

THE PHARMA Squad



SEROTONIN SYNDROME MCQS

Multiple Choice Questions & Case-Based Questions

Questions 1–5

1. A patient presents with agitation, sweating, tremor, hyperreflexia, and diarrhoea after starting a new antidepressant. What is the most likely diagnosis?
 - A. Neuroleptic malignant syndrome
 - B. Serotonin syndrome
 - C. Anticholinergic toxicity
 - D. Opioid overdose

2. Which medication combination is MOST likely to cause serotonin syndrome?
 - A. Paracetamol + Ibuprofen
 - B. Sertraline + Tramadol
 - C. Metformin + Gliclazide
 - D. Rosuvastatin + Ezetimibe

3. Which of the following is considered a hallmark sign of serotonin syndrome?
 - A. Bradycardia
 - B. Hyperreflexia
 - C. Pinpoint pupils
 - D. Dry skin

4. A patient taking fluoxetine develops muscle twitching and agitation after starting linezolid. What is the most likely cause?
 - A. Drug allergy
 - B. Serotonin syndrome
 - C. Sepsis
 - D. Hypoglycaemia

5. Which symptom is LEAST likely to occur in serotonin syndrome?
 - A. Diarrhoea
 - B. Clonus
 - C. Hyperthermia
 - D. Urinary retention

Questions 6–10

6. Which drug class is most commonly associated with serotonin syndrome?

- A. ACE inhibitors
- B. SSRIs
- C. Statins
- D. PPIs

7. A patient presents with inducible clonus and agitation after taking an overdose of an SSRI. What is the priority management step?

- A. Continue treatment and observe
- B. Stop serotonergic medications
- C. Start warfarin
- D. Administer naloxone

8. Which medication may be used in moderate to severe serotonin syndrome?

- A. Cyproheptadine
- B. Metoclopramide
- C. Amoxicillin
- D. Salbutamol

9. Which combination carries the HIGHEST risk of serotonin syndrome?

- A. Sertraline + Tramadol
- B. Ramipril + Amlodipine
- C. Aspirin + Atorvastatin
- D. Metformin + Sitagliptin

10. Which triad best describes serotonin syndrome?

- A. Sedation, bradycardia, hypotension
- B. Hyperthermia, rigidity, altered mental status
- C. Mental status changes, autonomic instability, neuromuscular hyperactivity
- D. Rash, wheeze, hypotension

Case-Based Questions

11. A 24-year-old woman takes sertraline for depression. She develops a migraine and starts taking sumatriptan. Later that day she experiences agitation, sweating, tremor, and diarrhoea. What is the most likely diagnosis?

- A. Migraine aura
- B. Panic attack
- C. Serotonin syndrome
- D. Meningitis

12. A patient is prescribed tramadol following surgery while continuing their regular escitalopram. Two days later they develop hyperreflexia and clonus. Which medication is MOST likely responsible for the interaction?

- A. Tramadol
- B. Paracetamol
- C. Ibuprofen
- D. Ondansetron

13. A patient taking phenelzine accidentally starts fluoxetine. Within 24 hours they develop confusion, tachycardia, hyperthermia, and muscle rigidity. Which drug class does phenelzine belong to?

- A. SSRI
- B. SNRI
- C. MAOI
- D. TCA

14. Which of the following is considered a severe sign of serotonin syndrome requiring urgent medical attention?

- A. Mild nausea
- B. Headache
- C. Hyperthermia > 40°C
- D. Dry mouth

15. A pharmacist notices a patient is prescribed duloxetine, tramadol and St John's Wort. What should be the pharmacist's main concern?

- A. Nephrotoxicity
- B. Hepatotoxicity
- C. Serotonin syndrome
- D. QT prolongation

Exam Tips

■ HOT + FAST + TWITCHY

Hyperthermia • Tachycardia • Sweating • Agitation • Hyperreflexia • Clonus • Diarrhoea

Common Exam Combinations:

SSRI + Tramadol

SSRI + MAOI

SSRI + Linezolid

SSRI + Sumatriptan

SSRI + St John's Wort

SNRI + Tramadol

Answer Key

- 1.B
- 2.B
- 3.B
- 4.B
- 5.D
- 6.B
- 7.B
- 8.A
- 9.A
- 10.C
- 11.C
- 12.A
- 13.C
- 14.C
- 15.C