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THE PRACTICE TEST

Reading Section

TIME: 15 minutes

- Look at the four texts, **A D**, in the Text Booklet.
- For each question, 1 20, look through the texts, A D, to find the relevant information.
- Write your answers in the spaces provided in this Question Paper.
- Answer all the questions within the 15-minute time limit.

PART A: QUESTIONS 1 TO 20

Asthma: Questions

Questions 1 - 6

For each question below, **1** – **6**, decide which text (**A**, **B**, **C** or **D**) the information comes from.

You may use any letter more than once.

In which text can you find information about

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ASTHMA: TEXTS

Text A

Establishing the severity of an acute asthma attack			
	Moderate asthma	Severe asthma	Life-threatening asthma
Adults	Measure PEF and arterial saturation		
	PEF >50-75% predicted	PEF 33-50% predicted	PEF <33% predicted
	 SpO₂ ≥92% PEF > 50-75% predicted No features of acute severe asthma 	 SpO₂ ≥92% PEF < 50% predicted RR ≥ 25/min HR ≥ 110/min difficulty talking 	 SpO₂ ≥92% silent chest cyanosis poor respiratory effort arrhythmia hypotension exhaustion altered consciousness

Asthma sufferers of any severity may also experience the following:

- shortness of breath
- coughing
- tightness or pain in the chest
- a whistling sound when exhaling

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TEXT B

Lung Function Tests in Asthma

Asthma tests should be undertaken to diagnose and aid management of the condition. This is particularly important in asthma, because it presents slightly differently with each patient. Spirometry is the most important test, however several different types of test are available:

- **Peak expiratory flow rate (PEFR):** this is the maximum flow rate during exhalation, after full lung inflation. Diurnal variation in PEFR is a good measure of asthma and useful to the long-term management of patients and the response to treatment. Monitor PEFR over 2-4 weeks in adults if there is uncertainty about diagnosis. It is measured with a peak flow meter a small, handheld device into which the patient blows, giving a reading in l/min.
- **Spirometry:** measures volume and flow of air that can be exhaled or inhaled during normal breathing. Asthma can be diagnosed with a >15% improvement in FEV1 or PEFT following bronchodilator inhalation. Alternatively, consider FEV1/FVC < 70% as a positive result for obstructive airway disease. A spirometry test usually takes less than 10 minutes, but will last about 30 minutes if it includes reversibility testing.

Direct bronchial challenge test with histamine or methacholine: in this test, patients breathe in a bronchoconstrictor. The degree of narrowing can be quantified by spirometry. Asthmatics will react to lower doses, due to existing airway hyperactivity.

Exercise tests: these are often used for the diagnosis of asthma in children. The child should run 6 minutes (on a treadmill or other) at a workload sufficient to increase their heart rate > 160/min. Spirometry is used before and after the exercise - an FEV1 decrease > 10% indicates exercise-induced asthma.

Allergy testing: can be useful if year-round allergies trigger a patient's
asthma. This will be recommended if inhaled corticosteroids are not
controlling symptoms. Three different tests are used to measure the patient's
reaction to allergens: nitric oxide testing, sputum eosinophils and blood
eosinophils.

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TEXT C

Patients with asthma of any severity may find their attacks panic-inducing. Remember that the patient's struggle to breathe can cause stress, panic and a feeling of helplessness. There is a strong link between people who suffer from asthma and those who experience panic attacks. Staff must keep this in mind when treating patients with asthma, as some sufferers will require additional emotional support.

Patients may find breathing exercises beneficial. Advise patients to practice daily, to allow these exercises to become habitual. When experiencing an attack, patients should make a conscious effort to relax their muscles and maintain steady breathing. Advise patients to breathe deeply in through the nose and out through the mouth.

Smokers are at a higher risk of developing both panic attacks and asthma. In addition, smoking can irritate the airways in patients with asthma, causing neutrophilic inflammation, and exacerbating breathing problems in those with asthma. Ensure that patients who smoke are fully aware of the risks of smoking with asthma.



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TEXT D

Management of Acute Asthma

Rapid treatment and reassessment is of paramount importance. It is sometimes difficult to assess severity. Maintaining a calm atmosphere is helpful to resolving an acute asthmatic attack.

Assess the severity of the attack

- 1. Check peak expiratory flow (PEF)
 - 2. Is the patient able to speak?
 - 3. Check respiratory rate (RR)
 - 4. Check pulse rate
 - 5. Check O₂ saturation

If life-threatening or severe: warn ICU



Immediate Treatment

- 1. Maintain O₂ saturation with oxygen (94-98%)
 - 2. Salbutamol 5mg with O₂ (nebulised)
 - 3. Ipratropium 5mg every 6 hours if severe
 - 4. Prednisolone 40-50mg PO or Hydrocortisone 100mg IV



Every 15 minutes: re-assess

- 1. PEF < 75%: salbutamol repeated every 15-30 minutes, or 10mg every hour continuously. If not yet given, add ipratropium.
- 2. Monitor ECG and check for arrhythmias
- 3. Magnesium Sulfate (MgSO₄), 1.2-2g IV over 20 minutes is an option in severe cases not responding to therapy



No improvement

- 1. Refer to ICU for ventilator support
- 2. Escalation of medical therapy
- 3. Check for:
 - PEF deteriorating
 - hypoxia
 - hypercapnia
 - ABG: low pH or high H⁺
 - Exhaustion
 - Drowsiness and confusion
 - Respiratory arrest



Improvement within 15 - 30 minutes

- 1. Continue salbutamol every 4-6 hours
- 2. Check peak PEF and O₂ saturation
- 3. Prednisolone 40-50 mg PO OD for 5-7 days
- 4. If PEF>75% an hour after treatment, consider discharge with follow-up

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In which text can you find information about
1. relaxation techniques for those suffering from an asthma attack?
2. measuring the respiration abilities in patients with asthma?
3. identifying the intensity of asthma attacks in patients?
4. the procedure to follow when treating an asthma attack?
5. symptoms of asthma in patients?
6. how to diagnose asthma in patients?
Questions 7 – 12
Complete each of the sentences, 7 – 12 , with a word or short phrase from one of the texts. Each answer may include words, numbers or both. Your answers should be correctly spelled.
7. To understand how severe an asthma attack is, (7) must be measured, in addition to PEF.
8. For patients who do not respond to therapy, an IV of (8) can be used to treat severe asthma attacks.
9. Nitric oxide testing can be used to determine (9) in patients.
10. A patient suffering from arrhythmia and a peak expiratory flow of greater than 33% would be diagnosed with (10) asthma attacks.
11. Spirometry tests that contain (11) typically last for half an hour.
12. (12) can cause neutrophilic inflammation in patients with asthma.



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Questions 13 - 20

Answer each of the questions, **13 – 20**, with a word or short phrase from one of the texts. Each answer may include words, numbers or both. Your answers should be correctly spelled.

13	3. How often should patients be advised to practice breathing exercises?
14.	How often should patients with a peak expiratory flow of less than 75% be given 10 mg of salbutamol?
15.	When should patients be given 2mg of magnesium sulfate?
16.	Which patients will typically need to run when completing spirometry tests?
17.	What should staff do when assessing a patient suffering from a life-threatening panic attack?
18.	Which lung function test is helpful for understanding how the patient responds to treatment?
19.	What sort of noise might patients with asthma make when breathing?
20.	What is used to measure peak expiratory flow rate?

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PART B: QUESTIONS 1 TO 6

End-of-Life Decision Making

- 1. Remember the five priorities when caring for a dying patient:
 - 1. Recognise that the end of life may be approaching.
 - 2. Communicate with patients, families, carers and staff.
 - 3. Involve patients and those close to them in decision-making.
 - 4. Support the needs of families and carers.
 - 5. Develop an individualised plan of care for the patient.

An end-of-life care plan must ensure the physical, psychological, social and spiritual comfort of the patient, and should strive for the best possible quality of life for the patient's remaining time. This includes prescribing anticipatory medications which can be given as required, falling under the following categories which staff are encouraged to remember as the 'Four As': Analgesia (pain relief), Anxiolytics (anti-anxiety), Anti-emetics (for nausea and vomiting), and Anti-secretory (for respiratory and airway secretions). Any unnecessary medications, such as long-term diabetes control and blood pressure medications can be stopped. A Do-Not-Resuscitate (DNACPR) decision also needs to be made.

The notice reminds staff that patients who are dying

- (A) will need to be prescribed anti-emetics.
- (B) might not need to continue with certain medication.
- (C) should be encouraged to discuss their condition with loved ones.



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2. Anaesthesia use at Harlow Dental Centre

At this practice, preference is given to the use of local anaesthetics in combination with conscious sedation.

Many local anaesthetics may be used in order to reversibly block specific pain pathways and/or cause paralysis of muscles. The most commonly used local anaesthetic at the centre is lidocaine - remember that the half-life of lidocaine in the body is about 1.5 to 2 hours. Other local anaesthetic agents include articaine, bupivacaine, prilocaine and mepivacaine. Often, a combination of local anaesthetics may be used, sometimes with adrenaline or another vasoconstrictor to modulate the metabolism of the local anaesthetic and control local bleeding.

Sedation during procedures should mostly be limited to conscious sedation. Benzodiazepines enhance the effect of neurotransmitter gamma-aminobutyric acid (GABA) at the ${\rm GABA}_{\rm A}$ receptor. This results in a sedative, hypnotic, anxiolytic, anticonvulsant and muscle relaxant properties.

The guidelines inform us that multiple anaesthetics can be used

- (A) to increase the numbing effects.
- (B) to prevent bleeding throughout the procedure.
- (C) to more accurately control how long it will last.

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3. For the attention of all medical staff:

Microbial resistance to antibiotics is on the rise and infection with multi-resistant pathogens, such as Clostridium difficile and MRSA amongst others, is becoming more common.

Patients receiving antibiotics are at increased risk of such infections. As such, please be aware of our antimicrobial

prescribing guidelines, which ensure that antibiotics are only prescribed with clear, clinical justification; evidence of infection; and/or guaranteed medical benefit.

It is recommended that specimens should be cultured and results obtained before commencing treatment with antibiotics, thus only prescribing the therapy to which the microbe is sensitive. Prescription of broad-spectrum antibiotics should be avoided where possible, as these not only damage the normal bacteria of the human body, but also increase microbial exposure to antimicrobial medications, increasing their potential for developing resistance. Review narrow-spectrum antibiotic prescriptions within 5 days, and broad-spectrum prescriptions within 48 hours.

The purpose of this memo is to explain

- (A) how to treat multi-resistant pathogens.
- (B) the causes of bacterial infections.
- (C) when to prescribe antibiotics.

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More than 1% of the UK population has an autism spectrum

4. Autism in Young People

disorder. Signs can vary widely between individuals and at different stages of an individual's development. When children present with other conditions such as ADHD (attention deficit hyperactivity disorder) or other learning difficulties, autism spectrum disorders often go undiagnosed.

In children with autism spectrum disorders, symptoms are present before three years of age but diagnosis can be made after this age too. Individuals with autism spectrum disorder tend to have issues with social interaction and communication, including difficulty with eye contact, facial expressions, body language and gestures. Often, children with autism spectrum disorders may lack awareness or interest in other children and tend to play alone.

The causes of autism spectrum disorder are unknown but are linked to several complex genetic and environmental interactions.

This guidelines on autism in young people inform us that

- (A) the disorder is more difficult to identify in patients with ADHD.
- (B) most children with autism are diagnosed before the age of three.
- (C) young people with autism are more likely to suffer from other conditions.

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5. Subject: Fielding Patient Complaints

For the attention of all hospital staff:

At County Green Hospital, we endeavour to provide our patients and families with the highest quality of services. Unfortunately, there may be times where performance does not meet expectation. We routinely survey our patients on how we can do better, but members of the treatment team may also be approached with patient feedback, so all employees must be aware of the correct procedure for handling patient complaints. The first step is to listen to what patients have to say and document details appropriately. Whether or not you feel there is a legitimate grievance, it is important to keep a record for later examination. While listening to the complaint, the employee should validate the patient or family member's experience. This does not mean there needs be agreement about the nature of the complaint, but that the employee demonstrates a clear understanding of why the patient or family member might be feeling this way.

The memo reminds all staff to avoid

- (A) challenging a patient's criticisms.
- (B) handling grievances of a sensitive nature.
- (C) recording complaints that are not legitimate.

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Delirium affects up to 87% of patients in intensive care and is particularly common among the elderly. Delirium can have serious adverse effects and even lead to mortality and must therefore be treated as a medical emergency.

All hospital staff must know how to prevent, detect, and rapidly assess and treat delirium on the hospital wards. Risk factors for developing delirium include: change of environment, loss of vision/hearing aids, inappropriate noise or lighting, sleep deprivation, severe pain, dehydration, drug withdrawal, infections of any kind, recent surgery, and old age. For patients at risk of delirium, think of the mnemonic DELIRIUM which indicates the common causes: Drugs or Dehydration, Electrolyte Imbalance, Level of pain, Infection or Inflammation (such as post-surgery), Respiratory failure, Impaction of faeces (severe constipation), Urinary retention , Metabolic disorder (such as liver or renal failure). Management requires reorientation of the patient to where they are and who everybody around them is, as well as re-assurance and a non-confrontational, empathetic approach towards agitated and distressed patients. Please refrain from changing the staff of the medical team responsible for a delirious patient's care, in order to ensure Consistency for the patient. Avoid unfamiliar noises, equipment and staff in the immediate vicinity of the patient, and facilitate visits from family and friends as much as possible.

Patients with delirium are more likely to recover quickly if

- (A) kept in a darkened environment.
- (B) staff changes are kept to a minimum.
- (C) treatment ensures they receive adequate rest.

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PART C: QUESTIONS 7 TO 14

In this part of the test, there are two texts about different aspects of healthcare. For **questions 7 to 22**, choose the answer (**A**, **B**, **C** or **D**) which you think fits best according to the text.

Text 1: Work-Related Stress & Medical Errors

Stress is a term that crops up all too often in modern conversation, used to describe every unfortunate circumstance, every out-of-sequence event, and every foot out of line. What is stress? Most definitions of stress cover any internal or external stimulus which results in a negative response or disturbance in one's physical, social or mental wellbeing. Unfortunately, stress is common, and it can be devastating to people's lives and health when it is maintained over long periods of time, and when it gains the capacity to overwhelm one's coping abilities and mechanisms.

In the medical profession, daily stress is almost guaranteed. Recently, changes to many healthcare workers' contracts in the UK have resulted in longer and more antisocial working hours, as well as an increased workload, greater bed crises in hospitals and larger budget cuts, so stress levels amongst UK healthcare professionals are on the rise. A 1996 questionnaire study in the Lancet reported that 27% of doctors in the UK believed that the stress they experienced was triggered by poor management, low job satisfaction, financial concerns, and patients' suffering, amongst other factors.

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argue that conditions have actually deteriorated. A 2013 report by the British Medical Association stated that over 50% of UK doctors had experienced an increase in work-related stress over the preceding year, in addition to an increase in the complexity of their work. 25% of junior doctors in hospitals also reported a reduced quality of care for patients due to high levels of stress and the pressures put on individual members of staff, with levels of stress exacerbated by longer working hours. In many healthcare jobs, stress is the **elephant in the room**, particularly with junior staff, who may feel unable to voice concerns about their workload. Unfortunately, however, these factors have the potential to lead to medical mistakes, which could be detrimental to patient lives. In such a circumstance, who is really to blame? The overworked medical staff, or the poor management of modern hospitals?

We do not need to look far to examine the effect that stress can have on doctors today. In 2015, Dr Hadiza Bawa-Garba was found guilty of manslaughter after failing to provide lifesaving treatment to a patient when needed, resulting in the unfortunate death of a six-yearold child, Jack Adcock. In 2018, this experienced Senior paediatrician with a previously unblemished record was struck off the medical register, unable to ever practice again as a doctor. The case of Dr Bawa-Garba infuriated many in the medical profession, as fingers were pointed at an overworked doctor working under immense pressure who was blamed for gross negligence. But who is the truly negligent one in our current healthcare system? While the death of young Jack is extremely saddening, it is important to explore the circumstances around his death in order to prevent such tragedies from reoccurring. On the day of the incident, Dr Bawa-Garba was covering her own workload as well as that of two senior colleagues who were away, across six wards, spanning four floors, With malfunctioning IT software and out-of-order results systems. Did Dr Bawa-Garba make detrimental mistakes? Yes. But one must ask, are we creating a recipe for disaster when we require our medical staff to work under such immense pressures? Could this be one tragic event of many waiting to happen? Such mistakes ruin lives.

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Studies have shown that the most common cause of medical errors is the use of heuristics in medical decision-making, leading to bias. Heuristics are shortcuts taken to reach decisions quickly, based on previous patterns of disease and similar cases seen by the doctor. Mistakes are more likely when such shortcuts are used by junior doctors who lack the experience necessary to make such fast decisions accurately. Tversky and Kahneman outlined seven types of heuristics in their 1974 article: Availability heuristics are based on how easy specific diagnoses are to recall, resulting in over-diagnosis of rare but memorable conditions; Representativeness heuristics are based on similarity of patient presentations to previous typical cases, leading to delayed or missed diagnoses in atypical or non-characteristic patients; Anchoring heuristics occur when a diagnosis is based on one piece of information only, leading to rapid conclusions which lack evidence and early diagnosis without consideration of all available information; Confirmation bias occurs when a diagnosis is based on a preconceived idea, where the doctor pays attention to the information that supports their theory, and evidence which challenges the diagnosis is consciously or subconsciously ignored; Commissioning bias where a doctor acts too soon rather than waiting to gather and review all the information first; Gambler's Fallacy which is where consecutive patients have the same diagnosis and so the doctor assumes a similar patient who follows must also have the same diagnosis; Fundamental Attribution Error which is the tendency to blame patients rather than their circumstances for their poor health.

Research shows that the best way to avoid medical errors in diagnosis is to consider several hypotheses, known as "differential diagnoses", and investigate **them** all equally until the one with the most supporting evidence is found and agreed upon. Use of heuristics and the resultant flawed decision-making could be prevented by reducing work stresses and pressures on medical professionals. One way to achieve this would be to reduce working hours and shift durations in order to prevent sleep deprivation in medical staff, which is known to hinder focus, thus creating a safer medical environment for both staff and patients.

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- 7. The first paragraph explains that stress
 - (A) is usually caused by a factor than cannot be controlled.
 - (B) is interpreted in various ways by different people.
 - (C) is unusual when it lasts for an extended time.
 - (D) generally impacts people's behaviour.
- 8. In the second paragraph, doctors are said to claim that stress
 - (A) is often improperly managed by chronic sufferers.
 - (B) could be improved by increasing the welfare budget.
 - (C) generally resulted in their having to work longer hours.
 - (D) was caused by a number of issues including money worries.
- 9. The writer uses the phrase 'the elephant in the room' to emphasise the fact that
 - (A) levels of stress experienced by staff has declined.
 - (B) senior staff generally experience less stress than their juniors.
 - (C) many healthcare professionals do not discuss the stress they experience.
 - (D) junior doctors have reported a lower quality personal life as a result of stress.
- 10. Why does the writer comment on Dr Hadiza Bawa-Garba and her patient Jack?
 - (A) to suggest that doctors are more likely to make significant errors when stressed
 - (B) to outline a scenario where a doctor's concerns about stress were ignored
 - (C) to demonstrate that stress in healthcare professionals is unacceptable
 - (D) to emphasise the impact the death of a patient can have on stress

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- 11. The writer suggests that Jack Adcock's death was partly caused by
 - (A) technology that was out of date and faulty.
 - (B) a hospital ward overcrowded with patients.
 - (C) an insufficient number of nursing team staff.
 - (D) a lack of experience among the clinical team.
- 12. Why might doctors who use heuristics be at a greater risk of making clinical errors?
 - (A) heuristics are more likely to be used by junior doctors
 - (B) doctors might take too long to complete their tasks
 - (C) doctors might skip over the relevant information
 - (D) the different types of heuristics are confused
- 13. The writer claims that confirmation bias might cause doctors to ignore relevant information if
 - (A) they have recently treated a patient with the same condition.
 - (B) they are very familiar with the evidence being presented.
 - (C) the patient displays extreme symptoms.
 - (D) it does not support their existing theory.
- 14. What does the word '**them**' refer to in the final paragraph?
 - (A) the team of healthcare staff
 - (B) a variety of possible causes
 - (C) the mistakes in patient care
 - (D) a number of different texts

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Text 2: Electroconvulsive therapy (ECT)

Electrodes. Wires. Bite Blocks. For many these terms bring to mind a sinister mental asylum and the foreboding image of a patient about to suffer a tortuous electric shock. Literature written in the 20th century did much to criticise this practice, with writers frequently describing electroconvulsive therapy (ECT) as faorm of torture, reserved for the most vulnerable members of society. Interestingly enough, ECT has actually been used in the healthcare field for hundreds of years. Before the advent of effective antipsychotic medications, a wide variety of therapies were trialled for serious mental illnesses. One of these involved the therapeutic use of inducing seizures in patients. As early as Benjamin Franklin's (1705 – 1790) time, an electrostatic machine could be used to cure someone of 'hysterical fits'. Through the 19th century, British asylums began to employ electroconvulsive therapy in a widespread effort to cure diseases of the mind. In the early 20th century, a neuropsychiatrist by the name of Ladislas J. Meduna promoted the idea that schizophrenia and epilepsy were antagonistic disorders, and that precipitating seizures could serve as a potential treatment of schizophrenia. There were several methods used to induce seizures, including insulin coma, seizure-inducing medications (metrazol), and most famously, ECT.

While many of these practices are now seen as barbaric, there were very few options for psychiatric treatment before the development of antipsychotics, mood stabilisers, and anti-depressants. With the rise of these new treatment options came an increase in the public awareness of the often inhuman conditions of electroshock. The revelations resulted in widespread backlash, and the use of ECT therapy began to swiftly decline. However, in the later part of the 20th century, after much debate and research, the National Institute of Mental Health in the US came to a consensus that ECT was both safe and effective when proper guidelines were implemented. In the US today, ECT treatment is routinely covered by insurance for severe and treatment-resistant forms of mental illness.

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The exact mechanism of action for ECT is unknown, but there are several hypotheses: Firstly, increased release of monoamine neurotransmitters such as dopamine, serotonin, and norepinephrine; secondly, enhanced transmission of monoamine neurotransmitters between synapses; thirdly, release of hypothalamus or pituitary gland hormones and fourthly, anticonvulsant effect. ECT has several indications, the most notable being refractory major depression, catatonia, persistent suicidality, and bipolar disorder. It is also used in pregnancy as it is effective and does not have the teratogenic effects of some other psychiatric medications. While there are no absolute contraindications, it goes without saying that when using ECT, the risks involved will carry more weight with certain patients. Those with unstable cardiovascular conditions, those who have recently suffered a stroke, and those with increased intracranial pressure, severe pulmonary conditions, or a high risk in anaesthesia may not be suitable candidates for ECT. To further explore the appropriateness of using of ECT on specific patients, consider the following case study.

The patient, let's call her Dana, is a 35 year old female who has a history of schizophrenia. She was taken to the hospital by ambulance because her parents found her motionless in her bed, staring blankly, not responding to external stimuli, and not eating or drinking for two days. The psychiatrist caring for her is understandably concerned, because this represents symptoms of catatonia. If Dana does not eat or drink, she may develop life-threatening nutritional deficiencies and electrolyte imbalances. If she does not move, Dana may end up developing a blood clot that could result in a fatal pulmonary embolism. The first-line treatment is benzodiazepines, but in this particular case, there is no improvement in her condition. The psychiatrist decides that that ECT is the next best option. There is the issue of informed consent. Legal jurisdiction handles this differently throughout the world, but if a patient lacks capacity or is too ill to provide consent, a court must provide substitute consent to ensure adequate legal oversight. Once this happens, Dana is medically screened and prepped for treatment.

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A course of ECT treatments does not have a standard regimen. Generally, most patients require between six to twelve treatments, but the actual endpoint is determined by the level of improvement. ECT is often given two to three times a week, usually on a Monday/Wednesday/Friday schedule with psychiatric symptoms and testing carried out on a regular basis to monitor progress. Dana starts Monday by being NPO (nothing by mouth) except for any necessary medications. This reduces the chance for aspiration under anaesthesia during the seizure. She will be taken down to the ECT suite where an anaesthesiologist, psychiatrist, and nurse will greet her. She will be placed in a supine position with EEG monitoring to determine the quality of the seizure given. She will have electrodes placed on her head bitemporally, bifrontally, or unilaterally on the right. In this case, given her life-threatening catatonia, we will use the bitemporal position. The anesthesiologist will then induce anaesthesia, first preoxygenating the patient, then administering anticholinergic agent to reduce oral secretions, anaesthesic medication, muscle relaxation medication, and any cardiovascular prophylaxis as needed.

Once the patient is sufficiently sedated, a brief (0.5 to 2.0 milliseconds) electrical pulse will be introduced at a level determined to reliably cause a seizure. A therapeutic ECT seizure should last at least 15 seconds but no more than 180 seconds. Dana will be monitored for thirty to sixty minutes once **this** has finished, to ensure her recovery. The goal is for further treatments to reduce her symptoms and enable her to eat, drink, communicate, and move again. Of course, there are adverse effects that must be considered. Anaesthesia can cause nausea, aspiration pneumonia, dental and tongue injuries. The seizure itself can cause cardiovascular issues, and fractures in patients with osteoporosis, and can temporarily impair cognition and memory. It is advised that patients do not make any major or financial decisions during or after ECT treatment, and patients must refrain from driving until a few weeks after the last session.

For most patients, one treatment may be all that is needed. For some, continuation of ECT as a single session every couple of weeks may help to prevent relapse. Maintenance treatment for patients with chronically recurring psychiatric illness may also be appropriate. The scheduling of these sessions generally depends on the patient's needs and episodes, sometimes even going on indefinitely. In Dana's case, a few treatments are all that is needed to resolve her catatonia and soon she will be healthy enough to be discharged home with outpatient follow-up for her

mental health management.
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- 15. In the first paragraph, the writer mentions the role of 20th century literature in
 - (A) informing patients of the side effects of antipsychotic medication.
 - (B) preventing the mistreatment of defenceless people.
 - (C) increasing the number of patients receiving ECT.
 - (D) promoting a negative image of ECT.
- 16. What do we learn about schizophrenia in the second paragraph?
 - (A) It was less prevalent in patients who experienced seizures.
 - (B) It had a significant impact on the treatment of epilepsy.
 - (C) Many asylums in the UK were not prepared to treat it.
 - (D) The medication metrazol could be used to induce it.
- 17. What did the US National Institute of Mental Health decide in the 20th century?
 - (A) Practitioners must follow identical treatment plans when using ECT.
 - (B) Patients should be given the right to refuse ECT treatment.
 - (C) ECT should only be used as a treatment in severe cases.
 - (D) ECT was accepted as a safe treatment for patients.
- 18. In the fourth paragraph, what idea does the writer emphasise with the phrase 'it goes without saying'?
 - (A) Some women find ECT treatments successful while carrying a child.
 - (B) It is well known that some patients will not respond well to ECT.
 - (C) Few patients realise that they could benefit from ECT therapy.
 - (D) The risks associated with ECT are rarely discussed.

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- 19. In the case study, the psychiatrist decides to use ECT on Dana
 - (A) despite Dana's parents' concerns about this type of procedure.
 - (B) because the patient expresses a preference for this treatment.
 - (C) after treatment with benzodiazepines proves ineffective.
 - (D) as she has developed an electrolyte imbalance.
- 20. In the sixth paragraph, why isn't Dana given food before her ECT treatment?
 - (A) to lower the likelihood of anaesthesia-related aspiration
 - (B) to reduce the likelihood of vomiting during treatment
 - (C) as medication can interfere with the treatment
 - (D) as the catatonic state makes eating difficult
 - 21. In the seventh paragraph, what does the word 'this' refer to?
 - (A) a treatment plan
 - (B) a seizure caused by ECT
 - (C) an abnormal reaction to medication
 - (D) an improvement to the patient's condition
 - 22. In the final paragraph, the writer suggests that Dana's treatment
 - (A) was complete after only one ECT session.
 - (B) will ultimately cure her catatonia using only ECT sessions.
 - (C) will continue for a number of weeks before improvement can be seen.
 - (D) will consist of two ECT sessions each week for the foreseeable future.