

Revision Questions

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1-You assess a 26-year-old woman with a diagnosis of bipolar disorder in the emergency department. She is speaking very quickly and is difficult to interrupt. She scarcely finishes a sentence before starting another. She speaks about a range of topics, but her words make sense and the topics are clearly linked to one another. What sign is she exhibiting?

(a) Pressure of speech

- (b) Dysphasia
- (c) Tangentiality
- (d) Alogia
- (e) Circumstantiality

This woman is exhibiting pressure of speech, a common feature of manic or hypomanic episodes. It is often accompanied by flight of ideas, which is an acceleration in the flow of thinking with little focus on the 'goal' of thinking, although with maintenance of logical connections between thoughts

2-You are assessing a 19-year-old man in an in-patient unit. His thinking seems slow, although he is answering questions. On several occasions, however, he stops mid-sentence and seems unable to recall what he was saying. He tells you that he thinks that another patient is stopping his thoughts. Which term most accurately describes this?

- (a) Tangentiality
- (b) Thought withdrawal
- (c) Loosening of association

(d) Thought block

- (e) Derailment

This is thought block, which occurs in schizophrenia. The person has the experience of their thoughts 'snapping off', which is followed by an unexpected silence

3-A 34-year-old man believes that his neighbours are trying to force him to leave his property. He believes they are sending threatening messages in Morse code through the radiators in his apartment. He also believes they are taunting him by having a small English flag on their car during the World Cup, as he is originally from Poland. He is adamant that he is correct despite you offering alternative and more likely explanations. How would you classify the nature of his beliefs?

(a) Persecutory delusions

- (b) Grandiose delusions
- (c) Delusions of control
- (d) Over-valued ideas
- (e) Thought insertion

This is an example of a set of persecutory delusions, the most frequent type of delusion. These can arise in many different conditions, including severe depression, mania and delirium, as well as schizophrenia. The patient's response to the beliefs can vary – in schizophrenia, the affect can sometimes be blunted or inappropriately indifferent (an 'incongruent affect')

4-A young man has recently been diagnosed with paranoid schizophrenia. He is attending the clinic today and is anxious to learn more about the diagnosis and wishes to discuss symptoms that he might experience as part of the disorder. All the following are negative symptoms of schizophrenia, except:

- (a) Affective flattening

- (b) Avolition
- (c) Anhedonia
- (d) Asociality

(e) Aggressiveness

The negative symptom construct includes blunted/flat affect, anhedonia (diminished interest and enjoyment), alogia (poverty of speech), asociality (social withdrawal) and avolition (diminished motivation and initiative). It is important to assess for the cause of negative symptoms and to exclude comorbid factors that might be causing the symptoms. Primary negative symptoms occur as part of the schizophrenia disorder, whereas secondary negative symptoms can be caused by positive psychotic symptoms, depression, or extrapyramidal side-effects.

5-You are called to assess a 24-year-old woman who gave birth 3 days ago. She has been behaving bizarrely on the obstetrics ward, accusing staff of spying on her and of harming her baby. She hasn't slept for 24 h and is displaying overactivity and aggression. You assess the woman and diagnose a psychotic episode. All the following are risk factors for a postpartum psychosis, except:

- (a) Primiparity
- (b) Bipolar affective disorder
- (c) Obstetric complications

(d) Gender of child

- (e) Single marital status

Postpartum psychosis is strongly related to bipolar affective disorder. Postpartum psychosis is the most uncommon, but most severe, form of postnatal affective illness, with rates of 1–2 episodes per 1000 deliveries. Postpartum psychosis is generally rapid in onset and can begin within 24–72 h of the birth, with the majority of episodes occurring within 2 weeks of the birth.

6-In bipolar affective disorder, which one of the following is correct?

- (a) It usually presents with delusions of control on mental state exam
- (b) Hypermania is a severe form of mania
- (c) Depressive mood swings are usually accompanied by psychotic symptoms

(d) Manic episodes are often associated with irritability rather than elevated mood

- (e) At least three episodes of mania are required for its diagnosis

The key feature of bipolar affective disorder is the experience of recurrent episodes of hypomania or mania – grandiose and expansive affect associated with increased drive and decreased sleep, with the mood being elated, expansive or irritable – and recurrent depressive episodes.

7-A 30-year-old man has been diagnosed with bipolar affective disorder after experiencing a second episode of mania with psychotic features. He was hospitalised for a period of 3 months and was euthymic when discharged on mood-stabilising medication to prevent a manic relapse. Which of the following medications is the least effective protection against relapse of mania?

- (a) Lithium carbonate
- (b) Sodium valproate
- (c) Carbamazepine
- (d) Lamotrigine**
- (e) Olanzapine

All these medications are licensed as mood stabilisers in bipolar affective disorder. However, lamotrigine is not effective for the prevention of manic relapse and is not recommended as maintenance treatment for mania prophylaxis. Lamotrigine prevents depressive relapses more than manic relapses.

8-A 23-year-old man is attending the clinic, having recently been diagnosed with first-episode psychosis. He is currently receiving treatment and is stable. Which of the following risk factors would be most predictive of a psychotic relapse for this patient?

- (a) Premorbid social isolation**
- (b) Medication adherence
- (c) Abstinence from alcohol use
- (d) Low expressed emotion in his family
- (e) Continuing education

Factors associated with relapse in first-episode psychosis and the early stages of a psychotic illness include the following: Poor treatment engagement;

alcohol/substance use disorder; high expressed emotion in family setting; poor premorbid social functioning; increased severity of cognitive symptoms. Medication adherence would not predispose to relapse, but medication nonadherence (also known as non-compliance) would do so.

9-With regard to the epidemiology of depression, which one of the following statements is correct?

- (a) Equally common in males and females

- (b) The mean age at onset is in the mid-40s
- (c) Suicide rate of 40%
- (d) Lower prevalence than bipolar affective disorder

(e) Lifetime risk of 15%

About 15% of people will have a depressive episode at some point during their lifetime. The average age at onset of depression (25–35 years) is approximately 10 years older than for bipolar affective disorder. Females have an approximately twofold increase in depression risk compared with males.

10-A 35-year-old married man is referred to the emergency department for an assessment of his depressive illness. Which of the following would indicate that a hospital admission would be required?

- (a) Insomnia
- (b) Anhedonia
- (c) Worthlessness

(d) Distressing auditory hallucinations

- (e) Poor concentration

The presence of auditory hallucinations would categorise this man's presentation as a severe depressive episode with psychotic symptoms. The other symptoms can occur along with hallucinations in a psychotic depression,

but these symptoms in themselves do not suffice to diagnose psychotic depression. The presence of auditory hallucinations indicates that the illness has progressed to a stage where the patient's reality testing is impaired.

11-A 25-year-old woman with a diagnosis of OCD is attending the clinic. She has been treated with fluoxetine 20 mg daily for the past 3 months but with no improvement in her symptoms. Which of these is the most appropriate next step?

- (a) Switch to a different SSRI

(b) Increase the dose of fluoxetine

- (c) Add an atypical antipsychotic
- (d) Add clonazepam
- (e) Switch to venlafaxine

The two first-line treatments for OCD are pharmacotherapy and cognitive– behavioural therapy using exposure and response prevention (ERP). Medications that are predominantly serotonergic (i.e. acting to promote serotonergic function), such as SSRIs, venlafaxine and some tricyclic antidepressants (e.g. clomipramine) are the most effective. Before starting an SSRI for the treatment of OCD, the patient should be informed that a significant treatment response can take up to 6–8 weeks to occur (and sometimes 10–12 weeks for a full response). Higher doses (e.g. fluoxetine at 40 mg or 60 mg daily) are more effective in OCD.

12-A 35-year-old retired soldier is referred to your clinic for assessment and treatment of PTSD. Which of the following is not a recommended treatment for PTSD?

- (a) Cognitive–behavioural therapy
- (b) Fluoxetine
- (c) Eye movement desensitisation and reprocessing
- (d) Diazepam**
- (e) Sertraline

Psychological approaches with proven efficacy include individual trauma focused cognitive–behavioural therapy and eye movement desensitisation and reprocessing. Trauma-focused cognitive–behavioural therapy is the recommended first-line intervention for PTSD. SSRIs, including sertraline, fluoxetine and paroxetine, are all efficacious as acute and maintenance treatment. Benzodiazepines are not recommended for the treatment of PTSD.

13-A 40-year-old man has been assessed at the clinic and diagnosed with a moderate depressive episode. He has expressed a preference for antidepressant therapy. All the following should be considered in making a medication choice, except:

- (a) Prescribing an antidepressant with a rapid onset of action**
- (b) The patient’s prior experience with antidepressant medication
- (c) Toxicity of antidepressant in overdose for patients at risk of suicide
- (d) Concurrent medical conditions
- (e) Concurrent medication use

Factors to take into account when choosing an antidepressant are the patient’s prior experience with medication (including response, tolerability, adverse effects), concurrent medical conditions and use of non-psychiatric medications, possible short- and long-term side-effects, toxicity of overdose in patients at risk of suicide, the clinician’s own experience with the medication, the patient’s history of adherence to medication, history of first-degree relatives responding to a medication, and patient preferences. No class of antidepressant has proven to have a more rapid onset than any other.

14-A 26-year-old male is brought to the emergency department by ambulance. He was found on the roadside by a passerby. He is unconscious and has evidence of respiratory depression, pinpoint pupils and is cold to the touch. Which of the following substances is he most likely to have had an overdose of?

- (a) Alcohol
- (b) Mephedrone
- (c) Cocaine
- (d) Benzodiazepine

(e) Heroin

This man has presented with features of an opioid/heroin overdose. Death can occur from respiratory depression. Patients should be managed with cardiopulmonary resuscitation protocol as required.

15-A 66-year-old man is referred to your clinic. His wife attends with him and tells you that he has been forgetful of late. He often forgets where he leaves his keys and yesterday he forgot about his appointment with you. He has been repeating questions and finding it difficult to express himself and has been more irritable than usual. He scores 23/30 on the MMSE. What diagnosis would you be most concerned about at this stage?

- (a) Delirium
- (b) Frontotemporal dementia
- (c) Lewy body dementia
- (d) Alzheimer's disease
- (e) Late-onset schizophrenia

This man seems to be in the early stages of Alzheimer's disease. It is the most common form of dementia, accounting for 60–70% of cases,

16-A 34-year-old man is referred to your out-patient clinic. He complains of low mood over the past 6 months. He also describes occasional difficulty in reading and writing and dressing himself. On full examination, he has difficulty in naming parts of objects, such as the second hand on your watch. Recently, he has been getting headaches. Where is the probable pathology?

- (a) Cerebellum

(b) parietal lobe

- (c) Temporal lobe
- (d) Frontal lobe

(e) Corpus callosum

This man is likely to have a parietal lobe lesion and will require further investigation, including brain imaging. Lesions in the parietal lobe are associated with impairment of core higher cognitive functions, including acalculia (inability to calculate), agraphia (inability to write), alexia (inability to read) and apraxia (inability to carry out learned skilled movements despite the retention of sensory and motor function)

17-A 78-year-old man with severe depressive illness is referred to your clinic and you start him on an antidepressant. A few weeks later, his GP writes to you informing you that he is stopping the antidepressant as it has resulted in hyponatraemia. What medication most likely to be the offending agent?

(a) Amitriptyline

(b) Citalopram

(c) Mirtazapine

(d) Duloxetine

(e) Trazadone

. SSRIs such as citalopram are non-sedative and are relatively free of interactions with other drugs. However, they can cause a range of side-effects, including gastrointestinal problems and hyponatraemia, particularly in the elderly.

18-Which two types of psychiatric disorder are most common in patients with epilepsy?

(a) Depression and anxiety

(b) Depression and psychosis

(c) Psychosis and anxiety

(d) OCD and depression

(e) OCD and psychosis

19-A 37-year-old woman presents reporting feeling anxious, hyperactive and irritable most of the time for the past 2 months. She also complains of weight loss (despite an increased appetite), intolerance to heat, hair loss, muscle aches, weakness, fatigue and intermittent diarrhoea. Which of the following endocrine conditions is most likely to explain her symptoms?

(a) Diabetes mellitus

- (b) Addison's disease
- (c) Pheochromocytoma
- (d) Diabetes insipidus

(e) Hyperthyroidism

Assessment of thyroid function is important in psychiatry. Thyroid abnormalities are common in the general population and thyroid function tests should be carried out routinely as part of an organic work-up.

20-An 8-year-old boy attending the clinic has been diagnosed with ADHD. The appropriate first-line treatment is:

- (a) Atomoxetine
- (b) Diazepam
- (c) Methylphenidate

(d) Behaviour management techniques

- (e) Dexamfetamine

The first-line intervention for a child with ADHD is non-pharmacological treatment. Psychosocial interventions consist of training parents in behavioural management, parent training and education programmes, consultation with teachers/school personnel and individual work (e.g. cognitive-behavioural therapy, social skills training) with the child

21-A young man, recently diagnosed with schizophrenia, has a 5-year history of cigarette smoking. Which of the following is true?

- (a) The prevalence of smoking in patients with schizophrenia is the same as in the general population
- (b) The majority of smokers with schizophrenia don't wish to stop smoking

(c) Smoking can alter the metabolism of antipsychotics

- (d) Smoking has no impact on mental health
- (e) People with schizophrenia don't have higher rates of smoking-related illness

The rate of cigarette smoking is significantly higher in people with schizophrenia (and other psychotic disorders) compared with the general

population.

22-A 35-year-old female patient with a diagnosis of schizophrenia attends the clinic concerned that her GP informed her that she has metabolic syndrome. All the following are part of the metabolic syndrome, except:

(a) Raised HDL cholesterol

(b) Raised triglyceride levels

(c) Raised blood pressure

(d) Increased waist circumference

(e) Raised fasting glucose

It is estimated that 1/5–1/4 of the world's adults have this syndrome. Individuals meeting criteria for metabolic syndrome have a 3- to 6-fold increased risk of developing type 2 diabetes and a 2- to 6-fold risk of mortality due to cardiovascular disease. Metabolic syndrome is highly prevalent among treated patients with schizophrenia, with prevalence rates of 34–60%.

23-A 25-year-old woman was recently started on antipsychotic treatment combined with cognitive-behavioural therapy for a first episode of psychosis. She has been treated with the antipsychotic for 2 months and attends the clinic reporting increased appetite and weight gain. Which of the following antipsychotics are most associated with weight gain?

(a) Amisulpride

(b) Aripiprazole

(c) Haloperidol

(d) Olanzapine

(e) Paliperidone

Olanzapine (along with clozapine) is associated with the greatest risk and degree of weight gain with antipsychotic treatment.

24-A 50-year-old woman attends the psychiatry out-patient clinic after a recent general hospital admission for complications secondary to a medical disorder. All the following have increased prevalence in severe mental illnesses, except:

(a) Cardiovascular disease

(b) Diabetes mellitus

(c) Rheumatoid arthritis

(d) Hepatitis B

- (e) Osteoporosis

All the above have increased prevalence rates in psychotic disorders, with the exception of rheumatoid arthritis, which is found at a reduced rate in schizophrenia.

25-A patient with schizophrenia, treated with clozapine, has developed type 2 diabetes. Which of the following would be a recommended first-line pharmacological intervention for type 2 diabetes in this case?

- (a) Switch to aripiprazole

(b) Metformin

- (c) Insulin
- (d) Methylphenidate
- (e) Fluoxetine

Metformin would be an appropriate first-line treatment for type 2 diabetes in this case

26-A patient you assess at your clinic with a diagnosis of schizophrenia was recently treated for a myocardial infarction. You speak to your consultant about cardiovascular risk factors in patients with schizophrenia. Which of the following is the most prevalent modifiable cardiovascular risk factor in patients with schizophrenia?

(a) Cigarette smoking

- (b) Hypertension
- (c) Dyslipidaemia
- (d) Obesity
- (e) Type 2 diabetes

Cigarette smoking is the most common modifiable cardiovascular risk factor in patients with schizophrenia, with a prevalence of 50–80%.

27-A 45-year-old male patient with depression attends the out-patient clinic. He presents with features of atypical depression. Which of the following symptoms would you be likely find in such a presentation? (a) Insomnia

(b) Weight gain

- (c) Agitation
- (d) Early morning wakening

- (e) Mood elevation

Features of atypical depression include weight gain and increased appetite.

28-A 22-year-old woman attends the clinic with a 1-month history of low mood. She was diagnosed with epilepsy 6 months previously and is concerned about the risk of developing mental illness. The prevalence of all the following disorders is increased in epilepsy, except:

- (a) Depression
- (b) Suicide
- (c) Psychosis

(d) Dementia

- (e) Anxiety

Epilepsy is associated with an increased prevalence of neuropsychiatric disorders, with a reported prevalence of 30%

29-Which of the following antipsychotic agents is least likely to be associated with weight gain?

- (a) Olanzapine
- (b) Clozapine

(c) Aripiprazole

- (d) Risperidone
- (e) Quetiapine

Aripiprazole has one of the most favourable side-effect profiles of all antipsychotic drugs, with relatively little incidence of weight gain, sedation, hyperprolactinaemia or anticholinergic side-effects.

30-Which of the following is the least likely side-effect of tricyclic antidepressants?

- (a) Sedation
- (b) Urinary retention
- (c) Blurred vision
- (d) Dizziness

(e) Diarrhoea

Common side-effects of tricyclic antidepressants include dry mouth, blurred vision, drowsiness, weight gain, constipation and cognitive impairment (especially in elderly patients)

31-A 22-year-old man started on a typical antipsychotic finds it difficult to sit still and has to move his legs constantly. How is this phenomenon best defined?

- (a) Tardive dyskinesia
- (b) Akinesia
- (c) Akathisia**
- (d) Neuroleptic malignant syndrome
- (e) Acute dystonic reaction

The diagnosis and assessment of akathisia should take account of both its subjective and objective components. Commonly experienced subjective components are a sense of inner restlessness, mental unease, unrest or dysphoria, feeling unable to keep still, an irresistible urge to move the legs and mounting inner tension when required to stand still. Akathisia is considered a relatively common acute extrapyramidal problem

32-A 28-year-old woman with a 5-year history of bipolar affective disorder, currently in remission, attends the out-patient clinic to discuss suitable medications that she could use during pregnancy. Which of the following medications would be the least safe to prescribe to a woman who is planning a pregnancy?

- (a) Fluoxetine
- (b) Sodium valproate**
- (c) Chlorpromazine
- (d) Olanzapine
- (e) Lamotrigine

All psychotropic drugs carry some degree of risk when used in pregnancy and require careful consideration and open discussion with patients. Sodium valproate has a clear causal link with foetal abnormalities, particularly spina bifida, and should be avoided if possible in pregnancy

33-A 40-year-old man with treatment-resistant schizophrenia was recently started on a typical antipsychotic. He presents 7 days later with fever, motor rigidity, confusion and diaphoresis. The most likely diagnosis is:

- (a) Neuroleptic malignant syndrome**
- (b) Acute renal failure

- (c) Hyponatraemia
- (d) Tardive dyskinesia
- (e) Akathisia

Neuroleptic malignant syndrome is a rare but potentially lethal form of drug-induced hyperthermia characterised by mental status changes, muscle rigidity, hyperthermia and autonomic dysfunction. In early studies, the mortality rates were in the range 20–38%; however, in the past two decades mortality rates have fallen below 10% because of early recognition and improved management.

34-Which of the following has the most clearly defined therapeutic range?

- (a) Paliperidone
- (b) Nortriptyline
- (c) Lithium carbonate**
- (d) Quetiapine
- (e) Lamotrigine

Lithium has been used for decades as a mood stabiliser and its therapeutic range is clearly established, although guidelines differ slightly in the exact figures.

35-Which of the following symptoms is related to lithium toxicity?

- (a) Polydipsia
- (b) Polyuria
- (c) Metallic taste
- (d) Coarse tremor**
- (e) Hypothyroidism

Coarse tremor is a sign of central nervous system toxicity

36-High plasma levels of clozapine lead to an increased risk of which of the following?

- (a) Headaches
- (b) Myocardial infarction
- (c) Rash
- (d) Seizures**

- (e) Panic attacks

Seizures occur more frequently in patients who receive doses > 500 mg/day and plasma levels above 600 ug/L.

37-A patient who was recently started on a new antipsychotic medication has returned to the clinic reporting a tremor. Which of the following receptors is likely to be involved?

- (a) Serotonergic
- (b) Dopaminergic**
- (c) Histaminergic
- (d) Alpha 2
- (e) Muscarinic

Striatal D2 occupancy predicts antipsychotic response, but also drug-induced extrapyramidal side-effects, akathisia, and prolactin elevation

38-Antipsychotic medications are associated with all the following except:

- (a) Impaired glucose tolerance
- (b) Dyslipidaemia
- (c) Shortened QTc interval**
- (d) Increased risk of cerebrovascular accidents
- (e) Amenorrhoea

The QTc interval remains the most valid surrogate marker for torsades de pointes, and prolongation to > 500 ms is associated with an increased risk of torsades de pointes.

39-A 40-year-old man with a diagnosis of bipolar affective disorder, currently in remission for 8 years on maintenance therapy with lithium carbonate, presents to the emergency department with features of lithium toxicity. Which of the following is most likely to have precipitated such a presentation?

- (a) Clozapine
- (b) Olanzapine
- (c) Diclofenac**
- (d) Amiloride
- (e) Amlodipine

NSAIDs such as diclofenac can increase the reabsorption of lithium by the kidney and result in increased serum lithium concentrations.

40-A 40-year-old man with a 15-year history of paranoid schizophrenia attends the clinic and reports the recent re-emergence of auditory hallucinations. He had been stable while treated with clozapine and amisulpride. You learn that he has recently begun smoking after a 5-year period of abstinence. Which of the following would you expect to see?

- (a) Decreased amisulpride levels
- (b) Increased clozapine levels
- (c) Decreased amisulpride and clozapine levels
- (d) Decreased clozapine levels**
- (e) Increased amisulpride levels

Smoking has a large effect on clozapine metabolism. Smoking can induce hepatic cytochrome P450 (CYP) oxidative enzymes, in particular CYP1A2, thus reducing serum levels of medications metabolised by these enzymes.

41-Gastrointestinal upset is a common early side-effect when using SSRIs. Which mechanism of receptor action is most responsible for this effect?

- (a) 5-HT1 stimulation
- (b) 5-HT3 stimulation**
- (c) 5-HT2 blockade
- (d) 5-HT3 blockade
- (e) 5-HT2 stimulation

. Gastrointestinal side-effects are most commonly reported. They probably result from stimulation of 5-HT3 receptors.

42-A 25-year-old man with a history of rapid-cycling bipolar affective disorder has recently started taking lamotrigine, in combination with his maintenance mood stabiliser, for the treatment of a depressive episode. He is commenced at a normal titration rate of lamotrigine but presents to the clinic with evidence of lamotrigine toxicity. Which of the following medications would be associated with increased serum lamotrigine levels?

- (a) Carbamazepine
- (b) Lithium carbonate

(c) Sodium valproate

(d) Olanzapine

(e) Haloperidol

Sodium valproate is a widely used anticonvulsant drug with a broad therapeutic spectrum. It is an inhibitor of cytochrome P450 liver enzymes and in this way causes reduced elimination (and hence potentially increased levels) of drugs metabolised by these enzymes, such as lamotrigine

43-A 19-year-old man says that he is 'scared to death' of spiders and cannot sleep at night, as he thinks there might be some in his room. When he last saw a spider, he became very frightened and felt he was going to faint. What psychological approach would be useful in treating this man?

(a) Psychoanalysis

(b) Exposure and response prevention

(c) Systematic desensitization

(d) Addressing cognitive distortions

(e) Group therapy

This man has a specific phobia of spiders (also known as arachnophobia). Exposure and response prevention is a behavioural technique used for the treatment of phobias

44-You are asked to assess an 82-year-old man in the community who seems to be depressed. He is recently bereaved and lives by himself. His daughter is concerned that he wishes to end his life. Which of the following factors are not related to an increased risk of suicide in the elderly?

(a) Older age

(b) Female gender

(c) Living alone

(d) Bereavement

(e) Depression

45-A 5-year-old boy is accompanied to the clinic by his father. He has Down syndrome and recently had an IQ assessment. His father wishes to discuss the diagnosis of Down syndrome with you. Which of the following is true regarding Down syndrome?

(a) It affects 1 in 10 newborn children

(b) In the majority of those affected, it is associated with severe to profound intellectual disability

(c) People with Down syndrome have increased rates of Alzheimer's disease

(d) Increased incidence with younger maternal age

(e) Normal life expectancy

. Approximately 75% of people with Down syndrome will develop symptoms of Alzheimer's disease during their lifetime.