PSYCHIATRY MCQs

Q-1

Olanzapine is known to block D2 dopamine receptors. What other type of receptor does it mainly act on?

A. Alpha-adrenoceptors
B. Acetylcholine receptors
C. Serotonin receptors
D. D1 dopamine receptors
E. H1 histamine receptors

ANSWER:
Serotonin receptors

EXPLANATION:
Olanzapine, like other atypical antipsychotics, is known to block serotonin receptors (especially the 5-HT2 subtype) as well as D2 dopamine receptors

ATYPICAL ANTIPSYCHOTICS
Atypical antipsychotics should now be used first-line in patients with schizophrenia, according to 2005 NICE guidelines. The main advantage of the atypical agents is a significant reduction in extra-pyramidal side-effects.

Adverse effects of atypical antipsychotics
- weight gain
- clozapine is associated with agranulocytosis (see below)

The Medicines and Healthcare products Regulatory Agency has issued specific warnings when antipsychotics are used in elderly patients:
- increased risk of stroke
- increased risk of venous thromboembolism

Examples of atypical antipsychotics
- clozapine
- olanzapine
- risperidone
- quetiapine
- amisulpride
- aripiprazole

Clozapine, one of the first atypical agents to be developed, carries a significant risk of agranulocytosis and full blood count monitoring is therefore essential during treatment. For this reason clozapine should only be used in patients resistant to other antipsychotic medication

Adverse effects of clozapine
- agranulocytosis (1%), neutropaenia (3%)
- reduced seizure threshold - can induce seizures in up to 3% of patients

Q-2

A 24-year-old female is reviewed following a course of cognitive behaviour therapy for bulimia. She feels there has been no improvement in her condition and is interested in trying pharmacological treatments. Which one of the following is most suitable?

A. Low-dose citalopram
B. Low-dose fluoxetine
C. Low-dose amitriptyline
D. High-dose amitriptyline
E. High-dose fluoxetine

ANSWER:
High-dose fluoxetine

EXPLANATION:
BULIMIA NERVOSA
Bulimia nervosa is a type of eating disorder characterised by episodes of binge eating followed by intentional vomiting or other purgative behaviours such as the use of laxatives or diuretics or exercising.

DSM 5 diagnostic criteria for a diagnosis of bulimia nervosa:
- recurrent episodes of binge eating (eating an amount of food that is definitely larger than most people would eat during a similar period of time and circumstances)
- a sense of lack of control over eating during the episode
- recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise.
- the binge eating and compensatory behaviours both occur, on average, at least once a week for three months.
- self-evaluation is unduly influenced by body shape and weight.
- the disturbance does not occur exclusively during episodes of anorexia nervosa.

Management
- referral for specialist care is appropriate in all cases
- NICE recommend bulimia-nervosa-focused guided self-help for adults
- If bulimia-nervosa-focused guided self-help is unacceptable, contraindicated, or ineffective after 4 weeks of treatment, NICE recommend that we consider individual eating-disorder-focused cognitive behavioural therapy (CBT-ED)
- children should be offered bulimia-nervosa-focused family therapy (FT-BN)
- pharmacological treatments have a limited role - a trial of high-dose fluoxetine is currently licensed for bulimia but long-term data is lacking

Q-3

A 25-year-old man with a history of schizophrenia is prescribed olanzapine. Which one of the following adverse effects is he most likely to experience?

A. Anorexia
B. Parkinsonism
C. Hypertension
D. Weight gain
E. Agranulocytosis

ANSWER:
Weight gain

EXPLANATION:
Weight gain is an extremely common adverse effect of atypical antipsychotics such as olanzapine

<u>Please see Q-1 for Atypical Antipsychotics</u>

Q-4

A 24-year-old man is brought to the Emergency Department by his brother who is concerned about his odd behaviour. Over the past two weeks he has started to tell his brother that he can hear people talking about him on the radio. He denies any auditory hallucinations. During the consultation he scores 10/10 on the mini-mental state examination. When asked to explain the meaning of the statement 'people in glass houses shouldn't throw stones' he replies 'you may break the glass'. What is this an example of?

A. Depression
B. Autistic thinking
C. Concrete thinking
D. Delusional disorder
E. Acute mania

ANSWER:
Concrete thinking

EXPLANATION:
This is an example of concrete thinking where a patient cannot use abstraction to understand the meaning of a sentence. It is more common in schizophrenia. Literal thinking is of course a feature of autism but this would not explain his delusional perception and is unlikely to present in a sub-acute fashion at this age

SCHIZOPHRENIA: FEATURES
Schneider's first rank symptoms may be divided into auditory hallucinations, thought disorders, passivity phenomena and delusional perceptions:

Auditory hallucinations of a specific type:
- two or more voices discussing the patient in the third person
- thought echo
- voices commenting on the patient's behaviour

Thought disorder*:
- thought insertion
- thought withdrawal
- thought broadcasting

Passivity phenomena:
- bodily sensations being controlled by external influence
- actions/impulses/feelings - experiences which are imposed on the individual or influenced by others

Delusional perceptions
- a two stage process) where first a normal object is perceived then secondly there is a sudden intense delusional insight into the objects meaning for the patient e.g. 'The traffic light is green therefore I am the King'.

Other features of schizophrenia include
- impaired insight
- incongruity/blunting of affect (inappropriate emotion for circumstances)
- decreased speech
- neologisms: made-up words
- catatonia
- negative symptoms: incongruity/blunting of affect, anhedonia (inability to derive pleasure), alogia (poverty of speech), avolition (poor motivation)

*occasionally referred to as thought alienation

Q-5

Which one of the following is not associated with a poor prognosis in schizophrenia?

A. Acute onset
B. Strong family history
C. Low IQ
D. Premorbid history of social withdrawal
E. Lack of obvious precipitant

ANSWER:
Acute onset

EXPLANATION:
A gradual, rather than acute, onset is associated with a poor prognosis

SCHIZOPHRENIA: PROGNOSTIC INDICATORS
Factors associated with poor prognosis
- strong family history
- gradual onset
- low IQ
- premorbid history of social withdrawal
- lack of obvious precipitant

Q-6

A 21-year-old female is admitted to the acute medical unit after a paracetamol overdose. She later admits to multiple episodes of impulsive self-harm and overdoses. She reports that her recent overdose was triggered by a fight with her dad and concerns that he will no longer want to see her. She describes long-standing feelings of emptiness and does not like the way she looks.

What is the most likely underlying personality disorder?

A. Narcissistic personality disorder
B. Paranoid personality disorder
C. Borderline personality disorder
D. Dependant personality disorder
E. Avoidant personality disorder

ANSWER:
Borderline personality disorder

EXPLANATION:
Borderline personality disorder is associated with impulsivity, feelings of emptiness, fear of abandonment and unstable self image
The correct answer is borderline personality disorder. Patients with personality disorder have disturbances in behaviour and personality that result in considerable personal and social distress across all areas of life. Borderline or emotionally unstable personality disorder is characterised by emotional instability, impulsive behaviour and intense but unstable relationships with others. Patients often fear abandonment of those close to them and may idolise these people. As in the patient described, they often have feelings of emptiness, poor self-image and recurrent attempts at self-harm. There is an association between the development of borderline personality disorder and history of trauma or abuse in childhood.

Narcissistic personality disorder is incorrect. These patients have an over exaggerated sense of self-importance, lack empathy and tend to have a sense of entitlement.

Option 2 is incorrect. Paranoid personality disorder presents in patients who are reluctant to confide in others. They often question the loyalty of friends and family and can be unforgiving. They can see hidden meaning in things or are concerned about conspiracy theories.

Patients with dependent personality disorder struggle to make everyday life decisions and require reassurance and support from others. They cope best when in a relationship and fear being alone. Whilst there are features in the stem of the patient idolising her father there is no evidence of dependent personality disorder.

Option 5 is also incorrect. Avoidant personality disorder is characterised by avoidance of social contact/relationships due to fear of being criticised, rejected or embarrassed. Patients view themselves as inferior to others and so are not keen to be involved unless they are certain of being liked.

PERSONALITY DISORDERS

Disorder	Features
Antisocial	• Failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest; • More common in men; • Deception, as indicated by repeatedly lying, use of aliases, or conning others for personal profit or pleasure; • Impulsiveness or failure to plan ahead; • Irritability and aggressiveness, as indicated by repeated physical fights or assaults; • Reckless disregard for safety of self or others; • Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations; • Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another
Avoidant	• Avoidance of occupational activities which involve significant interpersonal contact due to fears of criticism, or rejection. • Unwillingness to be involved unless certain of being liked • Preoccupied with ideas that they are being criticised or rejected in social situations • Restraint in intimate relationships due to the fear of being ridiculed • Reluctance to take personal risks doe to fears of embarrassment • Views self as inept and inferior to others • Social isolation accompanied by a craving for social contact
Borderline	• >Efforts to avoid real or imagined abandonment • Unstable interpersonal relationships which alternate between idealization and devaluation • Unstable self image • Impulsivity in potentially self damaging area (e.g. Spending, sex, substance abuse) • Recurrent suicidal behaviour • Affective instability • Chronic feelings of emptiness • Difficulty controlling temper • Quasi psychotic thoughts
Dependent	• Difficulty making everyday decisions without excessive reassurance from others • Need for others to assume responsibility for major areas of their life • Difficulty in expressing disagreement with others due to fears of losing support • Lack of initiative • Unrealistic fears of being left to care for themselves • Urgent search for another relationship as a source of care and support when a close relationship ends

Disorder	Features
	• Extensive efforts to obtain support from others • Unrealistic feelings that they cannot care for themselves
Histrionic	• Inappropriate sexual seductiveness • Need to be the centre of attention • Rapidly shifting and shallow expression of emotions • Suggestibility • Physical appearance used for attention seeking purposes • Impressionistic speech lacking detail • Self dramatization • Relationships considered to be more intimate than they are
Narcissistic	• Grandiose sense of self importance • Preoccupation with fantasies of unlimited success, power, or beauty • Sense of entitlement • Taking advantage of others to achieve own needs • Lack of empathy • Excessive need for admiration • Chronic envy • Arrogant and haughty attitude
Obsessive-compulsive	• Is occupied with details, rules, lists, order, organization, or agenda to the point that the key part of the activity is gone • Demonstrates perfectionism that hampers with completing tasks • Is extremely dedicated to work and efficiency to the elimination of spare time activities • Is meticulous, scrupulous, and rigid about etiquettes of morality, ethics, or values • Is not capable of disposing worn out or insignificant things even when they have no sentimental meaning • Is unwilling to pass on tasks or work with others except if they surrender to exactly their way of doing things • Takes on a stingy spending style towards self and others; and shows stiffness and stubbornness
Paranoid	• Hypersensitivity and an unforgiving attitude when insulted • Unwarranted tendency to questions the loyalty of friends • Reluctance to confide in others • Preoccupation with conspirational beliefs and hidden meaning • Unwarranted tendency to perceive attacks on their character
Schizoid	• Indifference to praise and criticism • Preference for solitary activities

Disorder	Features
	• Lack of interest in sexual interactions • Lack of desire for companionship • Emotional coldness • Few interests • Few friends or confidants other than family
Schizotypal	• Ideas of reference (differ from delusions in that some insight is retained) • Odd beliefs and magical thinking • Unusual perceptual disturbances • Paranoid ideation and suspiciousness • Odd, eccentric behaviour • Lack of close friends other than family members • Inappropriate affect • Odd speech without being incoherent

Q-7

The mother of a 28-year-old male who has been diagnosed with a personality disorder comes to see you. She reports that her son has been arrested multiple times and can often be aggressive getting into fights. As a teenager, he would lie to obtain money, played truant and would say unpleasant hurtful things to her without apology or apparent regret. He has never held down a job and relies on his parents for financial support.

His mother has the name of the condition he has been diagnosed with and knows you are not able to discuss the individual case. She asks if you can provide generic information on his condition to aid her understanding as she has always blamed herself for his behaviour.

What is the most likely condition her son has been diagnosed with?

A. Avoidant personality disorder
B. Antisocial personality disorder
C. Borderline personality disorder
D. Narcissistic personality disorder
E. Histrionic personality disorder

ANSWER:
Antisocial personality disorder

EXPLANATION:
Patients with antisocial personality disorder often fail to conform to social norms, and show lack of remorse, deception and irresponsibility
The correct answer here is 2 - antisocial personality disorder. Patients with this condition often fail to comply with social norms in terms of lawful behaviour resulting in multiple arrests. They are prone to getting into fights due to aggressiveness and can be deceitful particularly when seeking material gain. They can have a disregard for the safety of themselves and others and are irresponsible, failing

to support themselves financially. When they do act inappropriately or in a hurtful way to others, they are unable to show remorse for their actions. There is often a history of problems such as truancy in childhood. Their behaviour can have a significant impact on family life and so it is understandable that his mother may have blamed herself in the past and want more information. It is important to ensure that during this consultation confidentiality is not breached.

Patients with avoidant personality disorder tend to avoid social contact/relationships due to fear of being criticised, rejected or embarrassed. They view themselves as inferior to others and so are not keen to be involved unless they are certain of being liked. Hence this is not the correct answer.

Borderline personality disorder is characterised by emotional instability, impulsive behaviour and intense but unstable relationships with others. Patients often have feelings of emptiness, poor self-image and recurrent attempts at self-harm. Again making this an incorrect answer.

Narcissistic personality disorder is also incorrect. These patients have an over exaggerated perception of self-importance, lack empathy and tend to have a sense of entitlement.

Histrionic personality disorder is seen in patients who crave to be the centre of attention. They can also be sexually inappropriate and suggestible and as such, this is not the correct answer.

Please see Q-6 for Personality Disorders

Q-8

A 34-year-old female has been suffering from depression for the past 3-years and is managed with sertraline and psychological interventions. During her most recent admission to the psychiatric intensive care unit, one of the nurses has noticed that she has been in a fairly fixed position for the past few hours and has not moved much. The patient does not appear agitated.

Which of the following would be an appropriate first-line treatment for the patient?

A. Quetiapine
B. Olanzapine
C. Risperidone
D. ECT
E. Haloperidol

ANSWER:
ECT

EXPLANATION:
NICE suggest ECT is indicated for catatonic patients
The most appropriate treatment option in the list above is ECT (electroconvulsive therapy).

It would also be appropriate to administer a 2nd or 3rd generation anti-depressant such as fluoxetine or citalopram.

Anti-psychotics (such as olanzapine, quetiapine, risperidone, and haloperidol) are only indicated as an adjunct medication in some patients. It is not first-line for catatonia.

ELECTROCONVULSIVE THERAPY
Electroconvulsive therapy is a useful treatment option for patients with severe depression refractory to medication or those with psychotic symptoms. The only absolute contraindications is raised intracranial pressure.

Short-term side-effects
- headache
- nausea
- short term memory impairment
- memory loss of events prior to ECT
- cardiac arrhythmia

Long-term side-effects
- some patients report impaired memory

Q-9

A patient with a history of depression presents for review. Which one of the following suggests an increased risk of suicide?

A. Being 25-years-old
B. History of arm cutting
C. Being married
D. Female sex
E. Having a busy job

ANSWER:
History of arm cutting

EXPLANATION:
Whilst arm cutting may sometimes be characterised as attention-seeking or 'releasing the pain' studies show that any history of deliberate self harm significantly increases the risk of suicide. Employment is a protective factor

SUICIDE: RISK FACTORS
The risk stratification of psychiatric patients into 'high', 'medium' or 'low risk' is common in clinical practice. Questions based on a patient's suicide risk are therefore often seen. However, it should be noted that there is a paucity of evidence addressing the positive predictive value of individual risk factors. An interesting review in the BMJ (BMJ 2017;359:j4627) concluded that 'there is no evidence that these assessments can usefully guide decision making' and noted that 50% of suicides occur in patients deemed 'low risk'.

Whilst the evidence base is relatively weak, there are a number of factors shown to be associated with an increased risk of suicide

- male sex (hazard ratio (HR) approximately 2.0)
- history of deliberate self-harm (HR 1.7)
- alcohol or drug misuse (HR 1.6)
- history of mental illness (depression, schizophrenia)
- history of chronic disease
- advancing age
- unemployment or social isolation/living alone
- being unmarried, divorced or widowed

If a patient has actually attempted suicide, there are a number of factors associated with an increased risk of completed suicide at a future date:

- efforts to avoid discovery
- planning
- leaving a written note
- final acts such as sorting out finances
- violent method

Protective factors

There are, of course, factors which reduce the risk of a patient committing suicide. These include

- family support
- having children at home
- religious belief

Q-10

A 45-year-old man is admitted due to haematemesis. He reports drinking 120 units of alcohol a week. When is the peak incidence of seizures following alcohol withdrawal?

A. 2 hours
B. 6 hours
C. 12 hours
D. 24 hours
E. 36 hours

ANSWER:
36 hours

EXPLANATION:
Alcohol withdrawal

- ***symptoms: 6-12 hours***
- ***seizures: 36 hours***
- ***delirium tremens: 72 hours***

ALCOHOL WITHDRAWAL

Mechanism

- chronic alcohol consumption enhances GABA mediated inhibition in the CNS (similar to benzodiazepines) and inhibits NMDA-type glutamate receptors
- alcohol withdrawal is thought to be lead to the opposite (decreased inhibitory GABA and increased NMDA glutamate transmission)

Features

- symptoms start at 6-12 hours: tremor, sweating, tachycardia, anxiety
- peak incidence of seizures at 36 hours
- peak incidence of delirium tremens is at 48-72 hours: coarse tremor, confusion, delusions, auditory and visual hallucinations, fever, tachycardia

Management

- first-line: benzodiazepines e.g. chlordiazepoxide. Typically given as part of a reducing dose protocol
- carbamazepine also effective in treatment of alcohol withdrawal
- phenytoin is said not to be as effective in the treatment of alcohol withdrawal seizures

Q-11

You are considering prescribing a tricyclic antidepressant for a patient who has not responded to two different types of selective serotonin reuptake inhibitors. Which one of the following tricyclic antidepressants is most dangerous in overdose?

A. Dosulepin
B. Imipramine
C. Clomipramine
D. Nortriptyline
E. Lofepramine

ANSWER:
Dosulepin

EXPLANATION:
Dosulepin - avoid as dangerous in overdose

TRICYCLIC ANTIDEPRESSANTS

Tricyclic antidepressants (TCAs) are used less commonly now for depression due to their side-effects and toxicity in overdose. They are however used widely in the treatment of neuropathic pain, where smaller doses are typically required.

Common side-effects

- drowsiness
- dry mouth
- blurred vision
- constipation
- urinary retention

Choice of tricyclic

- low-dose amitriptyline is commonly used in the management of neuropathic pain and the prophylaxis of headache (both tension and migraine)
- lofepramine has a lower incidence of toxicity in overdose
- amitriptyline and dosulepin (dothiepin) are considered the most dangerous in overdose

More sedative	Less sedative
Amitriptyline Clomipramine Dosulepin Trazodone*	Imipramine Lofepramine Nortriptyline

*trazodone is technically a 'tricyclic-related antidepressant'

Q-12

A 72-year-old man who is having trouble sleeping is prescribed temazepam. What is the mechanism of action of temazepam?

A. Inhibits the effect of acetylcholine
B. Enhances the effect of gamma-aminobutyric acid
C. Inhibits the effect gamma-aminobutyric acid
D. Inhibits the effect of glutamate
E. Inhibits the effect of noradrenaline

ANSWER:
Enhances the effect of gamma-aminobutyric acid

EXPLANATION:
Benzodiazepines enhance the effect of GABA, the main inhibitory neurotransmitter

BENZODIAZEPINES
Benzodiazepines enhance the effect of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA) by increasing the frequency of chloride channels. They therefore are used for a variety of purposes:

- sedation
- hypnotic
- anxiolytic
- anticonvulsant
- muscle relaxant

Patients commonly develop a tolerance and dependence to benzodiazepines and care should therefore be exercised on prescribing these drugs. The Committee on Safety of Medicines advises that benzodiazepines are only prescribed for a short period of time (2-4 weeks).

The BNF gives advice on how to withdraw a benzodiazepine. The dose should be withdrawn in steps of about 1/8 (range 1/10 to 1/4) of the daily dose every fortnight. A suggested protocol for patients experiencing difficulty is given:

- switch patients to the equivalent dose of diazepam
- reduce dose of diazepam every 2-3 weeks in steps of 2 or 2.5 mg
- time needed for withdrawal can vary from 4 weeks to a year or more

If patients withdraw too quickly from benzodiazepines they may experience benzodiazepine withdrawal syndrome, a condition very similar to alcohol withdrawal syndrome. This may occur up to 3 weeks after stopping a long-acting drug. Features include:

- insomnia
- irritability
- anxiety
- tremor
- loss of appetite
- tinnitus
- perspiration
- perceptual disturbances
- seizures

$GABA_A$ drugs

- benzodiazipines increase the **frequency** of chloride channels
- barbiturates increase the **duration** of chloride channel opening

Frequently **Ben**d - **Dur**ing **Barb**eque

...or...

Barbi**durat**es increase **durat**ion & **Fre**ndodiazepines increase **fre**quency

Q-13

A 93-year-old female patient on the ward is brought to your attention by the nurses. They are concerned she is experiencing visual hallucinations. She was admitted following a decline in mobility that was thought to be secondary to a urinary tract infection (UTI). She has improved clinically and biochemically during her time on the ward and she is awaiting a increase package of care before discharge.

You review the patient who tells you she earlier saw very small children running across the end of the bed. She reports she regularly sees similar images at home and has done so for many years. She has a background of hypertension, depression and age-related macular degeneration. What is the most appropriate step in this patient's management?

A. Reassure the patient
B. Urgent psychiatric evaluation
C. Consider treatment failure of her UTI
D. Prescribe 40mg of chlordiazepoxide
E. Consider commencing an antidepressant

ANSWER:
Reassure the patient

EXPLANATION:
This most likely represents Charles Bonnet syndrome. Reassurance is usually the best treatment, helping people to understand and come to terms with their hallucinations. It is importance to ensure there is not an alternative cause e.g. infection, psychosis, dementia (particularly Lewy body dementia), intoxication, metabolic abnormalities, focal neurological illness.

CHARLES-BONNET SYNDROME
Charles-Bonnet syndrome (CBS) is characterised by persistent or recurrent complex hallucinations (usually visual or auditory), occurring in clear consciousness. This is generally against a background of visual impairment (although visual

impairment is not mandatory for a diagnosis). Insight is usually preserved. This must occur in the absence of any other significant neuropsychiatric disturbance.

Risk factors include:
- Advanced age
- Peripheral visual impairment
- Social isolation
- Sensory deprivation
- Early cognitive impairment

CBS is equally distributed between sexes and does not show any familial predisposition. The most common ophthalmological conditions associated with this syndrome are age-related macular degeneration, followed by glaucoma and cataract.

Well-formed complex visual hallucinations are thought to occur in 10-30 percent of individuals with severe visual impairment. Prevalence of CBS in visually impaired people is thought to be between 11 and 15 percent.

Around a third find the hallucinations themselves an unpleasant or disturbing experience. In a large study published in the British Journal of Ophthalmology, 88% had CBS for 2 years or more, resolving in only 25% at 9 years (thus it is not generally a transient experience).

Q-14

A 24-year-old male is admitted to the Emergency Department complaining of severe abdominal pain. On examination he is shivering and rolling around the trolley. He has previously been investigated for abdominal pain and no cause has been found. He states that unless he is given morphine for the pain he will kill himself. This is an example of:

A. Hypochondrial disorder
B. Conversion disorder
C. Malingering
D. Munchausen's syndrome
E. Somatisation disorder

ANSWER:
Malingering

EXPLANATION:
This is difficult as the patient may well be an opiate abuser who is withdrawing. However, given the above options the most appropriate term to use is malingering as the patient is reporting symptoms with the deliberate intention of getting morphine

UNEXPLAINED SYMPTOMS
There are a wide variety of psychiatric terms for patients who have symptoms for which no organic cause can be found:

Somatisation disorder
- multiple physical SYMPTOMS present for at least 2 years
- patient refuses to accept reassurance or negative test results

Hypochondrial disorder
- persistent belief in the presence of an underlying serious DISEASE, e.g. cancer
- patient again refuses to accept reassurance or negative test results

Conversion disorder
- typically involves loss of motor or sensory function
- the patient doesn't consciously feign the symptoms (factitious disorder) or seek material gain (malingering)
- patients may be indifferent to their apparent disorder - la belle indifference - although this has not been backed up by some studies

Dissociative disorder
- dissociation is a process of 'separating off' certain memories from normal consciousness
- in contrast to conversion disorder involves psychiatric symptoms e.g. Amnesia, fugue, stupor
- dissociative identity disorder (DID) is the new term for multiple personality disorder as is the most severe form of dissociative disorder

Munchausen's syndrome
- also known as factitious disorder
- the intentional production of physical or psychological symptoms

Malingering
- fraudulent simulation or exaggeration of symptoms with the intention of financial or other gain

Q-15

A 60-year-old male is admitted to the in-patient psychiatric unit last night. On reviewing him this morning, he is a poor historian, answering most questions minimally and stating he does not need to be here as he is deceased, and hospitals should be for living patients.

What is the name of this delusional disorder and which condition is it most commonly associated with?

A. De Clerambault's syndrome and Major Depressive Disorder
B. Cotard syndrome and Major Depressive Disorder
C. Othello syndrome and Paranoid Schizophrenia
D. Capgras delusion and Dementia
E. Charles de Bonnet syndrome and Bipolar Disorder

ANSWER:
Cotard syndrome and Major Depressive Disorder

EXPLANATION:

Cotard syndrome is associated with severe depression
This patient is presenting with Cotard's syndrome, a rare subtype of nihilistic delusions, in which they believe they or part of them is dead or does not exist. This is seen most commonly in severe depression, but is also associated with schizophrenia.

COTARD SYNDROME

Cotard syndrome is a rare mental disorder where the affected patient believes that they (or in some cases just a part of their body) is either dead or non-existent. This delusion is often difficult to treat and can result in significant problems due to patients stopping eating or drinking as they deem it not necessary.

Cotard syndrome is associated with severe depression and psychotic disorders.

Q-16

An 88-year-old woman is brought to her GP by her daughter because of new memory problems. She did not want to attend as she is worried about her memory and does not want to be diagnosed with dementia. She scores 12 out of 30 on a mini-mental state exam.

Her memory is globally impaired with failure to retain new information as well as failure to remember important events from her life. Her daughter reports this has been the case for the past two months and she was previously fine and had no cognitive concerns. Her daughter also reports she is struggling with sleep and her appetite has reduced significantly in this time although the patient does not think this is the case.

What is the most likely cause of her memory impairment?

A. Alzheimer's disease
B. Chronic small vessel ischaemia
C. Lewy body disease
D. Acute delirium
E. Depression

ANSWER:

Depression

EXPLANATION:

Severe depression can mimic dementia but gives a pattern of global memory loss rather than short-term memory loss - this is called pseudodementia
It can often be difficult to ascertain the cause of memory impairment off a single encounter but there are three main causes to consider:

- ***A dementia process.***
- ***An acute delirium.***
- ***Depression (also called pseudodementia).***

The key features here which indicate it is not a dementia process are the short length of time (less than six months) and global memory loss. The biological symptoms of poor sleep and loss of appetite as well as worry about memory would also not fit with a dementia process. You would expect an early stage dementia patient to remember significant life events which occurred many years earlier as the first memory issues that occur are usually related to loss of short-term memory and inability to remember new things.

Depression can produce a dementia-like picture in a very short time period in the elderly and for this reason it is sometimes known as pseudo-dementia.

DEPRESSION VS. DEMENTIA

Factors suggesting diagnosis of depression over dementia

- short history, rapid onset
- biological symptoms e.g. weight loss, sleep disturbance
- patient worried about poor memory
- reluctant to take tests, disappointed with results
- mini-mental test score: variable
- global memory loss (dementia characteristically causes recent memory loss)

Q-17

You are considering prescribing a selective serotonin reuptake inhibitor for a patient with depression. Which class of drug is most likely to interact with a selective serotonin reuptake inhibitor?

A. Beta-blocker
B. Thiazolidinediones
C. Tetracycline
D. Statin
E. Triptan

ANSWER:

Triptan

EXPLANATION:

SELECTIVE SEROTONIN REUPTAKE INHIBITORS

Selective serotonin reuptake inhibitors (SSRIs) are considered first-line treatment for the majority of patients with depression.

- citalopram (although see below re: QT interval) and fluoxetine are currently the preferred SSRIs
- sertraline is useful post myocardial infarction as there is more evidence for its safe use in this situation than other antidepressants
- SSRIs should be used with caution in children and adolescents. Fluoxetine is the drug of choice when an antidepressant is indicated

Adverse effects

- gastrointestinal symptoms are the most common side-effect

- there is an increased risk of gastrointestinal bleeding in patients taking SSRIs. A proton pump inhibitor should be prescribed if a patient is also taking a NSAID
- patients should be counselled to be vigilant for increased anxiety and agitation after starting a SSRI
- fluoxetine and paroxetine have a higher propensity for drug interactions

Citalopram and the QT interval
- the Medicines and Healthcare products Regulatory Agency (MHRA) released a warning on the use of citalopram in 2011
- it advised that citalopram and escitalopram are associated with dose-dependent QT interval prolongation and should not be used in those with: congenital long QT syndrome; known pre-existing QT interval prolongation; or in combination with other medicines that prolong the QT interval
- the maximum daily dose is now 40 mg for adults; 20 mg for patients older than 65 years; and 20 mg for those with hepatic impairment

Interactions
- NSAIDs: NICE guidelines advise 'do not normally offer SSRIs', but if given co-prescribe a proton pump inhibitor
- warfarin / heparin: NICE guidelines recommend avoiding SSRIs and considering mirtazapine
- aspirin: see above
- triptans: avoid SSRIs

Following the initiation of antidepressant therapy patients should normally be reviewed by a doctor after 2 weeks. For patients under the age of 30 years or at increased risk of suicide they should be reviewed after 1 week. If a patient makes a good response to antidepressant therapy they should continue on treatment for at least 6 months after remission as this reduces the risk of relapse.

When stopping a SSRI the dose should be gradually reduced over a 4 week period (this is not necessary with fluoxetine). Paroxetine has a higher incidence of discontinuation symptoms.

Discontinuation symptoms
- increased mood change
- restlessness
- difficulty sleeping
- unsteadiness
- sweating
- gastrointestinal symptoms: pain, cramping, diarrhoea, vomiting
- paraesthesia

SSRIs and pregnancy
- BNF says to weigh up benefits and risk when deciding whether to use in pregnancy.
- Use during the first trimester gives a small increased risk of congenital heart defects
- Use during the third trimester can result in persistent pulmonary hypertension of the newborn
- Paroxetine has an increased risk of congenital malformations, particularly in the first trimester

Q-18

A 16-year-old girl is brought for review by her father. She is talented violinist and is due to start music college in a few weeks time. Her parents are concerned she has had a stroke as she is reporting weakness on her right side. Neurological examination is inconsistent and you suspect a non-organic cause for her symptoms. Despite reassurance about the normal examination findings the girl remains unable to move her right arm. What is the most appropriate term for this behaviour?

A. Hypochondrial disorder
B. Munchausen's syndrome
C. Somatisation disorder
D. Conversion disorder
E. Munchausen's-by-proxy syndrome

ANSWER:
Conversion disorder

EXPLANATION:
This is a typical conversion disorder. There may be underlying tension regarding her musical career which be manifesting itself as apparent limb weakness.

Please see Q-14 for Unexplained Symptoms

Q-19

The risk of developing schizophrenia if one monozygotic twin is affected is approximately:

A. 10%
B. 20%
C. 50%
D. 75%
E. > 95%

ANSWER:
50%

EXPLANATION:
SCHIZOPHRENIA: EPIDEMIOLOGY
The strongest risk factor for developing a psychotic disorder (including schizophrenia) is family history. Having a parent with schizophrenia leads to a relative risk (RR) of 7.5.

Risk of developing schizophrenia
- monozygotic twin has schizophrenia = 50%
- parent has schizophrenia = 10-15%
- sibling has schizophrenia = 10%
- no relatives with schizophrenia = 1%

Other selected risk factors for psychotic disorders include:

- Black Caribbean ethnicity - RR 5.4
- Migration - RR 2.9
- Urban environment- RR 2.4
- Cannabis use - RR 1.4

Q-20

A 36-year-old patient presents with nausea, headaches and palpitations. He has had multiple previous admissions with such symptoms over the past 2 years, each time no organic cause was found. What kind of disorder is this likely to represent?

A. Munchausen's syndrome
B. Hypochondrial disorder
C. Somatisation disorder
D. Conversion disorder
E. Dissociative disorder

ANSWER:
Somatisation disorder

EXPLANATION:
Please see Q-14 for Unexplained Symptoms

Q-21

A patient presents three days after suddenly stopping diazepam after having taken it for over two years. He feels generally unwell. Which one of the following features would suggest a diagnosis other than benzodiazepine withdrawal syndrome?

A. Hypothermia
B. Loss of appetite
C. Tinnitus
D. Perceptual disturbances
E. Perspiration

ANSWER:
Hypothermia

EXPLANATION:
Hypothermia is not a feature of benzodiazepine withdrawal syndrome.

Please see Q-12 for Benzodiazepines

Q-22

A 19-year-old woman presents to the Emergency department having taken an overdose of 40x500mg paracetamol tablets and 400ml of vodka. She took the overdose because her boyfriend is going away for 2 weeks on a course and she fears abandonment. This is her 4th attendance with an overdose over the past 3 years. She is also known to the police after an episode of reckless driving / road rage. On arrival in the unit she is tearful and upset, and tells you she did it because her boyfriend is leaving her. Vital signs and general physical examination are normal apart from evidence of cutting her arms. She is given activated charcoal. Which of the following is the most likely diagnosis?

A. Bipolar disorder
B. Anti-social personality disorder
C. Borderline personality disorder
D. Endogenous depression
E. Drug induced psychosis

ANSWER:
Borderline personality disorder

EXPLANATION:
Borderline personality disorder is marked out by instability in moods, behaviour and relationships.

Diagnosis is confirmed by the presence of at least 5 of the following symptoms;

1) Extreme reactionsincluding panic, depression, rage, or frantic actionsto abandonment, whether real or perceived

2) A pattern of intense and stormy relationships with family, friends, and loved ones, often veering from extreme closeness and love to extreme dislike or anger

3) Distorted and unstable self-image or sense of self, which can result in sudden changes in feelings, opinions, values, or plans and goals for the future (such as school or career choices)

4) Impulsive and often dangerous behaviours, such as spending sprees, unsafe sex, substance abuse, reckless driving, and binge eating

5) Recurring suicidal behaviours or threats or self-harming behaviour, such as cutting
Intense and highly changeable moods, with each episode lasting from a few hours to a few days

6) Chronic feelings of emptiness and/or boredom

7) Inappropriate, intense anger or problems controlling anger

8) Having stress-related paranoid thoughts or severe dissociative symptoms, such as feeling cut off from oneself, observing oneself from outside the body, or losing touch with reality.

There are no features consistent with endogenous depression, such as early morning wakening or loss of appetite, and no features consistent with hypomania such as pressure of speech, flight of ideas, or over exuberant behaviour. We are given no indication of drug abuse which

may indicate drug induced psychosis. Anti-social personality disorder is characterised by a failure to conform to social norms, and repeated law breaking. There is consistent irresponsibility, impulsivity and disregard for both their own safety and that of others.

Please see Q-6 for Personality Disorders

Q-23

A 23-year-old man presents as he is concerned about a number of recent episodes related to sleep. He finds when he wakes up and less often when he is falling asleep he is 'paralysed' and unable to move. This sometimes associated with what the patient describes as 'hallucinations' such as seeing another person in the room. He is becoming increasingly anxious about these recent episodes. What is the most likely diagnosis?

A. Frontal lobe epilepsy
B. Generalised anxiety disorder
C. Sleep paralysis
D. Night terrors
E. Acute schizophrenia

ANSWER:
Sleep paralysis

EXPLANATION:
SLEEP PARALYSIS
Sleep paralysis is a common condition characterized by transient paralysis of skeletal muscles which occurs when awakening from sleep or less often while falling asleep. It is thought to be related to the paralysis that occurs as a natural part of REM (rapid eye movement) sleep. Sleep paralysis is recognised in a wide variety of cultures

Features
- paralysis - this occurs after waking up or shortly before falling asleep
- hallucinations - images or speaking that appear during the paralysis

Management
- if troublesome clonazepam may be used

Q-24

A 58-year-old lady presents to her GP concerned her partner is being unfaithful. She appears very distressed by this yet after further questioning does not appear to have any evidence to support her claims, yet she is convinced she is right. What might this concern be a symptom of?

A. Capgras' delusion
B. Grandiose delusion
C. de Clérambault's syndrome
D. Othello's syndrome
E. Charles Bonnet syndrome

De Clérambault's syndrome also called erotomania is a delusional belief that someone else is in love with the patient. Charles Bonnet syndrome is the experience of complex visual hallucinations in patients with partial or severe blindness.

ANSWER:
Othello's syndrome

EXPLANATION:
OTHELLO'S SYNDROME
Othello's syndrome is pathological jealousy where a person is convinced their partner is cheating on them without any real proof. This is accompanied by socially unacceptable behaviour linked to these claims.

Q-25

You are looking after a 36-year-old female patient on the ward when you become concerned regarding her behavior towards you. She has made a number of sexually inappropriate comments and on your last review she was wearing seductive underwear. She is often disruptive on the ward making a scene and easily encouraged by other patients. Your consultant advises you to avoid seeing the patient on her own and that he is aware the patient has a personality disorder.

What is her most likely diagnosis?

A. Histrionic personality disorder
B. Schizoid personality disorder
C. Schizotypal personality disorder
D. Antisocial personality disorder
E. Borderline personality disorder

ANSWER:
Histrionic personality disorder

EXPLANATION:
Histrionic personality disorder is characterised by inappropriate sexual seductiveness, suggestibility and intense relationships
The correct answer is 1 - histrionic personality disorder. This condition is seen in patients who crave being the center of attention, can be sexually inappropriate in behavior or appearance and are highly suggestible. They can develop intense relationships but at other times read more into the intimacy of a relationship that is actually there.

Option 2 is incorrect. Patients with schizoid personality disorder tend to have a lack of interest in sexual interactions making this an unlikely diagnosis based on the patient in question. They are often cold and lack close friendships, preferring to spend time alone.

Patients with schizotypal personality disorder can have odd/eccentric beliefs or behavior. Similarly to the patient in

this question they can be inappropriate however struggle to make friends and can be paranoid/suspicious making this less likely the correct answer.

Patients with antisocial personality disorder often fail to comply to social norms in terms of lawful behavior resulting in multiple arrests. They are prone to getting into fights due to aggressiveness and can be deceitful particularly when seeking material gain. They can have a disregard for safety and lack remorse. This does not describe the patient in the stem.

Option 5 is also incorrect, borderline personality disorder is characterised by emotional instability, impulsive behavior, feelings of emptiness and recurrent attempts at self harm. Similarly to histrionic personality disorder they also have intense relationships however these are often unstable.

Please see Q-6 for Personality Disorders

Q-26

A 33-year-old female is brought to the GP by her concerned mother. The patient reports that the prime minister is secretly in love with her, despite her mother protesting there has never been any contact between them. Which psychiatric disorder does this fit with?

A. Couvade syndrome
B. Bouffée délirante
C. Fregoli delusion
D. Capgras delusion
E. De Clerambault's syndrome

ANSWER:
De Clerambault's syndrome

EXPLANATION:
Bouffée délirante is an acute psychotic disorder in which hallucinations, delusions or perceptual disturbances are obvious but markedly variable, changing from day to day or even from hour to hour.

Fregoli delusion is the mistaken belief that some person currently present in the deluded person's environment (typically a stranger) is a familiar person in disguise.

Capgras delusion is the belief that significant others have been replaced by impostors, robots or aliens.

Couvade is the common but poorly understood phenomenon whereby the expectant father experiences somatic symptoms during the pregnancy for which there is no recognised physiological basis.

DE CLERAMBAULT'S SYNDROME
De Clerambault's syndrome, also known as erotomania, is a form of paranoid delusion with an amorous quality. The patient, often a single woman, believes that a famous person is in love with her.

Q-27

A 26-year-old female presents to the Emergency Department feeling suicidal after the breakdown of her relationship two weeks ago. She reports being fearful of being on her own as he had made all major decisions in their relationship as she is not capable of making correct choices. She has tried online dating since her relationship broke down but despite multiple dates has not yet found a new partner.

She advises you she was previously diagnosed with a personality disorder. What is the most likely diagnosis?

A. Borderline personality disorder
B. Paranoid personality disorder
C. Narcissistic personality disorder
D. Dependent personality disorder
E. Avoidant personality disorder

ANSWER:
Dependent personality disorder

EXPLANATION:
Patients with dependant personality disorder require excessive reassurance from others, seek out relationships and require others to take responsibility for major life decisions
The correct answer is dependent personality disorder. The patient in the question is struggling to cope after the breakdown of a relationship. Patients with this personality disorder struggle to make everyday life decisions and require reassurance and support from others. They feel they are unable to look after themselves and become fearful when left to do so. As in this patient whose relationship only broke down 2 weeks ago but has already been on multiple dates, they cope best when in a relationship and urgently seek out new relationships if one fails. They will often passively comply with the wishes of others.

Borderline personality disorder is characterised by emotional instability, impulsive behaviour and intense but unstable relationships with others. Patients often fear abandonment but do not seek out excessive reassurance and are able to make life decisions making this the incorrect answer.

In contrast to dependent personality disorder, paranoid personality disorder presents in patients who are reluctant to confide in others, question the loyalty of friends and family and can be unforgiving.

Narcissistic personality disorder is incorrect. These patients have an over-exaggerated sense of self-importance, lack empathy and tend to have a sense of entitlement.

Avoidant personality disorder is different from dependent personality disorder in that patients avoid social contact/relationships due to fear of being criticised, rejected or embarrassed. Patients view themselves as inferior to others and so are not keen to be involved unless they are certain of being liked.

Please see Q-6 for Personality Disorders

Q-28

An 84-year-old female has been an inpatient in a psychiatric ward for the past 6 months with a fixed belief that her insides are rotting as she is deceased.

This type of delusion is known as which of the following?

A. Cotard delusion
B. Othello delusion
C. De Clerambault syndrome
D. Ekbom syndrome
E. Capgras delusion

ANSWER:
Cotard delusion

EXPLANATION:
Othello syndrome is a delusional belief that a patients partner is committing infidelity despite no evidence of this. It can often result in violence and controlling behaviour.

De Clerambault syndrome (otherwise known as erotomania), is where a patient believes that a person of a higher social or professional standing is in love with them. Often this presents with people who believe celebrities are in love with them.

Ekbom syndrome is also known as delusional parasitosis and is the belief that they are infected with parasites or have 'bugs' under their skin. This can vary from the classic psychosis symptoms in narcotic use where the user can 'see' bugs crawling under their skin or can be a patient who believes that they are infested with snakes.

Capgras delusion is the belief that friends or family members have been replaced by an identical looking imposter.

Please see Q-15 for Cotard Syndrome

Q-29

A patient you are looking after is started on imipramine for depression. Which combination of side-effects is most likely to be seen in a patient taking this class of antidepressants?

A. Dry mouth + urinary frequency
B. Hypertension + sweating
C. Gastrointestinal bleeding + dyspepsia
D. Headache + myoclonus
E. Blurred vision + dry mouth

ANSWER:
Blurred vision + dry mouth

EXPLANATION:
These antimuscarinic side-effects are more common with imipramine than other types of tricyclic antidepressants.

Please see Q-11 for Tricyclic Antidepressants

Q-30

The sister of a 34-year-old man comes to see you in clinic as she is worried her brother may have a personality disorder. She reports her brother has always had a heightened opinion of himself and often expresses delusional thoughts regarding his potential for success as a banker believing he is capable of making millions. He does not seem perturbed by bringing others down in the process and appears pleased when he talks of others failures. She remembers he behaved similarly when they were growing up and was unsympathetic towards her when she had to resit her finals due to ill health.

What personality disorder is she describing?

A. Antisocial personality disorder
B. Schizoid personality disorder
C. Schizotypal personality disorder
D. Borderline personality disorder
E. Narcissistic personality disorder

ANSWER:
Narcissistic personality disorder

EXPLANATION:
Narcisstic personalities lack empathy, have a sense of entitlement and take advantage of others to achieve their own need
The correct answer is narcissistic personality disorder. Whilst her brother may not actually qualify for having a personality disorder if his behaviour does not cause him personal distress or prevent him functioning socially, many of these features are seen in narcissistic behaviour. These patients have a heightened impression of self-importance and entitlement often believing they have unlimited abilities to succeed, become powerful or look beautiful. Additionally, they lack empathy and will happily take advantage of others to achieve their own need. In keeping with many personality disorders his symptoms appear to have been present since childhood and into adult life.

Patients with antisocial personality disorder also lack empathy or feelings of guilt/remorse. Similarly to narcissistic personalities they can be deceitful when wanting to achieve their own need. However, in contrast to narcissists they often fail to comply with rules or laws resulting in criminal offences and are prone to getting into fights. As such the patient in the stem fits more closely with narcissistic personality disorder.

Patients with schizoid personality disorder tend to have a lack of interest in sexual interactions are cold and lack close friendships preferring to spend time alone. They are also

indifferent to praise making this unlikely to be the correct answer.

Option 3 is incorrect. Patients with schizotypal personality disorder can have odd/eccentric beliefs or behaviour. They can also struggle to make friends and can be paranoid/suspicious as opposed to lacking empathy or having a sense of entitlement.

Option 5 is also incorrect, borderline personality disorder is characterized by emotional instability, impulsive behaviour, feelings of emptiness and recurrent attempts at self-harm.

Please see Q-6 for Personality Disorders

Q-31

A 54-year-old man presents with a variety of physical symptoms that have been present for the past 9 years. Numerous investigations and review by a variety of specialties have indicated no organic basis for his symptoms. This is an example of:

A. Munchausen's syndrome
B. Hypochondrial disorder
C. Dissociative disorder
D. Somatisation disorder
E. Conversion disorder

ANSWER:
Somatisation disorder

EXPLANATION:
Unexplained symptoms
Somatisation = Symptoms
hypoChondria = Cancer

Somatisation disorder is the correct answer as the patient is concerned about persistent, unexplained symptoms rather than an underlying diagnosis such as cancer (hypochondrial disorder). Munchausen's syndrome describes the intentional production of symptoms, for example self poisoning

Q-32

Which one of the following side-effects is more common with atypical than conventional anti-psychotics?

A. Akathisia
B. Weight gain
C. Galactorrhoea
D. Parkinsonism
E. Tardive dyskinesia

ANSWER:
Weight gain

EXPLANATION:
Atypical antipsychotics commonly cause weight gain

Please see Q-1 for Atypical Antipsychotics

Q-33

A 23-year-old male presents to his GP two weeks after a road traffic accident concerned about increased anxiety levels, lethargy and headache. At the time he had a CT brain after banging his head on the steering wheel, which revealed no abnormality. Six months following this episode his symptoms have resolved. What did his original symptoms likely represent?

A. Conversion disorder
B. Post-traumatic stress disorder
C. Somatisation disorder
D. Generalised anxiety disorder
E. Post-concussion syndrome

ANSWER:
Post-concussion syndrome

EXPLANATION:
In post-traumatic stress disorder the onset of symptoms is usually delayed and it tends to run a prolonged course

POST-CONCUSSION SYNDROME
Post-concussion syndrome is seen after even minor head trauma

Typical features include
- headache
- fatigue
- anxiety/depression
- dizziness

Q-34

Enid, an 87-year-old lady, is experiencing disturbing visual hallucinations. She sees 'evil' looking faces on the walls and snakes and insects on the floor. She knows that these are not real. She has no auditory hallucinations. She is otherwise well. She has a history of hypertension, depression, hearing loss and macular degeneration. What is the most likely cause of her hallucinations?

A. Lewy body dementia
B. Psychotic depression
C. Acute psychosis
D. Charles Bonnet syndrome
E. Normal pressure hydrocephalus

ANSWER:
Charles Bonnet syndrome

EXPLANATION:

Charles-Bonnet syndrome causes unpleasant visual hallucinations in a third of sufferers
The cause of this lady's visual hallucinations is Charles Bonnet syndrome. Around a third of sufferers may experience disturbing or unpleasant hallucinations.

Lewy body dementia may involve visual hallucinations alongside fluctuating cognitive impairment, but in the absence of any current neuropsychiatric symptoms this makes this a less likely diagnosis.

Acute psychosis tends to involve auditory hallucinations associated with delusions.

Psychotic depression would usually involve severe symptoms of depression with the development of psychotic symptoms.

Normal pressure hydrocephalus does not usually involve visual hallucinations.

Please see Q-13 for Charles-Bonnet Syndrome

Q-35

A 18-year-old sprinter who is currently preparing for a national athletics meeting asks to see the team doctor due to an unusual sensation in his legs. He describes a numb sensation below his knee. On examination the patient there is apparent sensory loss below the right knee in a non-dermatomal distribution. The team doctor suspects a non-organic cause of his symptoms. This is an example of a:

A. Conversion disorder
B. Hypochondrial disorder
C. Somatisation disorder
D. Malingering
E. Munchausen's syndrome

ANSWER:
Conversion disorder

EXPLANATION:
Please see Q-14 for Unexplained Symptoms

Q-36

A 54-year-old man with a history of depression presents for review. He was started on fluoxetine eight weeks ago and is now requesting to stop his medication as he feels so well. What should be recommended regarding his treatment?

A. It should be stopped straight away
B. It should be continued for at least another 6 weeks
C. It should be continued for at least another 3 months
D. It should be continued for at least another 6 months
E. It should be continued for at least another 12 months

ANSWER:
It should be continued for at least another 6 months

EXPLANATION:
This greatly reduces the risk of relapse. Patients should be reassured that antidepressants are not addictive.

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-37

You review a 55-year-old woman who has become dependant on temazepam, which was initially prescribed as a hypnotic. She is keen to end her addiction to temazepam and asks for help. Her current dose is 20mg on. What is the most appropriate strategy?

A. Switch to the equivalent zopiclone dose then slowly withdraw over the next 2 weeks
B. Switch to the equivalent diazepam dose then slowly withdraw over the next 2 weeks
C. Switch to the equivalent zopiclone dose then slowly withdraw over the next 2 months
D. Switch to the equivalent chlordiazepoxide dose then slowly withdraw over the next 2 months
E. Switch to the equivalent diazepam dose then slowly withdraw over the next 2 months

ANSWER:
Switch to the equivalent diazepam dose then slowly withdraw over the next 2 months

EXPLANATION:
Please see Q-12 for Benzodiazepines

Q-38

Which one of the following intervention is most likely to be beneficial in a patient with schizophrenia?

A. Counselling
B. Supportive psychotherapy
C. Social skills training
D. Adherence therapy
E. Cognitive behavioural therapy

ANSWER:
Cognitive behavioural therapy

EXPLANATION:
SCHIZOPHRENIA: MANAGEMENT
NICE published guidelines on the management of schizophrenia in 2009.

Key points:

- oral atypical antipsychotics are first-line
- cognitive behavioural therapy should be offered to all patients
- close attention should be paid to cardiovascular risk-factor modification due to the high rates of cardiovascular disease in schizophrenic patients (linked to antipsychotic medication and high smoking rates)

Q-39

A 73-year-old male patient who lives alone presents with recurrent episodes of pleasant visual hallucinations but no clouding of consciousness or confusion. He tells you he knows the hallucinations are not real. He is normally fit and well with the exception of visual impairment.

Given the likely diagnosis, what ophthalmic condition is he most likely to suffer from?

A. Glaucoma
B. Diabetic retinopathy
C. Retinal detachment
D. Age-related macular degeneration
E. Cataract

ANSWER:
Age-related macular degeneration

EXPLANATION:
Age-related macular degeneration is associated with Charles-Bonnet syndrome
This patient has Charles-Bonnet syndrome (CBS) as evidenced by visual hallucinations with normal insight on a background of visual impairment. He also lives alone which could be another risk factor for CBS if this leads to him becoming socially isolated. 11-15% of patient with severe visual impairment are thought to have coexisting CBS and experience recurrent, persistent or episodic visual or auditory hallucinations. The most common ophthalmological condition associated with CBS is age-related macular degeneration and hence this is the correct answer.

Glaucoma and cataract are the next most common causes of visual impairment associated with CBS. CBS can, however, occur in any ophthalmic condition making 1,2,3 and 5 all possible but less common causes than age-related macular degeneration.

It is important to note that the hallucinations are related to failing eyesight and are not a sign of an underlying psychiatric condition.

Please see Q-13 for Charles-Bonnet Syndrome

Q-40

A 25-year-old man demands a CT scan of his abdomen in clinic. He states it is 'obvious' he has cancer despite previous negative investigations. This is an example of a:

A. Hypochondrial disorder
B. Conversion disorder
C. Munchausen's syndrome
D. Dissociative disorder
E. Somatisation disorder

ANSWER:
Hypochondrial disorder

EXPLANATION:
Unexplained symptoms
Somatisation = Symptoms
hypoChondria = Cancer

Please see Q-14 for Unexplained Symptoms

Q-41

A 84-year-old female attends clinic with her daughter. She has a past medical history of hypertension and a fractured neck of femur six months ago. Her daughter reports over the last few months she has become highly preoccupied with her blood pressure and diet measuring her blood pressure multiple times per day. Her daughter feels that her concerns over her physical health are affecting her mood. She becomes easily agitated and often snaps at her daughter. The patient denies any problems with her memory or mood but does report difficulty in getting to sleep.

What is the most likely diagnosis?

A. Alzheimers' disease
B. Lewy body dementia
C. Depression
D. Vascular dementia
E. Hypochondriasis

ANSWER:
Depression

EXPLANATION:
Elderly patients with depression are less likely to complain of low mood and instead may present with health anxiety, agitation and sleep disturbance
Depression in elderly patients can be challenging to diagnose and less commonly presents with low mood or classical features of depression. Patients often present with health anxiety, poor sleep and agitation as in the question here making 3 the most correct answer. Her recent hip fracture and subsequent hospitalisation may have acted as a trigger of the low mood.

The patient does not report any memory problems and there is nothing else in the history to suggest significant memory impairment or Parkinson's like symptoms. Whilst vascular dementia can present with a change in personality there is no suggestion of altered executive function or confusion and hypertension is her only vascular risk factor. As such 1,2 and 4 are less likely than depression given the history. Memory problems should however be ruled out with a MMSE as patients will often not report concerns with their memory and depression can be associated with memory impairment.

There are features of health anxiety or hypochondriasis in this stem, however together with agitation and poor sleep, depression is a more likely answer.

DEPRESSION IN OLDER PEOPLE
Older patients are less likely to complain of depressed mood

Features
- physical complaints (e.g. hypochondriasis)
- agitation
- insomnia

Management
SSRIs are first line (adverse side-effect profile of TCAs more of an issue in the elderly)

Q-42

A woman who gave birth 5 days ago presents for review as she is concerned about her mood. She is having difficulty sleeping and feels generally anxious and tearful. Since giving birth she has also found herself snapping at her husband. This is her first pregnancy, she is not breast feeding and there is no history of mental health disorders in the past. What is the most appropriate management?

A. Explanation and reassurance
B. Cognitive behavioural therapy
C. Trial of fluoxetine
D. Trial of citalopram
E. Discuss with psychiatric team to consider admission to mother and baby unit

ANSWER:
Explanation and reassurance

EXPLANATION:
This woman has the baby-blues which is seen in around two-thirds of women. Whilst poor sleeping can be a sign of depression it is to be expected with a new baby!

POST-PARTUM MENTAL HEALTH PROBLEMS
Post-partum mental health problems range from the 'baby-blues' to puerperal psychosis.

The **Edinburgh Postnatal Depression Scale** may be used to screen for depression:
- 10-item questionnaire, with a maximum score of 30
- indicates how the mother has felt over the previous week
- score > 13 indicates a 'depressive illness of varying severity'
- sensitivity and specificity > 90%
- includes a question about self-harm

'Baby-blues'	Postnatal depression	Puerperal psychosis
Seen in around 60-70% of women Typically seen 3-7 days following birth and is more common in primips	Affects around 10% of women Most cases start within a month and typically peaks at 3 months Features are similar to depression seen in other circumstances	Affects approximately 0.2% of women Onset usually within the first 2-3 weeks following birth Features include severe swings in mood (similar to bipolar disorder) and disordered perception (e.g. auditory hallucinations)
Reassurance and support, the health visitor has a key role	As with the baby blues reassurance and support are important Cognitive behavioural therapy may be beneficial. Certain SSRIs such as sertraline and paroxetine* may be used if symptoms are severe** - whilst they are secreted in breast milk it is not thought to be harmful to the infant	Admission to hospital is usually required There is around a 20% risk of recurrence following future pregnancies

*paroxetine is recommended by SIGN because of the low milk/plasma ratio
**fluoxetine is best avoided due to a long half-life

Q-43

Which of the following types of tricyclic antidepressant is considered the safest in overdosage?

A. Nortriptyline
B. Imipramine
C. Dosulepin
D. Lofepramine
E. Clomipramine

Lofepramine - the safest TCA in overdosage

ANSWER:
Lofepramine

EXPLANATION:
Please see Q-11 for Tricyclic Antidepressants

Q-44

A 65-year-old female with a history of ischaemic heart disease is noted to be depressed following a recent myocardial infarction. What would be the most appropriate antidepressant to start?

A. Paroxetine
B. Imipramine
C. Flupentixol
D. Venlafaxine
E. Sertraline

ANSWER:
Sertraline

EXPLANATION:

Sertraline is the preferred antidepressant following a myocardial infarction as there is more evidence for its safe use in this situation than other antidepressants

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-45

A 24-year-old man tells you he is unable to go outside without first sanitizing the door handle in a certain way. He also washes his hands before and after he leaves the house. He goes on to explain that if he doesn't do these things in a certain order he gets very anxious and uptight.

This has been going on for two years and is upsetting him deeply.

What is the most appropriate treatment for the likely diagnosis?

A. Eye Movement Desensitization and Reprocessing Therapy (EMDR)
B. Trauma-focused CBT
C. Olanzapine
D. Dialectical behaviour therapy (DBT)
E. Exposure-response prevention (ERP) therapy

ANSWER:

Exposure-response prevention (ERP) therapy

EXPLANATION:

An obsession is an intrusive, unpleasant and unwanted thought. A compulsion is a senseless action taken to reduce the anxiety caused by the obsession
This question requires you to identify the symptoms of Obsessive Compulsive Disorder (OCD) and know the best initial intervention.

Eye Movement Desensitization and Reprocessing Therapy (EMDR) - this is not the most appropriate answer. EMDR is used for patients suffering with Post-Traumatic Stress Disorder (PTSD)

Trauma-focused CBT - this is not the most appropriate answer. Trauma-focussed CBT is also used for patients suffering with Post-Traumatic Stress Disorder (PTSD)

Olanzapine - this is not the most appropriate answer. Olanzapine is an atypical antipsychotic medication and is not used first line to treat OCD.

Dialectical behaviour therapy (DBT) - this is not the most appropriate answer. DBT is a psychological intervention for patients with borderline personality disorder.

Exposure-response prevention (ERP) therapy - this is the correct answer. ERP therapy, as well as cognitive behavioural therapy, is recommended and a first line intervention for OCD.

OCD

Pathophysiology

- some research suggest childhood group A beta-haemolytic streptococcal infection may have a role

Associations

- depression (30%)
- schizophrenia (3%)
- Sydenham's chorea
- Tourette's syndrome
- anorexia nervosa

Q-46

A 34-year-old man originally from West Africa is seen in January with depression. There is no past medical history of note but he is known to smoke cannabis. He has had similar episodes for the past two winters. What is the most likely diagnosis?

A. Cyclothymic disorder
B. Atypical depression
C. Seasonal affective disorder
D. Schizophrenia
E. Drug-induced depression

ANSWER:

Seasonal affective disorder

EXPLANATION:

SEASONAL AFFECTIVE DISORDER

Seasonal affective disorder (SAD) describes depression which occurs predominately around the winter months. SAD should be treated the same way as depression, therefore as per the NICE guidelines for mild depression, you would begin with psychological therapies and follow up with the patient in 2 weeks to ensure that there has been no deterioration. Following this an SSRI can be given if needed. In seasonal affective disorder, you should not give the patient sleeping tablets as this can make the symptoms worse. Finally, the evidence for light therapy is limited and as such it is not routinely recommended.

Q-47

A 47-year-old alcoholic has been brought to the emergency department by his brother. His brother states that he has been confused for the last few days and has fallen over a few times. On examination, he has an unsteady gait. He cannot remember the first female prime minister of the UK or the journey to the emergency department. He claimed he went to the park yesterday - which his brother states are untrue. Considering the clinical picture, what is the most likely diagnosis?

A. Wernicke's encephalopathy
B. Korsakoff's syndrome
C. Alzheimer's disease
D. Acute delirium
E. Lewy-body dementia

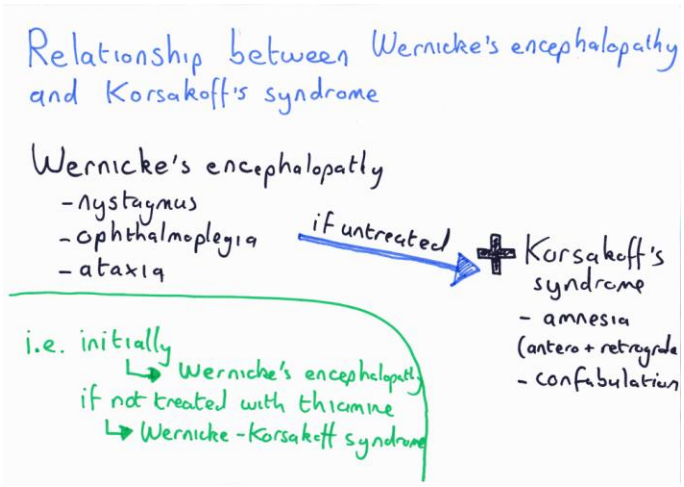
ANSWER:
Korsakoff's syndrome

EXPLANATION:
Korsakoff's syndrome is a complication of Wernicke's encephalopathy. It's features include: anterograde amnesia, retrograde amnesia, and confabulation
Wernicke's encephalopathy is characterised by ataxia, ophthalmoplegia and confusion. This patient had confusion and an unsteady gait (a sign of ataxia). However, the patient has symptoms of Korsakoff's syndrome: anterograde amnesia (unable to form new memories), retrograde amnesia (unable to recall past memories) and confabulation (making up new memories) suggesting his Wernicke's encephalopathy has progressed.

Alzheimer's disease generally affects memory in a stepwise progression. Lewy-body dementia classically has signs of parkinsonism and also hallucinations.

KORSAKOFF'S SYNDROME
Overview
- marked memory disorder often seen in alcoholics
- thiamine deficiency causes damage and haemorrhage to the mammillary bodies of the hypothalamus and the medial thalamus
- in often follows on from untreated Wernicke's encephalopathy

Features
- anterograde amnesia: inability to acquire new memories
- retrograde amnesia
- confabulation



Q-48
An elderly patient in a nursing home is started on quetiapine due to persistent aggressive behaviour that has not responded to non-pharmacological approaches. Which of the following adverse effects do antipsychotics increase the risk of in elderly patients?

A. Atrial fibrillation
B. Myocardial infarction
C. Aspiration pneumonia
D. Stroke
E. Breast cancer

ANSWER:
Stroke

EXPLANATION:
Antipsychotics in the elderly - increased risk of stroke and VTE

ANTIPSYCHOTICS
Antipsychotics act as dopamine D2 receptor antagonists, blocking dopaminergic transmission in the mesolimbic pathways. Conventional antipsychotics are associated with problematic extrapyramidal side-effects which has led to the development of atypical antipsychotics such as clozapine

Extrapyramidal side-effects
- Parkinsonism
- acute dystonia (e.g. torticollis, oculogyric crisis)
- akathisia (severe restlessness)
- tardive dyskinesia (late onset of choreoathetoid movements, abnormal, involuntary, may occur in 40% of patients, may be irreversible, most common is chewing and pouting of jaw)

The Medicines and Healthcare products Regulatory Agency has issued specific warnings when antipsychotics are used in elderly patients:
- increased risk of stroke
- increased risk of venous thromboembolism

Other side-effects
- antimuscarinic: dry mouth, blurred vision, urinary retention, constipation
- sedation, weight gain
- raised prolactin: galactorrhoea, impaired glucose tolerance
- neuroleptic malignant syndrome: pyrexia, muscle stiffness
- reduced seizure threshold (greater with atypicals)
- sprolonged QT interval (particularly haloperidol)

Q-49
A 14-year-old boy is brought for review. He is normally fit and well and hasn't seen a doctor for over five years. His mother has been increasingly concerned about his behaviour in the past few weeks. She describes him staying up late at night, talking quickly and being very irritable. Yesterday he told his mother he was planning to 'take-over' the school assembly and give 'constructive criticism' to his teachers in front of the other pupils. He feels many of his teachers are 'underperforming' and need to be 'retaught' their subjects by him. He admits to trying cannabis once around six months

ago and has drank alcohol 'a few times' in the past year, the last time being two weeks ago. Prior to his deterioration a few weeks ago his mother describes him as a happy, well-adjusted, sociable young man. Which one of the following is the most likely diagnosis?

A. Hypomania
B. Cannabis-induced psychosis
C. Mania
D. Alcoholic hallucinosis
E. Asperger's syndrome

ANSWER:
Mania

EXPLANATION:
Cannnabis and alcohol related problems are very unlikely given how long ago he used those substances. The delusions of grandeur imply this is mania rather than hypomania.

HYPOMANIA VS. MANIA
The presence of psychotic symptoms differentiates mania from hypomania

Psychotic symptoms
- delusions of grandeur
- auditory hallucinations

The following symptoms are common to both hypomania and mania

Mood
- predominately elevated
- irritable

Speech and thought
- pressured
- flight of ideas
- poor attention

Behaviour
- insomnia
- loss of inhibitions: sexual promiscuity, overspending, risk-taking
- increased appetite

Q-50

An 80-year-old man presents with recurrent episodes of hallucinations. He describes often seeing faces smaller than normal or other objects out of proportion. He finds these episodes distressing although he says he knows they're not real. His past medical history includes macular degeneration and an episode of depression 20 years ago following the death of his wife. Neurological examination is unremarkable. What is the most likely diagnosis?

A. Schizophrenia
B. Charles-Bonnet syndrome
C. Psychotic depression
D. Cerebral tumour
E. Alzheimer's disease

ANSWER:
Charles-Bonnet syndrome

EXPLANATION:
Please see Q-13 for Charles-Bonnet Syndrome

Q-51

A 21-year-old female patient is being investigated for a personality disorder. She is found to be low in self-esteem and fearful of criticism or rejection, particularly in social situations. She reports struggling to make friends at work despite being desperate to be liked. She feels that her colleagues are much better at her job than her. She becomes very anxious every day on the way to work as she worries she will make a fool of herself. As a result, she struggles to hold down a job often moving jobs regularly. She has had the same experience with relationships out of work as she does not feel good enough for anyone.

What is the most likely diagnosis?

A. Dependant personality disorder
B. Paranoid personality disorder
C. Borderline personality disorder
D. Histrionic personality disorder
E. Avoidant personality disorder

ANSWER:
Avoidant personality disorder

EXPLANATION:
Patients with avoidant personality disorder are fearful of criticism, being unliked, rejection and ridicule
The correct answer here is 5 - avoidant personality disorder. Patients with personality disorder have disturbances in behaviour and personality that result in considerable personal and social distress across all areas of life. As in the stem, patients with avoidant personality disorder tend to avoid social contact/relationships due to fear of being criticised, rejected or embarrassed. They view themselves as inferior to others and so are not keen to be involved unless they are certain of being liked. They sometimes have an overwhelming sense of tension or apprehension.

Patients with dependent personality disorder struggle to make everyday life decisions and require reassurance and support from others. They tend to lack initiative and feel they are unable to look after themselves. They cope best when in a relationship and fear being alone. As such this not the correct answer.

Paranoid personality disorder presents in patients who are reluctant to confide in others. They often question the loyalty of friends and family and can be unforgiving. They can see hidden meaning in things or are concerned about conspiracies. There is no evidence of paranoid personality disorder in this stem.

Borderline personality disorder is characterized by emotional instability, impulsive behaviour and intense but unstable relationships with others. They often have feelings of emptiness, poor self-image and recurrent attempts at self-harm. Again making this an incorrect answer.

Histrionic personality disorder is seen in patients who crave being the centre of attention, they can be sexually inappropriate in behaviour or appearance and suggestible. These are not the features described in the stem.

Please see Q-6 for Personality Disorders

Q-52

A 46-year-old man is seen by an occupation health doctor due to long-term sickness leave. He states chronic lower back pain prevents him from working but examination findings are inconsistent and the doctor suspects a non-organic cause of his symptoms. This is an example of a:

A. Conversion disorder
B. Munchausen's syndrome
C. Malingering
D. Hypochondrial disorder
E. Somatisation disorder

ANSWER:
Malingering

EXPLANATION:
Please see Q-14 for Unexplained Symptoms

Q-53

Rachel is 45 years old has routine bloods for a health check. Her renal function are as follows:

Na+	**125 mmol/l**
K+	**4.3 mmol/l**
Urea	**5.3 mmol/l**
Creatinine	**60 µmol/l**

She takes the following medications: sertraline, carbimazole, amlodipine, metformin, aspirin. Which of her medications is likely to be the cause of her hyponatraemia?

A. Aspirin
B. Metformin
C. Amlodipine
D. Carbimazole
E. Sertraline

ANSWER:
Sertraline

EXPLANATION:
SSRI: SIDE-EFFECTS
Adverse effects

- gastrointestinal symptoms are the most common side-effect
- there is an increased risk of gastrointestinal bleeding in patients taking SSRIs. A proton pump inhibitor should be prescribed if a patient is also taking a NSAID
- hyponatraemia
- patients should be counselled to be vigilant for increased anxiety and agitation after starting a SSRI
- fluoxetine and paroxetine have a higher propensity for drug interactions

Citalopram and the QT interval

- the Medicines and Healthcare products Regulatory Agency (MHRA) released a warning on the use of citalopram in 2011
- it advised that citalopram and escitalopram are associated with dose-dependent QT interval prolongation and should not be used in those with: congenital long QT syndrome; known pre-existing QT interval prolongation; or in combination with other medicines that prolong the QT interval
- the maximum daily dose is now 40 mg for adults; 20 mg for patients older than 65 years; and 20 mg for those with hepatic impairment

Interactions

- NSAIDs: NICE guidelines advise 'do not normally offer SSRIs', but if given co-prescribe a proton pump inhibitor
- warfarin / heparin: NICE guidelines recommend avoiding SSRIs and considering mirtazapine
- aspirin: see above
- triptans: avoid SSRIs

Following the initiation of antidepressant therapy patients should normally be reviewed by a doctor after 2 weeks. For patients under the age of 30 years or at increased risk of suicide they should be reviewed after 1 week. If a patient makes a good response to antidepressant therapy they should continue on treatment for at least 6 months after remission as this reduces the risk of relapse.

When stopping a SSRI the dose should be gradually reduced over a 4 week period (this is not necessary with fluoxetine). Paroxetine has a higher incidence of discontinuation symptoms.

Discontinuation symptoms

- increased mood change
- restlessness
- difficulty sleeping

- unsteadiness
- sweating
- gastrointestinal symptoms: pain, cramping, diarrhoea, vomiting
- paraesthesia

Q-54

A 42-year-old woman presents for review. Her husband reports that she has had an argument with their son which resulted in him leaving home. Since this happened she has not been able to speak. Clinical examination of her throat and chest is unremarkable. Which one of the following terms best describes this presentation?

A. Aprosodia
B. Schizophasia
C. Expressive aphasia
D. Akinetic mutism
E. Psychogenic aphonia

ANSWER:
Psychogenic aphonia

EXPLANATION:
Psychogenic aphonia is considered to be a form of conversion disorder. Please see the link for more details.

APHONIA
Aphonia describes the inability to speak. Causes include:
- recurrent laryngeal nerve palsy (e.g. Post-thyroidectomy)
- psychogenic

Q-55

A 68-year-old gentleman is brought into hospital by his husband who says he has reported seeing flashing images of foxes and badgers in their living room. This is something that is extremely distressing to the patient, and has made him reluctant to venture into some areas of the house. You wonder if this might be Charles-Bonnet syndrome.

Which of the following risk factors may pre-dispose this gentleman to Charles-Bonnet syndrome?

A. Caucasian
B. Peripheral visual impairment
C. Male gender
D. Hypertension
E. Occupational history of working in sewers

ANSWER:
Peripheral visual impairment

EXPLANATION:
Charles-Bonnet syndrome - peripheral visual impairment is a risk factor
Charles-Bonnet syndrome is characterised by visual hallucinations associated with eye disease.

Most common visual hallucinations are faces, children and wild animals.

It occurs in patients of increasing age; equally amongst males and females; and with no known increased risk with family history.

Please see Q-13 for Charles-Bonnet Syndrome

Q-56

A 31-year-old woman who gave birth two weeks ago presents for review with her husband. He is worried by her mood as she now seems depressed and is interacting poorly with the baby. He describes her mood three days ago being much different, when she was talking in a rapid and incoherent fashion about the future. The mother denies any hallucinations but states that her child has been brought into a 'very bad world'. What is the most appropriate management?

A. Start fluoxetine
B. Reassurance + review by health visitor
C. Cognitive behavioural therapy
D. Start lithium
E. Arrange urgent admission

ANSWER:
Arrange urgent admission

EXPLANATION:
The mother may be suffering from puerperal psychosis and needs urgent admission to allow psychiatric evaluation.

Whilst there is not a full complement of psychotic features there are a number of pointers towards significant mental health problems:
poor interaction with the baby: this is very unusual, including in women with postnatal depression
'talking in an incoherent fashion about the future'
stating that the baby 'has been brought into a very bad world' is odd and somewhat worrying

For these reasons, the mother should have an urgent psychiatric evaluation.

Please see Q-42 for Post-Partum Health Problems

Q-57

You a reviewing a 24-year-old man who complains of auditory hallucinations. These have become increasingly common and are now happening on a daily basis. Which one of the following factors in his history is the strongest risk factor for psychotic disorders?

A. **Indian subcontinent ethnicity**
B. **Having a parent with schizophrenia**
C. **A history of long-term cannabis use**
D. **A history of being sexually abused when younger**
E. **Working in the performing arts**

ANSWER:
Having a parent with schizophrenia

EXPLANATION:
Family history is the strongest risk factor for psychotic disorders

SCHIZOPHRENIA: EPIDEMIOLOGY
The strongest risk factor for developing a psychotic disorder (including schizophrenia) is family history. Having a parent with schizophrenia leads to a relative risk (RR) of 7.5.

Risk of developing schizophrenia
- monozygotic twin has schizophrenia = 50%
- parent has schizophrenia = 10-15%
- sibling has schizophrenia = 10%
- no relatives with schizophrenia = 1%

Other selected risk factors for psychotic disorders include:
- Black Caribbean ethnicity - RR 5.4
- Migration - RR 2.9
- Urban environment- RR 2.4
- Cannabis use - RR 1.4

Q-58

A 27-year-old woman is brought in by her husband. She has been refusing to go outside for the past 3 months, telling her husband she is afraid of catching avian flu. On exploring this further she is concerned due to the high number of migrating birds she can see in her garden. She reports that the presence of her husbands socks on the washing line in the garden alerted her to this. What is the most likely diagnosis?

A. **Depression**
B. **Hypochondrial disorder**
C. **Formal thought disorder**
D. **Borderline personality disorder**
E. **Acute paranoid schizophrenia**

ANSWER:
Acute paranoid schizophrenia

EXPLANATION:
The washing line comment is an example of a delusional perception - see below

Please see Q-4 for Schizophrenia: Features

Q-59

Which class of drug have the Medicines and Healthcare products Regulatory Agency warned may be associated with an increased risk of venous thromboembolism in elderly patients?

A. **Tricyclic antidepressants**
B. **5HT3 antagonists**
C. **Third generation cephalosporins**
D. **Benzodiazepines**
E. **Atypical antipsychotics**

ANSWER:
Atypical antipsychotics

EXPLANATION:
Antipsychotics in the elderly - increased risk of stroke and VTE

Please see Q-48 for Antipsychotics

Q-60

A 82-year-old female who has glaucoma starts to experience visual hallucinations which include seeing goldfish, black boxes and mud sliding down shelves. She is completely blind in the right eye and only partially sighted in the left eye. What is the most likely diagnosis?

A. **Schizophrenia**
B. **Delirium**
C. **Charles Bonnet syndrome**
D. **Peduncular hallucinosis**
E. **Anton's syndrome**

ANSWER:
Charles Bonnet syndrome

EXPLANATION:
In a patient who is partially or fully blind and experiencing visual hallucinations, Charles Bonnet syndrome should be considered. Delirium and schizophrenia also present with visual hallucinations, but with the history of blindness, Charles Bonnet syndrome is the more likely diagnosis.

Anton's syndrome is is a rare symptom of brain damage occurring in the occipital lobe characterised by cortical blindness, but will not accept they are blind despite being told that they are. They don't have visual hallucinations

Peduncular hallucinosis is a rare neurological disorder that causes vivid visual hallucinations in dark environments which last for several minutes. They typically occur after a midbrain stroke. This diagnosis is less likely given the history of blindness.

Please see Q-13 for Charles-Bonnet Syndrome

Q-61

Which one of the following features is least recognised in long-term lithium use?

A. Alopecia
B. Weight gain
C. Fine tremor
D. Goitre
E. Diarrhoea

ANSWER:
Alopecia

EXPLANATION:
All the above side-effects, with the exception of alopecia, may be seen in patients taking lithium

LITHIUM
Lithium is mood stabilising drug used most commonly prophylatically in bipolar disorder but also as an adjunct in refractory depression. It has a very narrow therapeutic range (0.4-1.0 mmol/L) and a long plasma half-life being excreted primarily by the kidneys.

Mechanism of action - not fully understood, two theories:
- interferes with inositol triphosphate formation
- interferes with cAMP formation

Adverse effects
- nausea/vomiting, diarrhoea
- fine tremor
- nephrotoxicity: polyuria, secondary to nephrogenic diabetes insipidus
- thyroid enlargement, may lead to hypothyroidism
- ECG: T wave flattening/inversion
- weight gain
- idiopathic intracranial hypertension

Monitoring of patients on lithium therapy
- inadequate monitoring of patients taking lithium is common - NICE and the National Patient Safety Agency (NPSA) have issued guidance to try and address this. As a result it is often an exam hot topic
- after starting lithium levels should be performed weekly and after each dose change until concentrations are stable
- once established, lithium blood level should 'normally' be checked every 3 months. Levels should be taken 12 hours post-dose
- thyroid and renal function should be checked every 6 months
- patients should be issued with an information booklet, alert card and record book

Q-62

You are reviewing a 24-year-old PhD student who presents with feeling on edge all of the time. He feels that nothing specific makes him feel worse. He cannot relax and as a result is not sleeping too well, but his appetite is good. He tells you that his mood is okay. You have reviewed him for several weeks with the same symptoms and despite referral to self-help sessions he has made no improvement.

Given the likely diagnosis, which pharmacological option is most likely to be indicated?

A. Beta blocker
B. Pregabalin
C. Benzodiazepine
D. Atypical antipsychotic
E. Selective serotonin reuptake inhibitor (SSRI)

ANSWER:
Selective serotonin reuptake inhibitor (SSRI)

EXPLANATION:
SSRIs are the first-line pharmacological therapy for generalised anxiety disorder
This scenario most likely represents generalised anxiety disorder. NICE recommend pharmacological therapy if low-intensity psychological interventions have been unsuccessful. Sertraline if recommended first-line, and if contraindicated or not tolerated then any other SSRI or serotonin noradrenaline reuptake inhibitor (SNRI). Pregabalin is indicated but only if these treatments have failed.

GENERALISED ANXIETY DISORDER
Management
- SSRI anti-depressants
- buspirone (5-HT1A partial agonist)
- beta-blockers
- benzodiazepines: use longer acting preparations e.g. diazepam, clonazepam
- cognitive behaviour therapy

Q-63

A 65-year-old male with a background of chronic alcohol excess and previous Wernicke's encephalopathy is admitted to the acute medical take with behavioural disturbance. He has not consumed alcohol in the past 2 years.

Which of the following phenomena is he likely to display on further assessment?

A. Confabulation
B. Dysthymia
C. Hydrophobia
D. Lilliputians
E. Perseveration

ANSWER:
Confabulation

EXPLANATION:
Confabulation in a patient with chronic alcoholism points towards Korsakoff's syndrome
Korsakoff's is characterised by confabulation and amnesia, typically occurring in alcoholics secondary to chronic vitamin B1 (thiamine) deficiency. Dysthymia refers to mild depression; hydrophobia is a feature of rabies; lilliputians

may be observed in delirium tremens; perseveration is repetitive speech patterns, commonly seen after traumatic brain injury.

Please see Q-47 for Korsakoff's Syndrome

Q-64

Which one of the following symptoms may indicate mania rather than hypomania?

A. Predominately elevated mood
B. Delusions of grandeur
C. Increased appetite
D. Flight of ideas
E. Irritability

ANSWER:
Delusions of grandeur

EXPLANATION:
Whilst criteria vary (e.g. ICD-10, DSM-5) the consistent difference between mania and hypomania is the presence of psychotic symptoms.

Please see Q-49 for Hypomania vs. Mania

Q-65

A 34-year-old ex-soldier with a history of post-traumatic stress disorder returns for review. He has had a course of eye movement desensitisation and reprocessing therapy which was not helpful and is reluctant to try cognitive behavioural therapy. Of the options listed, which medication may be useful in such patients?

A. Fluoxetine
B. Citalopram
C. Mirtazapine
D. Topiramate
E. Bupropion

ANSWER:
Mirtazapine

EXPLANATION:
POST-TRAUMATIC STRESS DISORDER
Post-traumatic stress disorder (PTSD) can develop in people of any age following a traumatic event, for example a major disaster or childhood sexual abuse. It encompasses what became known as 'shell shock' following the first world war. One of the DSM-IV diagnostic criteria is that symptoms have been present for more than one month

Features
- re-experiencing: flashbacks, nightmares, repetitive and distressing intrusive images
- avoidance: avoiding people, situations or circumstances resembling or associated with the event
- hyperarousal: hypervigilance for threat, exaggerated startle response, sleep problems, irritability and difficulty concentrating
- emotional numbing - lack of ability to experience feelings, feeling detached
- from other people
- depression
- drug or alcohol misuse
- anger
- unexplained physical symptoms

Management
- following a traumatic event single-session interventions (often referred to as debriefing) are not recommended
- watchful waiting may be used for mild symptoms lasting less than 4 weeks
- military personnel have access to treatment provided by the armed forces
- trauma-focused cognitive behavioural therapy (CBT) or eye movement desensitisation and reprocessing (EMDR) therapy may be used in more severe cases
- drug treatments for PTSD should not be used as a routine first-line treatment for adults. If drug treatment is used then paroxetine or mirtazapine are recommended

Q-66

A 45-year-old man who takes chlorpromazine for schizophrenia presents with severe restlessness. What side-effect of antipsychotic medication is this an example of?

A. Akathisia
B. Neuroleptic malignant syndrome
C. Acute dystonia
D. Tardive dyskinesia
E. Parkinsonism

ANSWER:
Akathisia

EXPLANATION:
Antipsychotics may cause akathisia (severe restlessness)

Please see Q-48 for Antipsychotics

Q-67

A 35-year-old man with a history of schizophrenia is transferred to the Emergency Department due to an oculogyric crisis. What is the most appropriate treatment?

A. Selegiline
B. Haloperidol
C. Procyclidine
D. Bromocriptine
E. Cabergoline

ANSWER:
Procyclidine

EXPLANATION:
Benztropine is also an appropriate treatment

Please see Q-48 for Antipsychotics

Q-68

Which one of the following is not a recognised feature of anorexia nervosa?

A. Hypokalaemia
B. Low LH
C. Impaired glucose tolerance
D. Low FSH
E. Reduced growth hormone levels

ANSWER:
Reduced growth hormone levels

EXPLANATION:
Anorexia features
most things low
G's and C's raised: growth hormone, glucose, salivary glands, cortisol, cholesterol, carotinaemia

ANOREXIA NERVOSA: FEATURES
Anorexia nervosa is associated with a number of characteristic clinical signs and physiological abnormalities which are summarised below

Features
- reduced body mass index
- bradycardia
- hypotension
- enlarged salivary glands

Physiological abnormalities
- hypokalaemia
- low FSH, LH, oestrogens and testosterone
- raised cortisol and growth hormone
- impaired glucose tolerance
- hypercholesterolaemia
- hypercarotinaemia
- low T3

Q-69

A 32-year-old woman is brought to the Emergency department by the police. She was found preaching outside the local supermarket, telling people that she is god's disciple and has been sent to prevent them from wasting money. It transpires that she has also spent up to her limit on her bank card. She began treatment with fluoxetine some 3 weeks ago for reactive depression after splitting from her husband. A limited physical examination due to poor compliance is unremarkable, as is a routine blood screen.

Which of the following is the most likely diagnosis?

A. Psychotic depression
B. Munchausen's syndrome
C. Schizophrenia
D. Viral encephalitis
E. Mania

ANSWER:
Mania

EXPLANATION:
Key features here include clear evidence of delusions of grandeur, coupled with starting treatment for fluoxetine some 3 weeks ago. Taken together these factors suggest possible mania. it is most likely to be related to selective serotonin reuptake inhibitor prescription for her depression.

Psychotic depression is unlikely given there are no delusions related to illness, loss of self-worth or other features usually expected. Schizophrenia is also unlikely given the absence of features such as auditory hallucinations or delusions of reference. Rather than being associated with agitation and hyperactivity, drowsiness and memory loss are more common features of viral encephalitis. The proximity to fluoxetine prescription, and the fact features of her illness fit so well with mania, make Munchausen's syndrome unlikely.

Please see Q-49 for Hypomania vs. Mania

Q-70

You review a 45-year-old man with a long history of bipolar disorder. According to NICE and National Patient Safety Agency (NPSA) guidelines, how often should lithium levels be checked once a stable dose has been achieved?

A. Every month
B. Every 2 months
C. Every 3 months
D. Every 4 months
E. Every 6 months

ANSWER:
Every 3 months

EXPLANATION:
Please see Q-61 for Lithium

Q-71

A 52-year-old man is brought into the emergency department having attempted to take his own life. He was found at home with empty packets of paracetamol by his side. He is still conscious. A history is taken from him to assess his risk of further attempts.

Which of the following is considered to be the strongest risk factor for successful suicide?

A. **Being a female**
B. **Being married**
C. **Having five children**
D. **Addiction to opiates**
E. **Having never seen a General Practitioner**

ANSWER:
Addiction to opiates

EXPLANATION:
A male with a history of alcohol or drug abuse and deliberate self harm should be considered to be at high risk of suicide This question requires you to recall the major risk factors for suicide.

Being a female - This is not the most appropriate answer given the options available. In fact, being male is one of the most significant risk factors for suicide.

Being married - This is not the most appropriate answer given the options available. Having family support is an important protective factor for suicide.

Having five children - This is not the most appropriate answer given the options available. Having children at home is thought to be a protective factor.

Addiction to opiates - This is correct. Alcohol or drug misuse is one of the major risk factors for suicide.

Having never seen a General Practitioner - This is not the most appropriate answer given the options available. Having a chronic mental or physical condition is however a risk factor for suicide.

Please see Q-9 for Suicide: Risk Factors

Q-72

A slim 22 year-old drama student presents with weakness and muscle cramps. She has a past medical history of reflux and asthma, for which she takes lansoprazole 30mg once daily, inhaled salbutamol PRN, and once-daily inhaled corticosteroid. She reports feeling stressed lately as she has a leading role in a significant stage production due to open in one week. Her heart rate is 87bpm, blood pressure 103/71mmHg, respiratory rate 13/min. Her blood results are shown:

pH	**7.46**
Na+	**137 mmol/L**
K+	**2.6 mmol/L**
Chloride	**93 mmol/L**
Magnesium	**0.61 mmol/L**

What is the most likely cause for her symptoms?

A. **Diuretic abuse**
B. **Steroid use**
C. **Stress**
D. **Bulimia**
E. **Gitelman Syndrome**

ANSWER:
Bulimia

EXPLANATION:
This is a hard question reflecting a difficult real-world challenge: differentiating between causes of hypochloraemia, which can be caused (amongst others) by Gitelman syndrome, bulimia and diuretic abuse. Inhaled steroid use and stress would not be responsible for such marked electrolyte derangement. Gitelman syndrome, although fitting, is very rare and would not be considered the most likely diagnosis. As such the two remaining options are bulimia and diuretic abuse. The scales are tipped towards bulimia by the mild metabolic alkalosis and history of gastroesophageal reflux (more prevalent in bulimia) requiring high-dose PPI to control - an unusual requirement in a young slim patient. Other potential signs would be parotid gland swelling and dental enamel erosion induced by regular vomiting. Diuretic abuse tends to give a hypochloraemic acidosis.

BULIMIA NERVOSA
Bulimia nervosa is a type of eating disorder characterised by episodes of binge eating followed by intentional vomiting or other purgative behaviours such as the use of laxatives or diuretics or exercising.

DSM 5 diagnostic criteria for a diagnosis of bulimia nervosa:
- recurrent episodes of binge eating (eating an amount of food that is definitely larger than most people would eat during a similar period of time and circumstances)
- a sense of lack of control over eating during the episode
- recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise.
- the binge eating and compensatory behaviours both occur, on average, at least once a week for three months.
- self-evaluation is unduly influenced by body shape and weight.
- the disturbance does not occur exclusively during episodes of anorexia nervosa.

Management
- referral for specialist care is appropriate in all cases
- NICE recommend bulimia-nervosa-focused guided self-help for adults
- If bulimia-nervosa-focused guided self-help is unacceptable, contraindicated, or ineffective after 4 weeks of treatment, NICE recommend that we consider

individual eating-disorder-focused cognitive behavioural therapy (CBT-ED)
- children should be offered bulimia-nervosa-focused family therapy (FT-BN)
- pharmacological treatments have a limited role - a trial of high-dose fluoxetine is currently licensed for bulimia but long-term data is lacking

Q-73

Carol is a 57-year-old lady who is under a section 3 at a an inpatient psychiatric hospital. She has stopped eating or drinking as she believes she is dead and does not require food anymore. Which syndrome is characterised by a person believing they are dead or non-existent?

A. Cotard syndrome
B. Capgras syndrome
C. Couvade syndrome
D. De Clerambault's syndrome
E. Othello syndrome

ANSWER:
Cotard syndrome

EXPLANATION:
Cotard syndrome is characterised by a person believing they are dead or non-existent
Cotard syndrome is characterised by a person believing they are dead or non-existent. It tends to be related to depression.

Capgras syndrome is characterised by a person believing their friend or relative had been replaced by an exact double.

Couvade syndrome is also known as 'sympathetic pregnancy'. It affects fathers, particularly during the first and third trimesters of pregnancy, who suffer the somatic features of pregnancy.

De Clerambault's syndrome is characterised by a person believing that another individual (often a celebrity) is deeply in love with them. It typically affects females.

Othello syndrome is when the patient believes their partner is cheating on them. They may be threatening or stalk their partner. This seems to affect males more than females.

Please see Q-15 for Cotard Syndrome

Q-74

Which one of the following is least recognised as a potential adverse effect of electroconvulsive therapy?

A. Nausea
B. Epilepsy
C. Cardiac arrhythmias
D. Short term memory impairment
E. Headache

ANSWER:
Epilepsy

EXPLANATION:
Although electroconvulsive therapy, by definition, causes a controlled seizure there is no increased risk of epilepsy in the long-term.

ELECTROCONVULSIVE THERAPY
Electroconvulsive therapy is a useful treatment option for patients with severe depression refractory to medication or those with psychotic symptoms. The only absolute contraindications is raised intracranial pressure.

Short-term side-effects
- headache
- nausea
- short term memory impairment
- memory loss of events prior to ECT
- cardiac arrhythmia

Long-term side-effects
- some patients report impaired memory

Q-75

Which one of the following statements regarding post-partum mental health problems is NOT true?

A. Post-natal depression is seen in around 2-3% of women
B. Puerperal psychosis has a recurrence rate of around 20%
C. Baby-blues are seen in the majority of women
D. Post-natal depression usually develops within the first month
E. Sertraline can be used whilst mothers are breast feeding

ANSWER:
Post-natal depression is seen in around 2-3% of women

EXPLANATION:
Post-natal depression is seen in around 10% of women

Please see Q-42 for Post-Partum Health Problems

Q-76

A patient reports feeling unwell after suddenly stopping paroxetine. Which one of the following symptoms is most consistent with selective serotonin reuptake inhibitor discontinuation syndrome?

A. Postural hypotension
B. Diarrhoea
C. Myoclonic jerks
D. Hallucinations
E. Seizures

Selective serotonin reuptake inhibitor discontinuation syndrome can present with a wide variety of symptoms including diarrhoea, vomiting and abdominal pain.

ANSWER:
Diarrhoea

EXPLANATION:

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-77

Which one of the following selective serotonin reuptake inhibitors has the highest incidence of discontinuation symptoms?

A. Paroxetine
B. Citalopram
C. Escitalopram
D. Fluoxetine
E. Sertraline

ANSWER:
Paroxetine

EXPLANATION:
Paroxetine - higher incidence of discontinuation symptoms

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-78

A 62-year-old man is brought to the doctors by his daughter. Four weeks ago his wife died from metastatic breast cancer. He reports being tearful every day but his daughter is concerned because he is constantly 'picking fights' with her over minor matters and issues relating to their family past. The daughter also reports that he has on occasion described hearing his wife talking to him and on one occasion he prepared a meal for her.

Despite this he has started going walking again with friends and says that he is determined to get 'back on track'.

What is the most likely diagnosis?

A. Atypical grief reaction
B. Depression without psychotic features
C. Delusional disorder
D. Depression with psychotic features
E. Normal grief reaction

ANSWER:
Normal grief reaction

EXPLANATION:
GRIEF REACTION
It is normal for people to feel sadness and grief following the death of a loved one and this does not necessarily need to be medicalised. However, having some understanding of the potential stages a person may go through whilst grieving can help determine whether a patient is having a 'normal' grief reaction or is developing a more significant problem.

One of the most popular models of grief divides it into 5 stages.

- Denial: this may include a feeling of numbness and also pseudohallucinations of the deceased, both auditory and visual. Occasionally people may focus on physical objects that remind them of their loved one or even prepare meals for them
- Anger: this is commonly directed against other family members and medical professionals
- Bargaining
- Depression
- Acceptance

It should be noted that many patients will not go through all 5 stages.

Abnormal, or atypical, grief reactions are more likely to occur in women and if the death is sudden and unexpected. Other risk factors include a problematic relationship before death or if the patient has not much social support.

Features of atypical grief reactions include:

- delayed grief: sometimes said to occur when more than 2 weeks passes before grieving begins
- prolonged grief: difficult to define. Normal grief reactions may take up to and beyond 12 months

Q-79

Victoria has recently been diagnosed with agoraphobia and the psychiatrist plans to start medical treatment. Which is the first line medication used for agoraphobia?

A. Fluoxetine
B. Sertraline
C. Citalopram
D. Mirtazapine
E. Venlafaxine

ANSWER:
Sertraline

EXPLANATION:
Agoraphobia is usually managed with sertraline. The other antidepressants may be used as second-line therapy depending on the patient's specific symptoms.

AGORAPHOBIA
Agoraphobia is primarily describes a fear of open spaces but also includes related aspects, e.g. the presence of crowds or the difficulty of escaping to a safe place

Q-80

You review a patient who has been taking citalopram for the past two years to treat depression. He has felt well now for the past year and you agree a plan to stop the antidepressant. How should the citalopram be stopped?

A. **Can be stopped immediately**
B. **Withdraw gradually over the next 3 days**
C. **Withdraw gradually over the next week**
D. **Withdraw gradually over the next 2 weeks**
E. **Withdraw gradually over the next 4 weeks**

ANSWER:
Withdraw gradually over the next 4 weeks

EXPLANATION:
This is not necessary with fluoxetine due to its longer half-life.

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-81

A 29-year-old fireman presents following a recent traumatic incident where a child died in a house fire. He describes recurrent nightmares and flashbacks which have been present for the past 3 months. A diagnosis of post-traumatic stress disorder is suspected. What is the most appropriate first-line treatment?

A. **Arrange a CT head to exclude an organic cause**
B. **Cognitive behavioural therapy or eye movement desensitisation and reprocessing therapy**
C. **Cognitive behavioural therapy or graded exposure therapy**
D. **Cognitive behavioural therapy or psychodynamic therapy**
E. **Watchful waiting**

ANSWER:
Cognitive behavioural therapy or eye movement desensitisation and reprocessing therapy

EXPLANATION:
Please see Q-65 for Post-Traumatic Stress Disorder

Q-82

A 23-year-old man asks to be referred to a plastic surgeon. From his records you can see he has been treated for anxiety and depression with fluoxetine previously and has been off work with back pain for the past three months. He is concerned that his ears are too big in proportion to his face. He reports that he now seldom leaves the house because of this. On examination his ears appear to be within normal limits. What is the most appropriate description of this behaviour?

A. **Hypochondriasis**
B. **Generalised anxiety disorder**
C. **Somatisation**
D. **Malingering**
E. **Dysmorphophobia**

ANSWER:
Dysmorphophobia

EXPLANATION:
BODY DYSMORPHIC DISORDER
Body dysmorphic disorder (sometimes referred to as dysmorphophobia) is a mental disorder where patients have a significantly distorted body image

Diagnostic and Statistical Manual (DSM) IV criteria:

- Preoccupation with an imagine defect in appearance. If a slight physical anomaly is present, the person's concern is markedly excessive
- The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning
- The preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in Anorexia Nervosa)

Q-83

A 34-year-old male comes to clinic for an asthma review. He tells you he has recently been diagnosed with a personality disorder. The diagnosis came about after he was referred by his boss to occupational health for being overly sensitive and getting angry when colleagues told him how to do his job. He feels his diagnosis is unjustified and is all a set up as his boss, who used to be a good friend, knows he is better at his job than him.

What diagnosis is he most likely to have received?

A. **Schizoid personality disorder**
B. **Narcissistic personality disorder**
C. **Paranoid personality disorder**
D. **Borderline personality disorder**
E. **Avoidant personality disorder**

ANSWER:
Paranoid personality disorder

EXPLANATION:
Paranoid personality disorder may be diagnosed in patients who are overly sensitive and can be unforgiving if insulted, question loyalty of those around them and are reluctant to confide in others
The correct answer is paranoid personality disorder. Patients with paranoid personality disorder are over sensitive, unforgiving and perceive feedback as attacks on their character. They can be preoccupied with conspiracy theories and tend to question the loyalty of others. Based on the patients' description, this is the most likely diagnosis.

Option 2 is incorrect. Patients with schizoid personality disorder tend to have a lack of interest in sexual interactions are cold and lack close friendships preferring to spend time alone. They are also indifferent to praise making this unlikely to be the correct answer.

Narcissistic personality disorder is not the correct answer. These patients have a heightened impression of self-importance and entitlement often believing they have unlimited abilities to succeed, become powerful or look beautiful. Additionally, they lack empathy and will happily take advantage of others to achieve their own need.

Borderline personality disorder is also incorrect. This is characterised by emotional instability, impulsive behaviour, feelings of emptiness and recurrent attempts at self-harm. Patients often fear abandonment as opposed to the questioning loyalty of those around them.

Patients with avoidant personality disorder tend to avoid social contact/relationships due to fear of being criticised, rejected or embarrassed as opposed to being unforgiving, making this less likely the correct answer.

Please see Q-6 for Personality Disorders

Q-84

A 34-year-old man confides in you that he experienced childhood sexual abuse. Which one of the following features is not a characteristic feature of post-traumatic stress disorder?

A. Hyperarousal
B. Emotional numbing
C. Nightmares
D. Loss of inhibitions
E. Avoidance

ANSWER:
Loss of inhibitions

EXPLANATION:
Please see Q-65 for Post-Traumatic Stress Disorder

Q-85

A 39-year-old patient is taking phenelzine, a monoamine oxidase inhibitor, for the treatment of depression. Which one of the following foods can the patient safely eat?

A. Bovril
B. Cheese
C. Oxo
D. Eggs
E. Broad beans

ANSWER:
Eggs

EXPLANATION:
MONOAMINE OXIDASE INHIBITORS
Overview

- serotonin and noradrenaline are metabolised by monoamine oxidase in the presynaptic cell

Non-selective monoamine oxidase inhibitors

- e.g. tranylcypromine, phenelzine
- used in the treatment of atypical depression (e.g. hyperphagia) and other psychiatric disorder
- not used frequently due to side-effects

Adverse effects of non-selective monoamine oxidase inhibitors

- hypertensive reactions with tyramine containing foods e.g. cheese, pickled herring, Bovril, Oxo, Marmite, broad beans
- anticholinergic effects

Q-86

A 64-year-old woman presents as she is feeling down and sleeping poorly. After speaking to the patient and using a validated symptom measure you decide she has moderate depression. She has a past history of ischaemic heart disease and currently takes aspirin, ramipril and simvastatin. What is the most appropriate course of action?

A. Stop aspirin, start sertraline
B. Start venlafaxine
C. Start sertraline + lansoprazole
D. Stop aspirin, start clopidrogrel + sertraline
E. Start sertraline

ANSWER:
Start sertraline + lansoprazole

EXPLANATION:
SSRI + NSAID = GI bleeding risk - give a PPI
There is an increased incidence of gastrointestinal bleeding when aspirin / NSAIDs are combined with selective serotonin reuptake inhibitors. This patient should therefore also be offered a proton pump inhibitor such as lansoprazole. It would be inappropriate to stop aspirin in a patient with a history of ischaemic heart disease.

Note the use of sertraline in this patient, the first-choice SSRI in patients with a history of cardiovascular disease.

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-87

A 39-year-old man comes for review. Six months ago he was started on paroxetine for depression. Around five days ago he stopped taking the medication as he felt that it was having no benefit. His only past medical history of note is asthma. For the past two days he has experienced increased anxiety, sweating, headache and the feeling of a needle like sensation in his head. During the consultation he is pacing around the room. What is the most explanation for his symptoms?

A. **Bipolar disorder**
B. **Malingering**
C. **Selective serotonin reuptake inhibitor discontinuation syndrome**
D. **Migraine**
E. **Generalised anxiety disorder**

ANSWER:
Selective serotonin reuptake inhibitor discontinuation syndrome

EXPLANATION:
Paroxetine has a higher incidence of discontinuation symptoms than other selective serotonin reuptake inhibitors.

Please see Q-17 for Selective Serotonin Reuptake Inhibitors

Q-88

A 84-year-old patient is brought to see you by his wife as she is worried about hallucinations he has been experiencing. She reports that he regularly sees cats walking around the house although they have never owned a cat. He is otherwise well in himself with no other concerns and does not seem troubled by the visions. He has a past medical history of hypertension, diabetes and cataracts and drinks approximately 20 units of alcohol per week.

What is the most likely diagnosis?

A. **Schizophrenia**
B. **Parkinson's disease**
C. **Alzheimer's disease**
D. **Alcohol excess**
E. **Charles-Bonnet Syndrome**

ANSWER:
Charles-Bonnet Syndrome

EXPLANATION:
Patients with Charles-Bonnet syndrome experience persistent or recurrent complex visual or auditory hallucinations however generally have full insight into their condition
The correct answer is Charles-Bonnet Syndrome. This classically presents as recurrent visual or auditory hallucinations in patients with failing eyesight. It is thought that as the brain receives less visual stimulus than it is used to, it begins to fill in the gaps with previously stored images. Hallucinations can either be simple as in patterns or lines or complex as in people or animals. They are usually pleasant hallucinations and most patients retain insight. In this patient with a history of cataract Charles-Bonnet syndrome is most likely.

Whilst hallucinations can occur in both Alzheimer's Disease and Parkinson's Disease, there is nothing in the history to suggest any problems with memory or a tremor, making 2 and 4 unlikely. Likewise other than hallucinations there is no further evidence of schizophrenia in particular no 1st rank symptoms such as delusions, thought insertion, removal or broadcasting. Additionally patients with Alzheimer's tend to experience auditory as opposed to visual hallucinations.

Whilst 20 units of alcohol a week is over the revised recommend weekly intake it is unlikely significant enough to cause any serious medical complications. Furthermore there is nothing else in the history to suggest alcoholism as a cause of his symptoms.

Please see Q-13 for Charles-Bonnet Syndrome