Establish ”contract” with patient
    - How to approach situation as a team
      - » With well defined boundaries
- Do not reinforce hallucinations/delusions
  - Understand that patient considers them real
- Speak openly and honestly
- Be alert for aggressive behaviour
  - Safety is important

Psychiatric and Behavioral Disorders

EATING DISORDERS

Anorexia and Bulimia Nervosa

- More prevalent in industrialized nations
  - No shortage of food
  - Perception of physique is thin and muscular
- Appetite and craving for food often maintained
- Self-esteem in patients with anorexia nervosa is dependent on perceived ideal shape and weight
- Encourage self-monitoring of intake with the use of food diaries

Anorexia Nervosa

- DSM-V criteria
  1. Refusal to maintain body at or above normal weights
  2. Fear of becoming overweight, even if quite underweight
  3. Unable to perceive own weight and physique, i.e. self examination as overweight
  4. In females
     - The absence of at least three consecutive menstrual cycles

Starvation

- Be mindful for signs of overt starvation
  - Emaciation
  - Significant hypotension, often orthostatic
  - Bradycardia
  - Hypothermia
  - Skin dryness and flakiness
  - Lanugo, or the presence of downy body hair on trunks or extremities
  - Dental enamel erosion
  - Amenorrhea
- Weight gain is seen as failure and loss as success
- Are often unaware or deny serious medical concerns of condition

Anorexia Nervosa

- Treatment
  - Rarely seek treatment on their own
  - Advocate and provide them with information of treatment in your community
  - Untreated anorexia has a mortality of 5 per 1000, the ***highest*** among psychiatric conditions
- Multi-modal approach
  - Evidence to support best practice is lacking
- Cognitive behavioral therapy utilized
  - No medications established to assist in eating or gaining weight
- Refer to dietician to establish goals and best ways to achieve them

Bulimia Nervosa

- DSM-V criteria:
  - Recurrent episodes of binge eating.
  - Recurrent inappropriate compensatory behavior in order to prevent weight gain such as
    - Self-induced vomiting
    - Misuse of laxatives
    - Diuretics, enemas
    - Or other medications
    - Fasting
    - Excessive exercise.
  - Both behaviors both occur, on average, at least twice a week for 3 months.
  - Self-evaluation is unduly influenced by body shape and weight.
  - The disturbance does not occur exclusively during episodes of anorexia nervosa

Bulimia Nervosa

- Chipmunk appearance
  - Hypertrophy of the salivary glands
- Russell's sign
  - Abrasions, calluses or scars on the back of the hand used to manually induce vomiting

Complications of BN

- Vomiting leads to a loss of gastric hydrochloric acid, and through renal compensatory mechanisms results in hypokalemia
- Esophageal tears and hemorrhage
- Dehydration
- Hypomagnesemia is a common finding in the purging type of bulimia
  - Risk for TdP
- Associated laxative abuse may result in severe diarrhea, resulting in metabolic acidosis
  - Muscle fatigue and general malaise
  - EKG changes (QT prolongation)

Bulimia Nervosa

- Antidepressants have demonstrated benefit even without concomitant depression
- Group psychotherapy
- Patients who demonstrate major electrolyte disturbance, who have depression with suicidal ideation, or who have not responded to outpatient management should be referred to inpatient treatment programs

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

PERSONALITY DISORDERS

Personality Disorders

- Cluster A
  - Paranoid personality disorder
  - Schizoid personality disorder
  - Schizotypal personality disorder
- Cluster B
  - Antisocial personality disorder
  - Borderline personality disorder
  - Histrionic personality disorder
  - Narcissistic personality disorder

Personality Disorders

- Cluster C
  - Avoidant personality disorder
  - Dependent personality disorder
  - Obsessive–compulsive disorder

- Assessment
  - MMPI-2
    - The MMPI-2 is an empirically based test of personality assessment
  - NEO-PI or five-factor model of personality

Antisocial Disorder

- The cause of disorder is not fully understood
- Diagnosis only made in those over 18 y/o
- Lack of conformity to social norms and laws
- Utilizes lies and/or other deceitfulness for personal gain
- Impulsiveness and irresponsibility
- Little remorse for behavior
- Antisocial personality disorder can overlap with other personality disorder traits
  - Commonly narcissistic, histrionic or borderline personality disorder

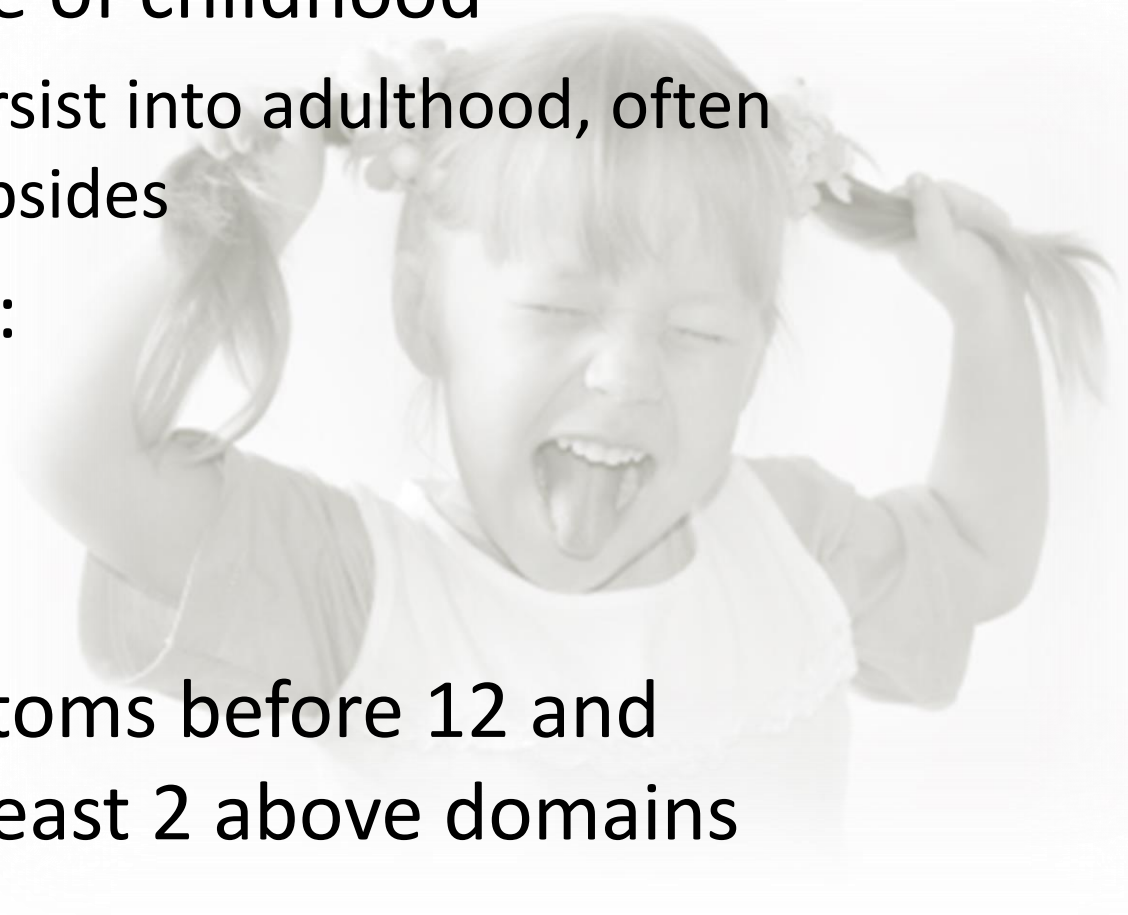
MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

ATTENTION DEFICIT HYPERACTIVITY DISORDER

ADHD

- Not just a disease of childhood
  - 50% of cases persist into adulthood, often hyperactivity subsides
- Characterized by:
  - Inattention
  - Hyperactivity
  - Impulsivity
- Must have symptoms before 12 and symptoms in at least 2 above domains



ADHD treatment

- Stimulants
  - Methylphenidate (Ritalin, Concerta, Biphentin)
  - Amphetamines (Dexedrine, Adderall XR, Vyvanse)
- Non-stimulants
  - Atomoxetine (ATX)
    - Antidepressant

Psychiatric and Behavioral Disorders

AUTISTIC DISORDER

Autism

- Underlying pathology still a mystery
- Marked and sustained impairment in social interaction
  - Associated with delayed and abnormal communication patterns with restricted, stereotyped patterns of interest and behavior.
- 1 in 5 able to function independently into adulthood
- Condition has a wide spectrum of severity, presentations and level of functioning

Autism

- Approach
  - Always speak to parents
    - Ask about specific do's and don'ts
- Minimal stimulation
  - Maybe just a sole medic
  - If possible allow period of adjustment before assessing patient

Psychiatric and Behavioral Disorders

SOMATOFORM DISORDERS

Somatoform Disorders

- Physical symptoms without apparent cause
  - Somatization disorder
    - A history of several physical complaints
    - Begins prior to age 30 years that occur over a period of several years
    - Significant impairment in social, occupational, or other important areas of functioning
  - Conversion disorder
    - Imitate motor and sensory symptoms
      - Pseudoseizure, blindness, deafness

Somatoform Disorders

- Hypochondriasis
  - Preoccupation with fears of having, or the idea that one has, a serious disease based on the person's misinterpretation of bodily symptoms
- Body dysmorphic disorder
  - Preoccupation with an imagined defect in appearance
- Pain disorder

Psychiatric and Behavioral Disorders

FACTITIOUS DISORDERS

Factitious Disorders

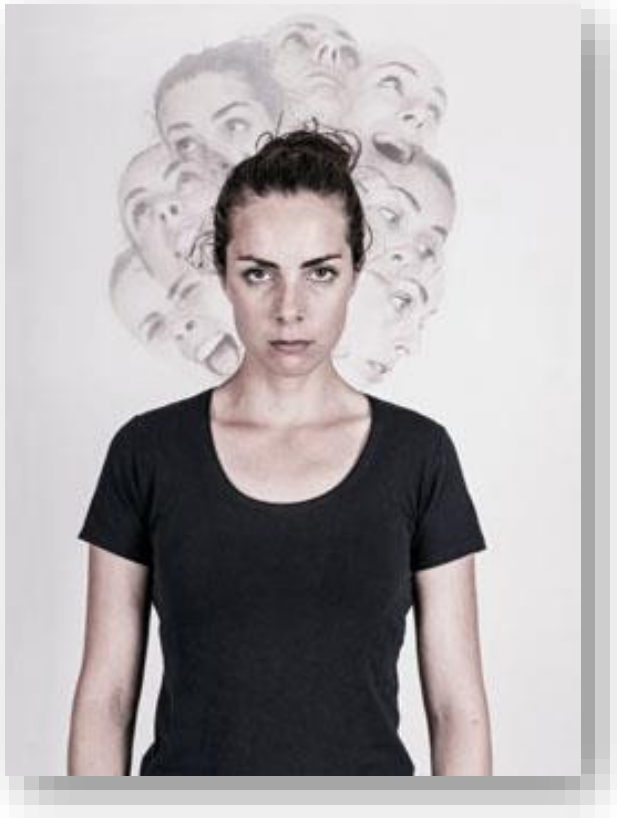
- Three criteria
  - Intentional production of physical or psychological signs or symptoms
  - Motivation for the behavior is to assume the “sick” role
  - External incentives for the behavior
- In severe cases, patients will undergo multiple surgeries
- By proxy
  - Induces the fake disease onto another person for treatment i.e. children
    - Considered abuse
- Malingering
  - Cells calls

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

DISSOCIATIVE DISORDERS

Dissociative Disorders



- Psychogenic amnesia
  - Failure to recall
  - Hidden beneath level of consciousness
- Types
  - Dissociative amnesia
  - Dissociative fugue
  - Dissociative identity disorder
  - Depersonalization disorder
  - Dissociative disorder not otherwise specified
- Fugue state
  - The predominant disturbance is sudden, unexpected travel away from home or one's customary place of work, with inability to recall one's past

Dissociative Disorders

- Dissociative identity disorder
  - Reacts to stress by manifesting two or more complete systems of personality
  - Very rare
- Depersonalization
  - Predominantly in young adults
  - Loss of sense of self
    - "Out of body experience"
  - Precipitated by acute stress

Psychiatric and Behavioral Disorders

IMPULSE CONTROL DISORDERS

Impulse Control Disorders

- Kleptomania
- Pyromania
- Pathological gambling
- Trichotillomania
- Intermittent explosive disorder

Psychiatric and Behavioral Disorders

SUICIDE

Suicide

- Alarmingly common
  - Third leading cause of death in 15 - 24 y/o
  - Rates have risen dramatically
- Women attempt suicide more often
- Men are more likely to succeed
- Up to 80% of patients who commit suicide have seen a health care provider with weeks prior to death

Suicide

- Introspection case study

Suicide

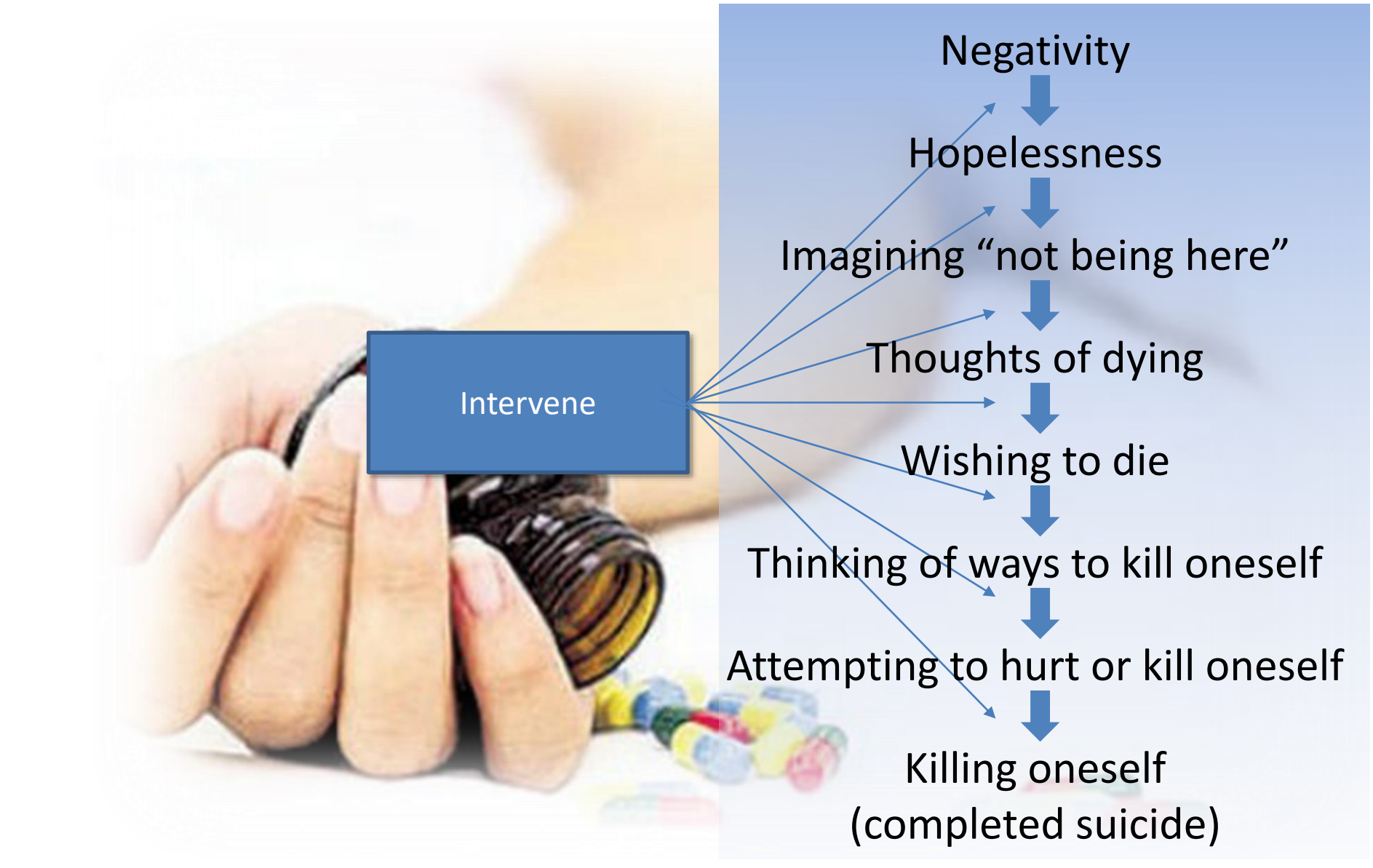
- Despite of all the research and assessment of suicide there is no screening tool or assessment tool that can accurately predict if a patient will successfully commit suicide
  - Do NOT take any chances
  - ALWAYS err on the side of caution

Suicide

- Risk factors
  - Age (adolescence)
  - **History or prior attempt**
  - Presence of a plan
  - Lack of social support
  - Relationship status/recent separation
    - Recently separated/divorced/widowed
  - Comorbid mental health issues

MEDAVIE HealthEd ÉduSanté

Spectrum of Suicidality



MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

AGITATED AND VIOLENT PATIENTS

Agitated Patients

- Most patients will respond and consent to your care
- No EMS personnel should do anything that is unsafe
- Threat determination
  - To self
  - To patient

Assessment

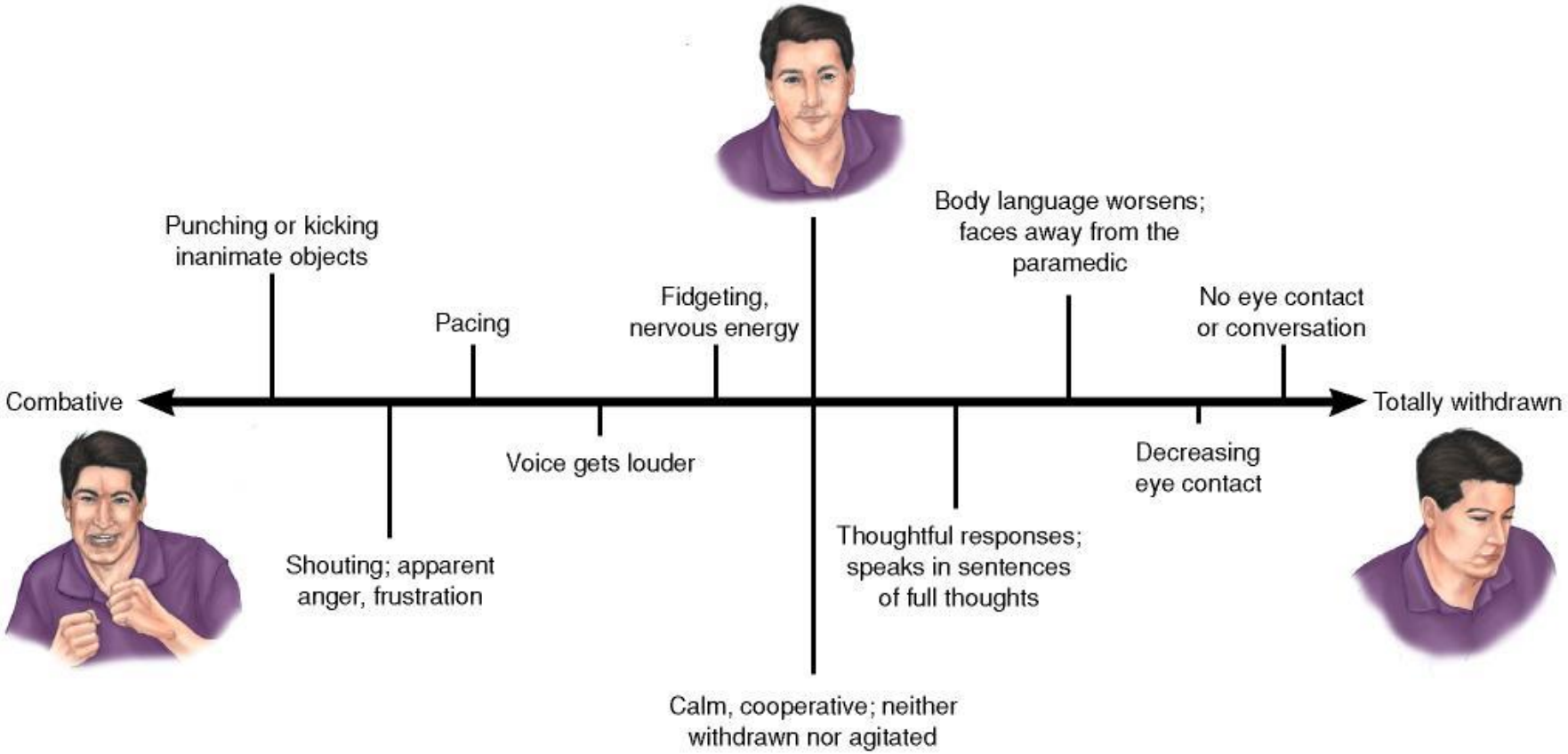

Safety
Identify dangerous behaviour
Medical assessment
Psychiatric assessment

Medical causes

- What could be some potential medical causes of agitation and violence?
- Mental health issues along with substance abuse is a bad combination

MEDAVIE HealthEd ÉduSanté

Continuum of Pt Response



MEDAVIE HealthEd ÉduSanté

S.A.F.E.S.T.

S

Spacing

- Maintain a safe distance, allow patient and yourself access to egress

A

Appearance

- Be empathetic.
- Have a sole individual build rapport

F

Focus

- Watch patients hands.
- Be alert for escalating agitation

E

Exchange

- Active listening.
- Do not sound punitive or judgmental
- Calm, continuous exchange.

S

Stabilization

- Physical and chemical restraint if needed

T

Treatment

- Only after all previous criteria satisfied

De-escalation

- It is important that you make patient aware of your medical expertise, that you are familiar with their condition
- It is important that you make patient aware you are looking out for their well-being and want everything to end safely, and so do the police (if present)
- You want to get them the help they need

MEDAVIE HealthEd ÉduSanté

Collaborating With Police

- You may ask police to search a patient prior to transporting
- You may ask police to accompany you to the hospital if uncomfortable with a patient
- You must present medical capacity and concerns to police and ultimately they determine if patient is to be placed involuntarily under arrest
  - If disagreement contact OLMC
- If patient is restrained they have given up their rights
  - They should be in police custody but often transported in stretcher
  - Police must accompany in this event

Restraint

- If appropriate resources available to restrain patient (police, ALS) make patient aware of consequences of non-compliance
  - Be empathetic
  - If possible give patient opportunity to comply
- If restraint necessary inform patient (as well as family) as to what is going to occur, the duration, and the effects
- Let patient know that you do not want to harm them and will monitor them frequently

Considerations in Restraint

- Prevent patient from harming himself
- Use the minimum force needed
- Use appropriate devices to perform restraint
- Restraint is not punitive
- Patients who have been restrained require careful monitoring
- Remove as soon as possible
  - Usually after adequate chemical restraint achieved

Physical Restraints

- Should be lead by the most skilled
  - Controls the head
  - Explains need and what is occurring
- Recommended minimum 5 people
  - Institution guidelines
  - Each team member subdues a major joint
- Should be applied systematically
  - Guideline just like cardiac arrest
  - Each agency should have a policy in place
- Avoid prone or hobble position

Hobble Position

Monitoring

- Change position if possible regularly to prevent
  - Neurovascular sequelae such as circulatory obstruction
  - Pressure sores, and paresthesias
  - Avoid rhabdomyolysis associated with continued combativeness
- Document all steps of the restraint process
- Observations about the scene that may be valuable to mental health professionals
- Any notes, plans or statements made by the patient

MEDAVIE HealthEd ÉduSanté

Psychiatric and Behavioral Disorders

INVOLUNTARY ASSESSMENT, TREATMENT & TRANSPORT

Involuntary Treatment

- Every province has legislation and regulation regarding involuntary treatment
  - NS
    - Involuntary Psychiatric Treatment Act
  - NB
    - Mental Health Act
  - PEI
    - Mental Health Act

Example

- "The Involuntary Psychiatric Treatment Act is appropriate when someone with a mental disorder:
  - Is a danger to him/herself or others, or is likely to deteriorate to the point that they are a danger, and
  - Needs inpatient care, and
  - Lacks capacity to make decisions about their care"
- A medical examination must take place within 24 hours.
  - After which, a patient must either be held for an involuntary psychiatric assessment or be told that you can leave the hospital should you wish to do so
- Involuntary Psychiatric Assessment is a 72 hour period

Acute Agitation

- Those at imminent risk of harm to self or others will require hospitalization, if necessary on an involuntary basis.
- Criteria for involuntary psychiatric assessment and/or admission are determined by each province's mental health legislation