





**SAQs** 

Summar y

#### Drugs used in schizophrenia

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#### Summary

## The Advantages of Atypical:

- Less or no extrapyramidal manifestations.
- They are effective in resistant /refractory cases of schizophrenia.
- Effective on both positive and negative symptoms of schizophrenia.
  - They act by blocking both dopaminergic and serotonergic receptors.

# One of their pharmacological action:

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1- Clozapine

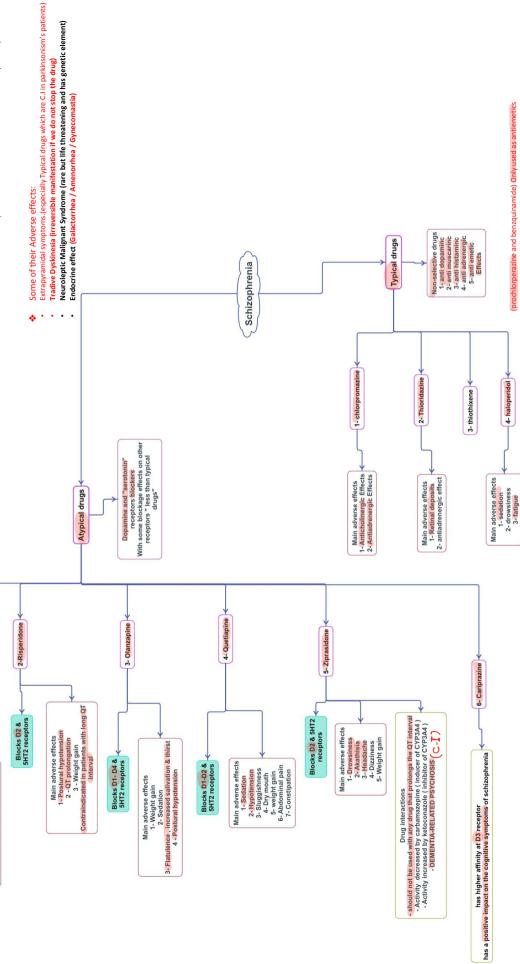
Main adverse effects
1- Agranulocytosis
2- Seizures (C-- Ĩ )
3- Myocarditis
4- Excessive salivation ( during sleep )

Blocks both D4 & 5HT2 receptors

- May cause lowering of body temperature.
- Mechanism: heat loss as a result of vasodiation due to alpha1-blocking or central effect.

  Prolongation of QT interval= Quinidine-like action (C.1 in cardiac patient).

  - Antihistaminic effect( Sedation due to H1 block so C.I in asthmatic patients)



1. Which of the following is the main mechanism of action for Antipsychotic drugs?

A. Block the Dopamine Reuptake. B. Block the Dopamine Receptors C. Both of them.

- 2. which of the following will give the Atypical group of anti-psychotic the benefit of being 1st line treatment in schizophrenia?
- A. They have no or less Extrapyramidal manifestations.
- B. They do work on dopaminergic as well as serotonergic receptors.
- C. They have positive impact on both positive and negative symptoms.
- D. All of them
- 3. What is the drug that is NOT used in geriatrics clinics especially with patients with dementia?
- A. Clozapine.

B. Risperidone.

- C. Ziprasidone.
- 4. Which of the following antipsychotic agents is most associated with the possibility of a hematological dyscrasia such as agranulocytosis in a patient being treated for schizophrenia?
- A. Cariprazine.

B. Clozapine.

- C. Chlorpromazine.
- 5. Which of the following drugs can not be used to treat Schizophrenia in epileptic patient?
- A. Clozapine.

B. Risperidone.

- C. Ziprasidone.
- 6. Which antipsychotic agent has been most associated with significant QT interval prolongation and should be used with caution in patients with preexisting arrhythmias or patients taking other drugs associated with QT prolongation?
- A. Ziprasidone.

B. Risperidone.

- C. Both of them.
- 7. Which of the following drugs has a good impact on cognitive symptoms of schizophrenia and has high affinity at D2 recent
- A. Ziprasidone.

B. Risperidone.



	Work of the f Cariprazine.	ollowing drugs wo B. Olanzapine.	•	
9. Which of the following adverse effects of antipsychotic drugs related to block of Dopamine receptors in tuberoinfundibular pathway in male's brain?				
A.	Galactorrhea.	B. Gynecomastia	a. C. Extrapy	ramidal symptoms
0. Which of the following Antipsychotic drugs can be used in patients with both schizophrenia & parkinsonism?				
A.	Haloperidol.	B. Clozapine.	C. Chlorprom	azine
1. Which of the following Antipsychotic drugs can be used as antiemeting?				
A.	Risperidone.	B. Clozapine.	C. Prochlorpe	erazine.
<ol> <li>Which of the following is other use of anti-psychiatric drugs especially in developing countries:</li> <li>A. Headache. B. Insomnia. C. Pruritis.</li> </ol>				
3. Which of the following drugs causes retinal deposit? A. Clozapine. B. Thioridazine. C. Risperidone.				
4. Which one of the following causes excessive salivation during sleep?				
A.	Clozapine.	B. Risperidone.	C. Olanzapine.	
	5. Ziprasidone block which of the following:			
A.	D2.	B. D3.	C. D4.	
6. Clozapine block which of the following:				
A.	D2.	B. D3.	C. D4.	Answers: 8. C. 9. B. 10. B. 11. C. 12. C. 13. B. 14. A. 15. A. 16. C.

#### 17. All atypical drugs have:

- A.Act on the Same serotonin receptors.
- B.Act on the Same dopamine receptors.
- C.The Same side effects.
- D.The Same chemical structure.
- 18. Patient have been diagnosed with schizophrenia, after taking the prescribed medication for 2 weeks he developed week WBC that lead to recurrent infections. What is the prescribed medication?
  - A. Clozapine.
- B.Chlorpromazine.
- C. Respiredone.
- 19. Which of the following is considered an irreversible side effect of anti-psychotic drugs due to prolong use?
  - A. Neuroleptic Malignant syndrome.
  - B. Extrapyramidal symptoms (parkinsonism).
  - C. Tradive dyskinesia.
- 20. Which antipsychotic has the most sedative potential and is sometimes questionably used as a hypnotic agent in clinical settings?
  - A. Quetiapine.
- B. Haloperidol.
- C. Olanzapine

#### SAQs

- Q1) Why the atypical anti-psychotic drugs are considered the 1st line treatment in schizophrenia(Advantages)?
  - 1. Less or no extrapyramidal manifestations.
  - 2. They are effective in resistant /refractory cases of schizophrenia.
  - 3. Effective on both positive and negative symptoms of schizophrenia.
  - 4. They act by blocking both dopaminergic and serotonergic receptors.

Zoom in to check your answers

#### SAQs

## Q2) What is the difference in the mechanism of action of Typical and Atypical Antipsychotic drugs Respectively? Give 2 examples of each class?

- 1- Blockade of dopamine receptors in the mesolimbic system and other sites in brain.
  - EX: Chlorpromazine ,Thioridazine
- 2- Blockade of serotonergic (  $5\mbox{HT2})~\&$  dopaminergic receptors.
  - EX: Clozapine ,Risperidone

Q3) Mr. Jack felt some lack of happiness and decrease in talking, also he sometimes hear some weird sounds, after he went to Psychiatrist he was diagnosed with Schizophrenia, after starting the treatment, he feels dizziness while standing up suddenly. What is the drug probably causing this side effect?

· Chlorpromazine or Thioridazine, this symptom is called Postural hypotension and it is only associated with Typical antipsychotic drugs.

## Q4) What Is the Drug that may induce seizures and agranulocytosis, and act in which receptors?

• Clozapine , block both D4 & 5HT2 receptors.

Q5) Mr. Mohammed & Mr. Abdullah are diagnosed with Schizophrenia, after taking different antipsychotic drugs, Mohammed developed some Xerostomia (dry mouth) while Abdullah developed excessive salivation. Which drug are used in each situation?

- Mohammed used Quetiapine.
- Abdullah used Clozapine.

### Q6) What is the drug that is NOT used in geriatrics clinics? And why?

- Ziprasidone.
- Not used because it may increase the mortality rate in elderly especially in patients with dementia.

Zoom in to check your answers