

# **Psychotic Disorders**

### By Dr. M. Al Jaffer

### **Objectives:**

- Understanding of the meaning of psychosis.
- Identify the possible causes/theories explaining psychotic symptoms.
- Knowing the important feature of Schizophrenia and other psychotic disorder.
- Knowing the general principle of treating Schizophrenia and other psychotic disorder.
- Knowing the most important antipsychotic medications including indications and common side effects.

Here is a summary file from the Dr

### Color index:

- Important
- 🔶 Golden
- Textbook

Old notes (439/438)
 New notes (441)
 Extra



### **Case Scenario**

#### Complaint:

• Nasser is a 28 year-old single male who was brought to the emergency room by his family. They noticed gradual changes in his behavior 9 months ago when he started eating only canned food but not cooked food made by his family. He started to become agitated and they have noticed that He talks to himself and stares occasionally on the roof of his room. He is afraid of being poisoned.

Past hospitalizations:

• He had two brief psychiatric hospitalizations in the last 3 years . Precipitated by anger at his neighbor and voices commenting about his behavior.

#### Childhood:

• Nasser was a healthy child, but he was a bedwetter. He was slower to develop than his siblings.

#### **Questions:**

- What are the possible etiological reasons?
- What are the differential diagnoses?
- What are the main signs and symptoms?

### Psychosis

- Psychosis is a term used to describe a distorted perception of reality.
- Poor reality testing may be accompanied by delusions, perceptual disturbances (illusions or hallucinations), and/or disorganized thinking/behaviour.
- It can be a symptom of schizophrenia, mania, depression, delirium, and major neurocognitive disorder (i.e., dementia), and it can be substance or medication-induced.
- Psychosis  $\rightarrow$  impaired reality testing (ما اقدر افرق بين الحقيقة والخيال) (when a normal person hallucinates, they know it is not true<sup>1</sup>, while a psychotic patient will think it is true).
- Psychosis is symptom not an illness (includes hallucinations, and paranoia).
- Never make the diagnosis of a psychiatric illness before ruling out secondary causes e.g. hallucinations due to hypoglycemia.
- Myxedema madness  $\rightarrow$  severe hypothyroidism, an important feature is psychosis.

#### Illusion vs hallucination

- Illusion → misinterpretation of an external stimulus
- Hallucination<sup>2</sup> → perception in the absence of an external stimulus
- Delusion → fixed, false belief contrary to evidence
- 1. This is called **pseudohallucination**  $\rightarrow$  hallucination that is recognized by the person experiencing it as being unreal.
- 2. Almost everyone experiences hallucinations from time to time (for example you might think someone is calling you but they are not), the difference is, that in psychosis the patient thinks that the hallucination is real, while a normal person would realize that it is not real and that he was imagining it.

- Schizophrenia is a psychiatric disorder characterized by a constellation of abnormalities in thinking, emotion, and behavior.
- There is no single symptom that is pathognomonic, and there is a heterogeneous clinical presentation.
- Schizophrenia is typically chronic, with significant psychosocial and medical consequences to the patient.
- Patient history & MSE are essential for diagnosis.
- Premorbid history includes schizoid or schizotypal personalities, few friends & exclusion of social activities.

### Features of Schizophrenia

Features don't necessarily diagnose SCZ

Schizophrenia Split-Brain, انفصال عقلي

- Positive & Negative symptoms.
- Disorganization. (speach, thoughts, behaviors)
- Cognitive deficits. (not in the criteria, but it's an imp feature) Why? because it's what makes us human
- Mood symptoms.(not in the criteria, but it's an imp feature) 15% of patients get depressed after episodes, Why? because they remember what they did and feel guilty.
- Impairment of function (if there is no impairment of function then it is not a psychiatric illness). Even if they have all symptoms!

| Positive Symptoms   | Negative Symptoms   | Cognitive Symptoms  |
|---|---|---|
| <ul> <li>Hallucinations.</li> <li>Delusions.</li> <li>Bizarre behavior.</li> <li>Disorganized speech (e.g. circumstantiality<sup>1</sup>).</li> </ul> | <ul> <li>Flat or blunted affect</li> <li>Anhedonia (No interest in life)</li> <li>Apathy</li> <li>Alogia (poverty of speech)</li> <li>Lack of interest in socialization</li> <li>Hypo-activity</li> </ul> | <ul> <li>Impairment in attention</li> <li>Impairment in executive function</li> <li>Impairment in working memory</li> <li>(these symptoms lead to poor work and school performance).</li> </ul> |
| (these symptoms tend to respond more robustly to antipsychotics).   | (these symptoms are more often<br>treatment resistant & contribute<br>significantly to the social isolation &<br>impaired function of patients).  |   |

### **Phases of Presentation**

| <ul> <li>Obsessive compulsive behaviors &amp; attenuated positive psychotic features</li> <li>Decline in functioning that precedes the first psychotic episode.</li> <li>Patient may become socially withdrawn and irritable.</li> <li>He/she may have physical complaints, declining school/work performance, and/or newfound interest in religion or the occult.</li> </ul> | <ul> <li>Perceptual disturbances.</li> <li>Delusions.</li> <li>Disordered thought.<br/>process/content.</li> </ul> | <ul> <li>Occurs following an episodes of active psychosis.</li> <li>Marked by mild hallucinations or delusions, social withdrawal, and negative symptoms.</li> </ul> |
|---|--|--|

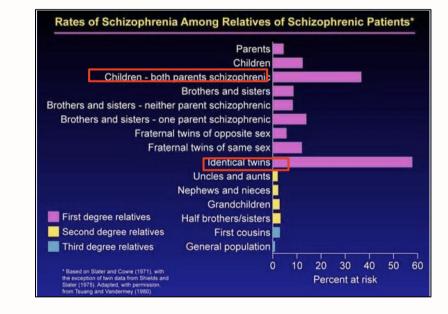
1. A problem with thought process where the point of the conversation is eventually reached but with overinclusion of irrelevant and trivial details.

### Diagnosis of Schizophrenia (DSM-5 criteria)

- A. <u>Two</u> or more of the following must be 1. Delusions. Can't prove it but he's too sure and committed present for at least **<u>1 month</u>**: (Active Phase: 2. Hallucinations. (abnormal perception  $\rightarrow$  doesn't know its not real), loses touch with reality (psychosis) continuous) 3. Disorganized speech (frequent derailment or **incoherence).** from stuttering till  $\rightarrow$  complete dissociation (word salad) Forget about schizophrenia for a second, you have to know criteria A, it is very important because it matters the 4. Grossly disorganized or catatonic behaviour. simply from most in differentiating between psychotic disorders agitation to very weird behaviors 5. Negative symptoms (diminished emotional expression or lack of drive 'avolition'). 6. (note  $\rightarrow$  at least one must be 1, 2, or 3). B. Must cause significant social, occupational, or functional (self-care) dysfunction. C. Duration of illness for at least 6 months (including prodromal or residual periods in which the above full criteria may not be met). D. Exclusion of schizoaffective & mood disorders. The disturbance is not due to substance or another medical condition. E.
- F. If there is a history of autism spectrum disorder or a communication disorder of childhood onset, schizophrenia diagnosis is made only if delusions or hallucinations plus other criteria are present.

### Epidemiology

- It is not a single disease.
- Prevalence 0.6-1.9%.
- Annual incidence of 0.5-5 per 10000.
- Men and women are equally affected but have different presentations and outcomes:
  - Women present in 25-35 years of age (late 20s).
  - Men present in 10-25 years of age (early to mid-20s). Very rare in 10-15 yrs old
  - Men tend to have more negative symptoms and poorer outcome compared to women.
- 1 in 10 kill themselves.
- Onset in adolescents.
- Strong genetic predisposition:
  - 50% concordance rate among monozygotic (identical) twins.
  - 40% risk of inheritance if both parents have schizophrenia.
  - 12% risk if one first-degree relative is affected.



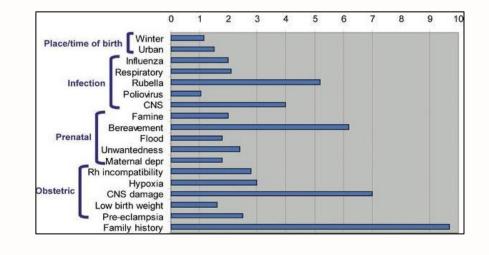
### Causes of Schizophrenia

- Etiology is **unknown**.
- Theories:
  - <u>Stress-diathesis model:</u>
    - Not a strong theory regarding treatment, But stronger in prognosis.
    - Symptoms : vulnerability (people are vulnerable to the disease, just need a trigger). due to many factors e.g. genetic and social.
    - Biological and psychosocial and environmental.
  - Genetic factors:
    - Family studies, twin studies, chromosome.
    - Genetic factors have no role in treatment.
    - Role is only in counseling and prevention and early detection.
    - Identical twins have the most common genetic risk followed by a child with both parents with schizophrenia.
  - Neurobiology (dopamine hypothesis):
    - Strongest theory, it is a neurotransmitter problem.
    - Schizophrenia appears to be partly related to increased dopamine activity in certain neuronal tracts.
    - Evidence to support this hypothesis is that most antipsychotics successful in treating schizophrenia are dopamine antagonists.
    - Treatment depends on this theory.
    - Cocaine and amphetamine increase dopamine activity and can cause schizophrenia-like symptoms.
    - Areas of the brain.
    - Theorized dopamine pathways affected in schizophrenia:
      - <u>Prefrontal cortex</u>  $\rightarrow$  inadequate dopaminergic activity; responsible for negative symptoms.
      - <u>Mesolimbic</u>  $\rightarrow$  excessive dopaminergic activity; responsible for positive symptoms.
    - Important dopamine pathways affected by antipsychotics:
      - <u>Tuberoinfundibular</u> → blocked by antipsychotics, causing hyperprolactinemia, which may lead to gynecomastia, galactorrhea, sexual dysfunction, and menstrual irregularities.
      - <u>Nigrostriatal</u> → blocked by antipsychotics, causing parkinsonism/extrapyramidal side effects such as tremor, rigidity, slurred speech, akathisia<sup>1</sup>, dystonia<sup>2</sup>, and other abnormal movements.

#### • <u>Neuropathology</u>:

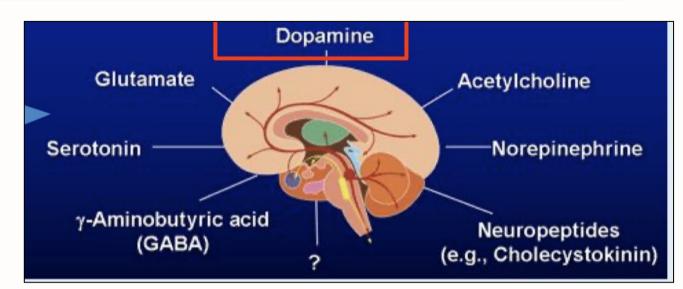
- Not strong, it is changes in brain structure.
- Structures or connections.
- Limbic system.
- Basal ganglia.
- Cerebellum.

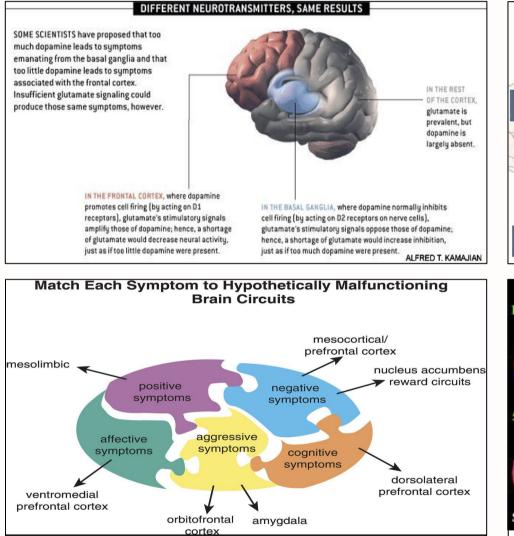
1. Feeling of restlessness.



2. A movement disorder in which your muscles contract involuntarily, causing repetitive or twisting movements.

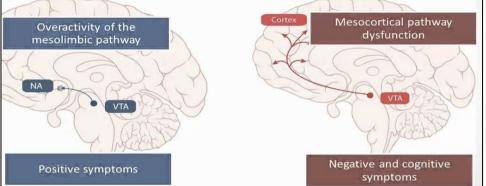
### Neurotransmitter Systems Implicated in Schizophrenia

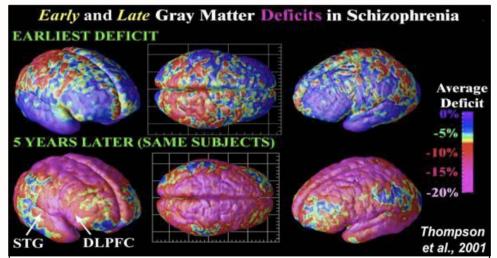




- Positive symptoms  $\rightarrow$  mesolimbic pathway.
- Negative symptoms → mesocortical pathway/prefrontal cortex.
- Affective symptoms → ventromedial prefrontal cortex.
- Aggressive symptoms → orbitofrontal cortex + amygdala.
- Cognitive symptoms → dorsolateral prefrontal cortex.

#### Dopamine Pathways Relevant to Schizophrenia Symptoms





- Pink regions indicate deficit areas of the brain.
- As we can see with time the deficit in a schizophrenic patient's brain keep increasing (irreversible) so early treatment is key in preventing this.
- The deficit progresses for 5 years then plateaus (can't get worse or better), that's why early treatment is better, because once the cognitive function is lost, it is irreversible.
- Early treatment is VERY important



### Multiple Mechanisms for Cognitive Dysfunction in Schizophrenia

- Dopamine.
- 5-HT.
- Acetylcholine.
- Neurodegenerative.
- Abnormal connectivity.

### Cognitive Deficits Predict Functional Outcomes

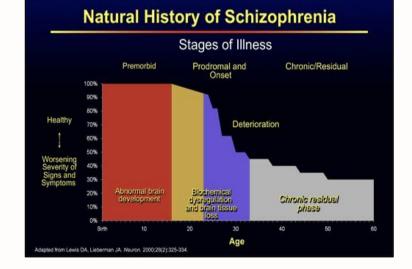
- Learning and memory  $\rightarrow$  school and occupational.
- Executive function  $\rightarrow$  social function.
- Attention  $\rightarrow$  activities of daily living.

### Mental State Examination in Schizophrenia

- Appearance and behavior (disheveled appearance).
- Mood, feelings and affect (flat affect).
- Perceptual disturbances (auditory hallucinations, paranoid delusions, ideas of reference).
- Thought process (disorganized thought process).
- Thought content.
- Cognitive function (intact procedural memory and orientation).
- Insight and judgement (poor, lack of insight into their disease).

### Course of the Disease

- Acute exacerbations with increased residual impairment.
- Full recovery is very rare.
- Longitudinal course  $\rightarrow$  downhill.







### Prognosis

- Even with meds, 40-60% of patients remain significantly impaired after their diagnosis.
- While only 20-30% function fairly well in society.
- About 20% of patients with schizophrenia attempt suicide and many more experience suicidal ideation.

| <b>Good Prognostic Factors</b>   | Poor Prognostic Factors   |
|--|---|
| <ul> <li>Late age of onset.</li> <li>Acute onset.</li> <li>Obvious precipitating factors.</li> <li>Presence of mood component.</li> <li>Good response to treatment.</li> <li>Good supportive system (social support).</li> <li>Positive symptoms.</li> <li>Female gender.</li> <li>Few relapses.</li> <li>Good premorbid functioning.</li> </ul> | <ul> <li>Young age of onset.</li> <li>Insidious onset.</li> <li>Lack of precipitating factors.</li> <li>Multiple relapses.</li> <li>Low IQ.</li> <li>Poor premorbid personality.</li> <li>Negative symptoms.</li> <li>Positive family history (for psychosis or SCZ).</li> <li>Poor social support.</li> <li>Male gender.</li> <li>Many relapses.</li> <li>Comorbid substance use.</li> </ul> |

### Differential Diagnosis of Psychosis

#### • Primary psychiatric disorders:

- Schizophreniform disorder.
- Brief psychotic disorder.
- Delusional disorder.
- Schizoaffective disorder.
- Mood disorders (bipolar presenting with manic episode, or major depression with psychotic features).
- Delirium/major neurocognitive disorder (dementia).
- Personality disorders (schizoid, schizotypal & borderline personality).
- Factitious disorder.
- Malingering.
- Secondary psychiatric disorders:
  - $\circ$  Substance-induced disorders.
  - Psychotic disorders due to another medical disorder:
    - Epilepsy (complex partial).
    - CNS diseases.
    - Trauma.
    - Others.

# 

### Treatment

- Pharmacologic treatment consists primarily of antipsychotic medications (given for life in schizophrenia).
- Behavioral therapy attempts to improve patients' ability to function in society.
- Depot<sup>5</sup> forms of antipsychotics (e.g. risperidone consta) is indicated for poorly compliant patients.
- Electroconvulsive therapy (ECT) for catatonic or poorly responding patients to medications.
- Insight oriented psychotherapy.
- **Psychosocial therapies** (social skills training, family oriented therapies, group therapy, individual psychotherapy, assertive community treatment, vocational therapy).
- Pharmacotherapy mainly <u>antipsychotics</u> includes:

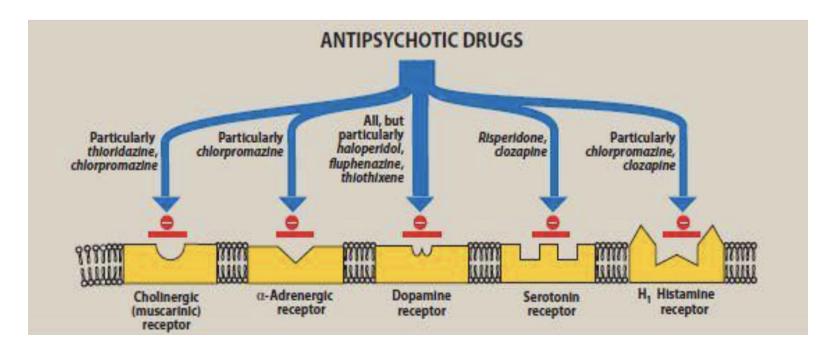
| Gen.     | First-gen (Typical) Antipsychotics  | Second-gen (Atypical) Antipsychotics  |
|----------|---|---|
| Examples | <ul> <li>Chlorpromazine<sup>1</sup>.</li> <li>Fluphenazine.</li> <li>Haloperidol<sup>2</sup>.</li> <li>Perphenazine.</li> <li>Thioridazine<sup>3</sup>.</li> </ul>  | <ul> <li>Aripiprazole.</li> <li>Asenapine.</li> <li>Clozapine<sup>4</sup>.</li> <li>Iloperidone.</li> <li>Lurasidone.</li> <li>Olanzapine.</li> <li>Quetiapine.</li> <li>Risperidone.</li> <li>Ziprasidone.</li> </ul>  |
| MOA      | <ul> <li>Primarily dopamine (mostly D2)<br/>antagonists.</li> </ul>   | <ul> <li>Antagonize serotonin receptors (5-HT2) as well as<br/>dopamine (D4&gt;D2) receptors.</li> </ul>  |
| Effect   | • Treat positive symptoms with minimal impact on negative symptoms.   |   |
| ADRs     | <ul> <li>Extrapyramidal symptoms.</li> <li>Neuroleptic malignant syndrome.</li> <li>Tardive dyskinesia.</li> <li>(all of them will be explained later on)</li> </ul>  | <ul> <li>Lower incidence of extrapyramidal symptoms (EPS),<br/>but higher risk of metabolic syndrome.</li> <li>Less side effects, but higher risk of metabolic<br/>syndrome.</li> </ul>   |
| Notes    | Antipsychotics MedicationsConventional AntipsychoticsAtypical AntipsychoticsChlorpromazine<br>Fluphenazine<br>Haloperidol<br>Loxapine<br>Molindone<br>Perphenazine<br>Pimozide<br>Prochlorperazine<br>Thiothixene<br>Thiotidazine<br>TrifluoperazineAripiprazole<br>Clozapine<br>Olanzapine<br> | <ul> <li>Medications should be taken for at least 4 weeks before efficacy is determined.</li> <li>Clozapine is reserved for pts who have failed multiple antipsychotic trials due to its risk of agranulocytosis.</li> <li>Clozapine is used as a 3rd line due to its serious side effects (agranulocytosis, myocarditis, PE, seizures), so before starting it do CBC, EKG, CXR (no need for EEG).</li> </ul> |

- 1. Causes corneal deposits.
- 2. Worst agent for EPS (because of strong dopamine antagonism)  $\rightarrow$  could cause neuroleptic malignant syndrome (NMS).
- 3. Causes retinal deposits and it is cardiotoxic (torsades de pointes -'quinidine-like').
- 4. The least one in causing EPS, but has a risk for causing agranulocytosis (do weekly WBC counts). Also causes increased salivation 'wet pillow syndrome' due to 5-HT2 receptor blockade.
- 5. Depot injection is a term for an injection formulation that releases slowly over time to permit less frequent administration of a medication.

## Antipsychotics

### Pharmacologic Actions of Antipsychotics

- Antipsychotic effect:
  - Produce emotional quieting and psychomotor slowing.
  - Decrease hallucinations, delusions, and agitation.
  - $\circ$  Mechanism  $\rightarrow$  blockade of dopamine receptors in the mesolimbic system
- Endocrine effects:
  - Galactorrhea, amenorrhea, gynecomastia, & impotence
  - Mechanism → prevent dopamine inhibition of prolactin release from pituitary leading to hyperprolactinemia
- Metabolic changes:
  - Changes in eating behavior (overeating) and weight gain.
  - $\circ$  Mechanism  $\rightarrow$  blockade of dopamine receptors in the medullary-periventricular pathway
- Anti-emetic effects:
  - Mechanism → blockade of dopamine receptors in the chemoreceptor trigger zone (CTZ) of the medulla
- Anti-cholinergic effects:
  - Blurred vision
  - Dry mouth
  - Urinary retention
  - Constipation
  - $\circ$  Mechanism  $\rightarrow$  blockade of muscarinic receptors
- Anti-adrenergic effects:
  - Postural hypotension (with reflex tachycardia)
  - Impotence
  - Failure of ejaculation
  - $\circ \quad \text{Mechanism} \rightarrow \text{blockade of alpha-adrenergic receptors}$
- Anti-histamine effects:
  - Sedation due to H1 receptor blockade



### Side Effects of Antipsychotics

#### First-gen (Typical) Antipsychotics

#### **Extrapyramidal Effects:**

- Dystonia.
- Pseudoparkinsonism.
- Akathisia.
- Tardive dyskinesia.
- Sedation.
- Hyperprolactinemia.
- Reduced seizure threshold.
- Postural hypotension.

#### Anticholinergic Effects:

- Blurred vision.
- Dry mouth.
- Urinary retention.
- Neuroleptic malignant syndrome.
- Weight gain.
- Sexual dysfunction.
- Cardiotoxicity (prolongation of QTc).

#### Second-gen (Atypical) Antipsychotics

#### Olanzapine:

- Weight gain.
- Sedation.
- Glucose intolerance.
- Frank diabetes mellitus.
- hypotension.

#### **Risperidone**:

- Hyperprolactinemia.
- Hypotension.
- EPS at high doses.
- Sexual dysfunction.

#### Amisulpride:

- hyperprolactinemia.
- Insomnia.
- Extrapyramidal effects.

#### Quetiapine:

- Hypotension.
- Dyspepsia.
- Drowsiness.

| Clozapine (Atypical Antipsychotic) <sup>1,2,3</sup>  |   |  |
|--|---|--|
| Sedation   | Glucose Intolerance and Diabetes Mellitus   |  |
| Hypersalivation  | Nocturnal Enuresis  |  |
| Constipation   | Reduced Seizure Threshold (dose-related)  |  |
| Hypo and Hypertension  | Tachycardia   |  |
| Pyrexia  | Weight Gain   |  |
| Rare serious side effects (neutropenia 3%,<br>agranulocytosis 0.8%, thromboembolism,<br>cardiomyopathy, myocarditis, aspiration pneumonia) | <ul> <li>Note → clozapine is the only drug that is called<br/>anti-schizophrenia, it has the highest efficacy but<br/>it is used as a last resort (resistant schizophrenia).</li> </ul> |  |

- 1. Do weekly CBC, after 6 months do CBC every 2 weeks, then after 1 year do CBC every month.
- 2. Clozapine is the only antipsychotic that is in category B (pregnancy drug categories), other antipsychotics are in category C (still clozapine is last-line treatment in pregnant women).
- 3. Clozapine is used in resistant schizophrenia, meaning after failure of 2 trials of different meds (usually 1 typical and 1 atypical) where we start the medication, assess over 6-8 weeks and keep increasing the dose until symptoms are controlled or the maximum dose is reached, if the maximum dose is reached and the symptoms are still not controlled switch to a different medication, if this second medication also fails then it is labeled as resistant schizophrenia and clozapine can be used in this case.

### Extrapyramidal Symptoms (EPS)

- Occur especially with the use of high-potency first-generation antipsychotics.
- They are the following:
  - Dystonia (spasms) of face, neck and tongue.
  - Parkinsonism (resting tremor, rigidity, bradykinesia).
  - Akathisia (feeling of restlessness).
- Treatment:
  - Anticholinergics (benztropine, diphenhydramine).
  - benzodiazepines/beta-blockers (specifically for akathisia).

### Anti-cholinergic Symptoms

• Occur especially with low-potency first-generation antipsychotics and atypical antipsychotics).

- They are the following:
  - Dry mouth.
  - Constipation.
  - Blurred vision.
  - Hyperthermia.
- Treatment:
  - As per symptom (eye drops, stool softeners etc).

### Metabolic Syndrome

- Occur with second generation antipsychotics.
- A constellation of conditions (high BP, high blood sugar levels, excess body fat around the waist, abnormal cholesterol levels), they occur together increasing the risk for cardiovascular disease, stroke and T2DM.
- Treatment:
  - Switch to a first-gen antipsychotic or a more 'weight-neutral' second-gen antipsychotic such as <u>aripiprazole</u> or <u>ziprasidone</u>.
  - Metformin.
  - Monitor lipids and blood glucose levels, refer to primary care, encourage appropriate diet, exercise, and smoking cessation.

### Tardive Dyskinesia

- More likely with first-gen antipsychotics.
- They may occur with atypical antipsychotics but it is less common.
- Tardive means 'late' months to years after drug initiation.
- Choreoathetoid<sup>1</sup> movements, usually seen in the face, tongue and head (painless).
- Treatment:
  - Discontinue or reduce the medication & consider substituting an atypical antipsychotic.
  - VMAT-2 (vesicular monoamine transporter-2) inhibitors (valbenazine, tetrabenazine).

I. Chorea (fast, involuntary, irregular, unpredictable muscles movement) + athetosis (slow, involuntary, and writhing movements)

### Neuroleptic Malignant Syndrome (NMS)

- Uncommon but potentially fatal complication of antipsychotic.
- Typically occurs soon after an antipsychotic is started or dose is increased but may occur late.
- Risk factors:
  - Depot antipsychotics.
  - IM administration.
  - Rapid increase in dose of antipsychotic.
  - High dose of antipsychotic.
  - Dehydration, malnutrition, iron deficiency, underlying brain abnormalities and agitation.
- Diagnostic triad:
  - Fever ≥ 38 °C (100.4 °F), Muscle rigidity, Mental status changes.
- Autonomic instability and hyperthermia are the major causes of morbidity and mortality.
- Common lab abnormalities include:
  - High CPK.
  - Myoglobinuria.
  - High WBC.
  - Metabolic acidosis.
- Ensure other medical causes have been excluded.
- Management:
  - Discontinue antipsychotics, lithium and dopamine blocking antiemetics.
  - $\circ$   $\;$  Supportive care (most commonly in an ICU).
  - First step is to stop antipsychotics and treat hyperthermia aggressively.

| Receptor Blockade & Antipsychotic Side Effects |  |  |
|--|--|--|
| Receptor Type                                  | Side Effects   |  |
| D2 (dopamine)                                  | EPS, prolactin elevation   |  |
| M1 (muscarinic)                                | Cognitive deficits, dry mouth, constipation, increased heart rate, urinary retention, blurred vision |  |
| H1 (histamine)                                 | Sedation, weight gain, dizziness   |  |
| alpha-1  | Orthostatic hypotension  |  |
| 5-HT2A   | anti-EPS (extrapyramidal symptoms)   |  |
| 5-HT2C   | Satiety blockade   |  |



# **Other Psychotic Disorders**

### Brief Psychotic Disorder

- Meets diagnostic criteria A for schizophrenia but duration is less than 4 weeks (1 day to 1 month).
- Diagnosis and DSM-5 criteria:
  - Psychotic symptoms as in schizophrenia; however the symptoms last from 1 day to 1 month.
  - There must be eventual full return to premorbid level of functioning.
  - Symptoms must not be due to the effects of substance or another medical condition.
- Prognosis:
  - High rate of relapses, but almost all completely recover.
- Treatment:
  - Brief hospitalization (usually required for workup, safety, and stabilization).
  - Supportive therapy.
  - Course of antipsychotics (for 1 month) for psychosis and/or benzos for agitation.

### Schizophreniform Disorder

- Meets diagnostic criteria A for schizophrenia but duration is from 1 month to 6 months, it is rare.
- Diagnosis and DSM-5 criteria:
  - Same criteria as schizophrenia but symptoms have lasted b/w 1-6 months (in schizophrenia, symptoms must be present for > 6 months).
- Prognosis:
  - $\circ$  1/3 of patients recover completely.
  - Two thirds progress to schizoaffective disorder or schizophrenia.
- Treatment:
  - Hospitalization (if necessary).
  - 6-month course of antipsychotics and supportive psychotherapy.

### Schizoaffective Disorder

- Has to have all the following three:
  - Psychosis for more than 6 months (which meets the diagnostic criteria for schizophrenia).
  - Has affective mood disorder (bipolar or depression) for at least 20-25% of psychosis duration.
  - Two weeks of pure psychosis (w/o mood symptoms).
- Diagnosis and DSM-5 criteria:
  - Meets criteria for either a major depressive or manic episode during which psychotic symptoms consistent with schizophrenia are also met.
  - Delusions or hallucinations for 2 weeks in the absence of mood disorder symptoms (this criterion is necessary to differentiate schizoaffective from a mood disorder with psychotic features).
  - $\circ$   $\,$  Mood symptoms present for a majority of psychotic illness .
  - Symptoms not due to the effects of a substance or another medical condition.
- Prognosis:
  - Worse with premorbid adjustment, slow onset, early onset, predominance of psychotic symptoms, long course, and family history of schizophrenia.
- Treatment:
  - Hospitalization (if necessary) and supportive psychotherapy.
  - $\circ$  Medical therapy  $\rightarrow$  antipsychotics, mood stabilizers, antidepressants, or ECT.

### Delusional Disorder

- Main component is delusion (+- mild hallucinations that are related to delusion topic).
- Impairment of function is only in the area related to the delusion (in other areas patients are functioning normally).
- Diagnosis and DSM-5 criteria:
  - One or more delusions for at least 1 month.
  - Does not meet criteria for schizophrenia.
  - Functioning in life is not significantly impaired, and behavior not obviously bizarre.
- Prognosis:
  - Better than schizophrenia with treatment.
  - >50% full recovery.
  - >20% symptoms.
  - o <20% no change.</p>
- Treatment:
  - Antipsychotics (recommended despite somewhat limited evidence).
  - Supportive therapy.

| Schizophrenia  | Delusional Disorder   |
|--|---|
| <ul> <li>Bizarre<sup>1</sup> or nonbizarre<sup>2</sup> delusions.</li> <li>Daily functioning significantly impaired.</li> <li>Must have 2 of the following:<br/>Delusions.</li> <li>Hallucinations.</li> <li>Disorganized speech.</li> <li>Disorganized behavior.</li> <li>Negative symptoms.</li> </ul> | <ul> <li>Usually nonbizarre delusions.</li> <li>Daily functioning not significantly impaired.</li> <li>Does not meet the criteria for schizophrenia.</li> </ul> |

### DIP (Drug Induced Psychosis)

Psychosis is **acute,** SCZ is **chronic.** 

- DSM-5:
  - Which one started first (drugs or psychosis).
  - If the patient started drugs then developed psychosis → stop the drug then check in 1 month, if symptoms got better within 1 month then it is DIP (if it doesn't get better within 1 month, then the cause is something else).
- The worst drug for schizophrenia is hash (i.e. cannabis حشيش), because it is associated with an increased risk of developing schizophrenia (not only psychosis) (50 joints of hash have a 6 fold increase in the risk of schizophrenia).

### MIP (Medical Condition Induced Psychosis)

- A medical condition causing psychosis (for example, parkinson's, epilepsy, stroke, thyroid conditions etc).
- MIP has a longer duration unlike medical induced delirium which comes acutely.
- 1. A bizarre delusion is a false belief that is impossible to be true. Example: 'aliens are spying on me through a Wi-Fi connection in my brain.
- 2. A non-bizarre delusion is a false belief that is plausible but is not true. Example: 'the neighbors are spying on me by reading my email'.

### MDD With Psychotic Features

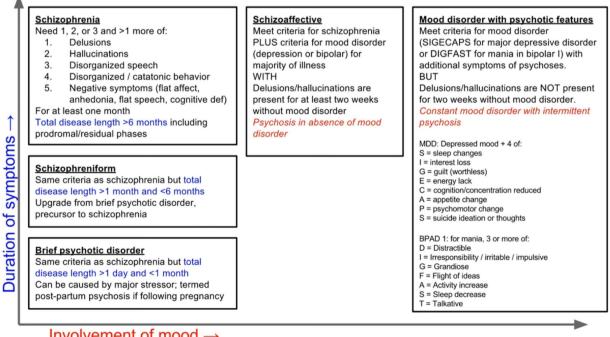
- MDD or bipolar (psychosis is more common with mania rather than depression).
- Which one started first? (mood symptoms or psychosis).
  - If mood symptoms started first then psychosis  $\rightarrow$  mood disorder with psychotic features. Ο
  - If psychosis started first then mood symptoms  $\rightarrow$  then it is one of the previous diagnoses depending on duration (brief psychotic disorder, schizophreniform, schizophrenia, schizoaffective, DIP, MIP etc).

#### Summarv This is a summary file from the Dr

- Prognosis from best to worst:
  - Mood disorder with psychotic features (best).
  - Schizoaffective disorder.
  - Schizophreniform disorder.
  - Schizophrenia (worst).
- Time course:
  - $\circ$  <1 month  $\rightarrow$  brief psychotic disorder.
  - $\circ$  1-6 months  $\rightarrow$  schizophreniform.
  - $\circ$  > 6 months  $\rightarrow$  schizophrenia.
- Note:
  - Do not confuse these psychotic disorders with <u>schizotypal</u> and <u>schizoid</u> personality disorders. (similar names, but these are personality disorders not psychotic disorders).

### Additional

#### **Psychotic disorders**



This is a great picture to help you navigate through psychotic disorders in relation to duration of Sx & Mood involvement

Involvement of mood  $\rightarrow$ 



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