Case Vignette 1: Anxiety

Tutor Guidance.

You are an F1 in Psychiatry. Whilst in Outpatient clinic, you see James, a 28 year old Doctor who has developed a fear of contamination. He is increasingly preoccupied by thoughts that his hands are covered in germs and he has started to wash them up to 20 times daily. His symptoms started about 6 months ago. Initially, his worries did not cause any great difficulties for him. However, James now fears that he is picking up germs from taps, patients and doorknobs. James is feeling low as he is frustrated by his actions, but feels little able to resist them. His work is suffering: he is preoccupied by his thoughts and his concentration has been affected. He is now seeking help as his work is being affected, and he does not enjoy the thoughts and preoccupations he has.

He has no past psychiatric history and is currently physically well. He is a non-smoker and drinks 10 units of alcohol weekly. He lives with his partner, who is very supportive.

Discussion points:

1. What is your differential diagnosis and what diagnosis will you give James?

The students should outline their thoughts on where in the anxiety spectrum this disorder lies. They should be aware of how to approach diagnosing an anxiety disorder i.e., recognising cognitive, somatic and emotional symptoms, the pattern they manifest in and assessing the impact the symptoms have on an individual's functioning (and an awareness of how this is not normal anxiety: all of this is comprehensively covered within their lecture). The diagnosis here is OCD and the students should be aware of how to recognise obsessions and compulsions (the definitions are given in their lecture on anxiety disorders), and also show knowledge that these are causing some dysfunction or distress in the individual. Students may outline depression in their differential diagnosis and it is worth pointing out to them that co-morbid depression is common (50-70%), and that screening for hopelessness/DSH/suicidal thoughts or plans is important whenever depression is suspected.

2. Outline the physical investigations you would ideally undertake in a patient with a suspected anxiety disorder.

Physical examination would note somatic (and maybe some cognitive) anxiety symptoms and exclude underlying thyroid disorder as a basic. Students have heard in lectures that other medical disorders may cause anxiety symptoms, for example, phaeochromocytoma, and hypoglycaemia or drug intoxication/withdrawal, so may mention and explore this. Blood

investigations should also be discussed, as may ECG or neuroimaging depending on what is thought to be the underlying cause.

3. Describe the treatment options available for your preferred diagnosis.

Treatment options are: If mild/moderate: CBT/ERP (exposure and response prevention) or SSRI (equally efficacious). The idea of patient centred care should be explored, with the patient exhibiting choice in the treatment modality. Any social stressors should also be adequately addressed.

If severe OCD: CBT/ERP + SSRI

If no response to SSRI, try Clomipramine (for serotonergic properties) alone or in combination.

The students are taught that Benzodiazepines are only used to counteract activation of SSRI or for periods of extreme distress or agitation, but would not be usual practice. It may be useful to ensure that students are familiar with the idea of NICE guidelines.

a) If James chooses medication, what side effects would you warn him about?

The students should be aware of the full physical side effect profile of SSRIs, including the withdrawal phenomenon (and its symptoms) and the concept of SSRI activation.

b) What particular type of psychological management would be useful? Describe the process to James.

Students have been taught about CBT and should be able to describe the process in terms of its indications and limitations, as well as being knowledgeable about how to undertake the CBT process (e.g. meeting with a facilitator for an hour a week, over 12-16 sessions and undertaking homework etc). They have also been briefed about the role of exposure response prevention (ERP) in OCD and should show familiarity with this concept.

4. What is the likely prognosis in this case?

OCD tends to run a phasic course and, if not already explored, the idea of comorbid depression should be discussed.

Case Vignette 2: Eating disorder

Tutor guidance.

Ellie is an 18 year old student who you meet in your Outpatient clinic whilst you are an F1 in Psychiatry. She is currently studying French at University, and has previously been an excellent student. She attends today with her parents who are concerned with her recent behaviour since she has returned home for the holidays.

Ellie's parents have noted that her grades have been slipping and that she is not eating well. Ellie admits that since being at University she has found the course stressful. She believes that, as usual, her parents are fussing far too much. She feels that her parents concerns are unfounded and has attended today to show them that she is fine.

However, on questioning, it becomes evident that Ellie has been trying to lose weight. Over the last 2 months she has lost a stone and a half and has never been overweight. Even though she weighs 50kg, she believes she is overweight and wants to be a size 0 as she thinks so many of her friends are. She has always been very active and is now playing sport daily. More recently, she has started to neglect her studies as she has been spending more time training at the gym and says she is too busy to eat 3 meals a day. There is no suggestion of purging, but her daily calorie intake is strictly self limited to 600 kcals per day. She enjoys collecting new recipes and preparing meals for her housemates, which she believes means her behaviour with food must be normal. She is sleeping well, there is no anhedonia and no perceptual abnormality noted, although her concentration is poor and her energy levels low.

On examination, she is 5ft 7in tall and weighs 50kg. Her BMI is 17.3. Her BP is 105/60 and her pulse is 50 bpm. You note she is thin, tired and wonder why despite it being a sunny day, she is seemingly cold. She confides in you that her periods stopped 2 months ago, and there is no possibility of pregnancy (Urine beta hCG is negative). On MSE, you do not suspect her to be depressed or anxious but she is distractible at times. You do not suspect any underlying psychosis.

Discussion points:

1. What is the likely diagnosis on the above information? Explain how you have decided this.

This vignette is exploring Anorexia Nervosa (AN). Ellie's eating behaviour has changed and she is self imposing a strict calorie limit in a bid to lose weight, even though she is not overweight. She has a distorted body image and is seemingly preoccupied with her weight and food. Physical changes to her HPA axis are important. Her BMI is 17.3 and it is worth ensuring that the students understand how to calculate BMI as well as its the critical nature in establishing a diagnosis of AN. Students may explore the possibility of Bulimia Nervosa and so it would be worth ensuring that they are aware of the diagnostic guidelines as outlined by ICD-10 for AN and BN. The psycho-phenomenology concepts of overvalued ideas v. delusions could be discussed.

2. What are the physical health complications that you would look for on physical examination?

On physical examination, Ellie is already showing complications of low BP, bradycardia, and cold intolerance. Other points to look for in Ellie may be breast atrophy (loss of secondary sexual characteristics), lanugo, peripheral neuropathy, dry skin, hair loss, tiredness and if purging suspected, any signs relating to this. Signs of cardiac failure may be present and any underlying arrhythmias

(ventricular tachyarrhymia or prolonged QTc) should be assessed by ECG. Pancreatitis, constipation or gastric dilation may be features.

Blood investigations should also be discussed: typically seen would be raised cortisol, low GH, raised amylase, raised LFTS, low Ca/Po4/K/glucose/Magnesium, low T3. If laxative abuse is suspected, there may be a metabolic acidosis; if diuretic abuse is considered, metabolic alkalosis (hypochloraemia, hypokalaemia).

3. Discuss the management options that you would outline to Ellie and her parents, including both the medical and psychological possibilities. What factors would make you think that Ellie should be admitted to an Eating Disorders Unit rather than be managed on an Outpatient basis.

Ellie would be managed by a stepped care and patient centred approach. It would be important to recognise her psychological, social as well as biological needs, and in this case, addressing her in the context of both an individual and as a family member is important (note she feels her parents are always fussing and encourage the students to pick up on this cue).

The students should discuss the concept of outpatient/day patient/inpatient settings and management. They have been made aware of the NICE recommendation of weight gain of 0.5kg.wk for outpatients, 1-2 kg per week for inpatients. They may introduce the idea of informal v. formal admission and this can be further discussed in Q4.

Students need to be aware of the possibility of re-feeding syndrome (the potentially fatal metabolic disturbance when a severely malnourished person is re-introduced to food. It usually occurs with the first 3-5 days of re-feeding and calcium, magnesium and phosphate levels in the blood should be monitored until stable. It is thought that excess loads on the cardiovascular/respiratory systems are the cause).

Medication is not used alone, and if used, note its potential effects on the QTc. Fluoxetine may be helpful -especially if obsessions are evident. Students should be mentioning psychotherapy options as the core: family therapy is thought preferable to individual therapy in adolescents. CBT is widely used and there is evidence and NICE guidance on IPT and CAT.

Excluding co-morbid psychiatric illness is important as depression is common and suicide rates are reported as grossly elevated to that of the general population.

Outpatient treatment is advocated by NICE (2004). Inpatient, or day patient, treatment is indicated for those who show no improvement or where "there is a significant risk of suicide or severe self-harm" or physical harm (NICE guidelines, 2004).

4. You decide that admission is warranted. Ellie agrees to admission and her parents support this. Initially, Ellie settles well on the Unit. However, a week into admission, she remains adamant that she does not have an illness needing inpatient assessment and treatment and she tries to leave the ward. You are the F1 on the Unit. Describe the options you would now be considering for Ellie's management.

The purpose of this question is to engage the students in discussion about the Mental Health Act both generally and in the context of Eating Disorders. Whilst they may find it difficult to give an exact answer as to how Ellie should be managed, try to get them to consider more how she could be managed, and facilitate a discussion around this. If the student immediately calls for senior support, and their seniors are all in clinic and will call back in due course, they need to be aware of both

immediate management options as well as those that the seniors would instigate. Ensure the student explores why Ellie wants to leave now and make sure they talk to her!

It is an opportunity to ensure that the students are familiar with the MHA 1983 and its more common sections (5(2), 2, 3, 4). They would be expected in the exams to be aware of what the MHA 1983 is, as well as be familiar with how assessments are conducted and by whom, and under what reasons, a person could be detained under the MHA 1983. Encourage the students to think about how the Act could be used. Iit may also present an opportunity to introduce the Children's Act in this context.

5. What factors would indicate a likely poor outcome in Bulimia Nervosa?

The factors suggestive as being indicative of a poor prognosis as usually quoted as: being male, later age of onset, longer period of illness, distorted family relationships and co-morbid psychiatric disorder/personality disorder.

Case Vignette 3: Bipolar Affective Disorder

Tutor guidance

You are an F1 in Psychiatry. Whilst in an inpatient unit, you see 30 year old Ms Julie Taylor who has been admitted with a diagnosis of mania with psychotic symptoms.

Julie had called the Crisis Team asking for help, as she had been unable to sleep for the last 3 days. When the Crisis Team went to see her at home, she appeared very distracted, laughing to herself and praying constantly. She was found holding a Bible in her hand. She admits hearing Jesus' voice asking her to "save this world from misery". She refused to be admitted into hospital, and therefore she has been detained under section 3 of MHA 1983.

She has had previous admissions to psychiatric hospitals both informally and under section of the MHA. She has been treated with Lithium, but she developed Lithium toxicity. Her treating team have therefore commenced her on Depakote (semisodium valproate).She has missed taking her medication for the last one week. She drinks alcohol occasionally, but doesn't use any illicit drugs. She has a 3 year old daughter; she usually drives her daughter to the nursery.

Discussion points:

1. What is the difference between hypomania and mania?
   In hypomania there is elevated mood associated with decreased need for sleep, but it is less severe than mania and not severe enough to interfere with social or occupational functioning, require hospital admission or to include psychotic symptoms.

2. What is section 3 of mental health Act 1983? How long is it valid for? What is the procedure to arrange a Mental Health Act assessment? Who is involved in this?

   On Section 3, the patient can be detained in hospital for treatment for a duration of up to 6 months, although this can be extended. Two doctors (Section 12 approved) must agree that a patient is suffering from a mental disorder of a nature or a degree which warrants detention in a hospital for assessment or treatment and that the patient should be detained in the interest of their health, own safety or with a view to the protection of other people. An Approved Mental Health Professional (AMHP) [used to be known as an Approved Social Worker (ASW)] is also involved in making an application.

3. How do you treat an acute episode of mania with psychotic symptoms?

   Antipsychotic medications (Olanzapine, Haloperidol, Quetiapine and Risperidone) are useful in the rapid control of severely agitated or psychotic patients with bipolar disorder. Consider adding short-term Benzodiazepines for severe behavioural disturbances. In addition to that, the patient may need a mood stabiliser; consider adding either Lithium or Valproate.

4. Why do you need to use a mood stabiliser in patients with bipolar affective disorder?

   The course of bipolar affective disorder is extremely variable. It is known that untreated patients may have more than 10 episodes in their lifetime. Therefore mood stabilisers are used as prophylaxis to prevent recurrent episodes.

5. How do you treat depressive episodes in patients with BPAD?

   If SSRI medications are used alone to treat a depressive episode in patients with bipolar affective disorder, they can trigger a manic episode.

   NICE recommends the initial use of an SSRI (in addition to an anti-manic medication) or Quetiapine (assuming an antipsychotic is not already prescribed).Second line treatment is to switch to Mirtazapine or Venlaflaxine or to add Quetiapine, Olanzapine or Lithium to the antidepressant).

6. What are the symptoms of Lithium toxicity?

   Toxicity symptoms appear when the serum lithium concentration is >1.5 mmol/L.

   The symptoms are as follows:

   GI effects

   Nausea

   Diarrhoea

   Anorexia

   CNS effects

   Drowsiness

   Increased lethargy

Confusion/delirium

Ataxia

Coarse tremor

Dysarthria

Muscle weakness

Muscle twitching

When the serum lithium level is >2 mmol/L there is increased disorientation and seizures usually occur which can progress to coma and death.

7. Can mood stabilisers be used safely during pregnancy?

All mood stabilisers are associated with risk of teratogenicity when used during pregnancy. Lithium causes Ebstein's anomaly (a congenital malformation of the tricuspid valve).Both Carbamazepine and Valproate are associated with an increased risk of neonatal malformations

8. Driving and mental illness.

Patients should contact the DVLA to notify them of their illness. If you believe that a patient has been driving when it is not safe to drive, then you have a duty to inform DVLA, after discussing the issues of confidentiality with the patient.

Case Vignette 4: Depression vs. Grief Reaction

Tutor Guidance

You are an F1 in Psychiatry .You have been asked to see Mrs Smith, a 35 year woman, in your Outpatient Clinic.

She had been happily married for about 5 years until her husband John died suddenly last week. He was attacked by a group of youngsters at a nearby sport centre. She is shocked by the whole incident and is feeling very low in her mood. She cannot be bothered with anything, not even the care of her 2 year old son. Her sister, who lives nearby, has been helping out. She is constantly looking for her husband. She feels guilty for having frequent past arguments with him. She sometimes hears her husband calling her name and speaking to her. She has not allowed anyone to touch his belongings since his death.

Mrs Smith is now staying with her sister. Her sister is very worried about her, so they have come to see you to get an opinion.

Discussion points:

1. What do you think are the possible differential diagnoses in this patient?

Depressive episode, psychotic illness, adjustment disorder, grief reaction, pathological grief reaction should be amongst the range of differentials.

2. What is the difference between bereavement and grief?

Bereavement is the loss through death of a loved person. Grief is the involuntary emotional and behavioural response to bereavement.

3. What are the issues important in this patient?

Differentiate if this lady has a depressive episode or a grief reaction.

Risk assessment to self/others and self neglect.

4. What are the stages of a normal grief process?

Grief is a continuous process, but for clarity can be described as having 3 stages as shown below.

Stage I Hours to days

Denial, disbelief,

”Numbness”

Stage II Weeks to 6 months

Sadness, weeping, waves of grief

Somatic symptoms of anxiety

Restlessness

Poor sleep

Diminished appetite

Guilt, blame of others

Experience of a presence

Illusions, vivid imagery

Hallucinations of dead person’s voice

Preoccupation with memories of the deceased

Social withdrawal

Stage III – weeks to months

Symptoms resolve

Social activities resumed

Memories of good times

5. When do you say that someone has prolonged grief reaction?

Grief is considered abnormal if it is unusually intense, unusually prolonged, delayed, or inhibited or distorted.

6. What are the causes of abnormal grief?

Abnormal grief is thought to be more likely in the following conditions:

1. Circumstances surrounding death: sudden unexpected death, traumatic death, unwitnessed death, no corpse or if there is someone to blame.

2. Who is dead – death of a child is more stressful. Death of a young adult is more stressful than the death of an infant as there is an associated longer relationship. There is more emotional and financial investment. Women who are in the postmenopausal period who are unlikely to have another child if they lose a child are more vulnerable to pathological grief reaction.

3. Who is bereaved – Grief can be complicated in more vulnerable people. Older people might be more psychologically, emotionally and physically vulnerable as they already have multiple stressors like medical problems and more emotional problems as their social network contracts. Death of a close relative is an additional stress.

4. Quality of relationship – the bereaved person had a very close, or dependent, or ambivalent relationship with the deceased. The survivor is insecure, or has difficulty in expressing feelings, or has suffered a previous psychiatric disorder.

7. What are the risk factors associated with risk of suicide?

Variable	High Risk	Low risk
Demographic and social profile - Age - Sex - Marital status - Employment - Interpersonal relationship - Family background	Over 45 years Male Divorced or widowed Unemployed Conflictual Chaotic or conflictual	Below 45 years Female Married Employed Stable Stable
Health - Physical - Mental	Chronic illness Hypochondriac Excessive substance intake Severe depression Severe personality disorder Substance abuse Hopelessness	Good health Feels healthy Low substance use Mild depression Neurosis Normal personality Social drinker Optimism
Suicidal activity - Suicidal ideation	Frequent, intense, prolonged	Infrequent, low intensity ,transient

- Suicide attempt	Multiple attempts Planned Rescue unlikely Unambiguous wish to die Communication internalized(self-blame) Method lethal and available	First attempt Impulsive Rescue inevitable Primary wish for change Communication externalized9anger) Method of low lethality or not readily available.
Resources		
- Personal	Poor achievement Poor insight Affect unavailable or poorly controlled	Good achievement Insightful Affect available and appropriately controlled
- Social	Poor rapport Socially isolated Unresponsive family	Good rapport Socially integrated Concerned family

8. How do you differentiate between grief and depression?

Grief	Depression
• *Normal identification with deceased. Little ambivalence toward deceased* • *Crying, weight loss, decreased libido, withdrawal, insomnia, irritability, decreased concentration and attention.* • *Suicidal ideas are rare.* • *No global feelings of worthlessness.* • *Evokes empathy and sympathy.* • *Symptoms abate with time. Self limited. Usually clears within 6 months to 1 year.* • *Vulnerable to physical illness.* • *Responds to reassurance and social contacts.* • *Not helped by antidepressant medication.*	• *Abnormal over identification with the deceased. Increased ambivalence and unconscious anger toward deceased.* • *Similar* • *Suicidal ideas common* • *Self blame global. Person thinks he or she is generally bad or worthless.* • *Usually evokes interpersonal annoyance or irritation* • *Symptoms don't abate and may worsen. May still be present after years.* • *Vulnerable to physical illness.* • *Doesn't respond to reassurance and pushes away social contact.* • *Helped by antidepressant medication.*

9. How do you manage “normal grief”?

Generally normal grief doesn’t require specific treatment. Benzodiazepines may be used short term to reduce severe autonomic symptoms. Antidepressants can be used when there are clinical symptoms of depression/anxiety.

Case Vignette 5: Alcohol use

Tutor guidance

You are an F1 in Psychiatry. You are on call and have been asked to assess Mr Smith, a 32 year-old man, who has been admitted to a surgical unit for fracture of his left femur after he had a motor traffic accident. He has undergone surgery with open reduction and internal fixation and his leg is in a plaster cast.

This patient has had contact with psychiatric services in the past. He has been on the caseload of a substance misuse team. He has had several admissions to hospital for inpatient detoxification. He is currently divorced, lives alone and is not working.

The nurses report that on the third day of admission to hospital this patient had become very agitated, violent and had assaulted the nursing staff. The staff reported that he has been giving irreverent answers when asked questions in the morning. He is currently disoriented. The treating team have sent off his blood to rule out any medical causes for his acute confusional state. You have been asked to assess this patient and give advice on management of his aggression.

Discussion points: -

The aim of this case vignette is to encourage students to think about how to take a history from a patient with alcohol problems and to highlight to them to be aware of *delirium tremens.*

1. **What is your differential diagnosis of this patient?**

   Organic causes – head injury

   Other causes of delirium

   Delirium tremens

   Other causes – psychosis

2. **How do you assess a patient who has a history of alcohol use?**

It is very important to get more information from the treating team regarding the circumstance of admission, to review the medical notes, and to get a detailed history from the substance misuse team and from the family. This patient is confused, so it is very important to rule out any medical causes of delirium. Check the results of his blood tests with the treating team.

If there are any treatable causes of delirium then these should be treated.

This patient is aggressive so you may need to involve the hospital security staff (if required) to try to de-escalate the situation. Once it is safe to interview the patient, then try to establish his orientation.

History

Time of most recent drink

Other illicit drug use

Severity of withdrawal symptoms

Coexisting medical/psychiatric problems

Physical examination to elicit the peripheral stigmata of alcohol liver disease

Laboratory investigation –FBC (looking for a macrocytic anaemia), U&Es, LFT, gamma GT, INR/PT, Urine drug screen to exclude comorbid misuse

Breathalyser; blood alcohol concentration (if possible)

Observe for signs of alcohol withdrawal and DTs (see below)

3. What are the criteria to make a diagnosis of alcohol dependence syndrome?

Most students mention that CAGE questionnaire can be used to make a diagnosis alcohol dependence syndrome. Explain to them that this is different from ICD10 criteria and discuss the criteria and difference between dependence and misuse. It may be useful to review the work of Edwards and Gross with the students.

4. What are the symptoms of alcohol withdrawal symptoms? Why do people develop alcohol withdrawal syndrome?

In alcohol dependent drinkers the central nervous system has adjusted to the constant inhibitory effect of alcohol (neuroadaptaion). When someone stops drinking alcohol then suddenly the brain remains in a hyperactive and hyper excited state causing the withdrawal syndrome. The symptoms can vary from mild insomnia to delirium tremens.

Within a few hours after the last drink, the patient can have restlessness, tremors, sweating, anxiety, vomiting, loss of appetite and insomnia. They can also have tachycardia and hypertension.

Generalised seizures can also occur within 24 hours of cessation.

In more severe cases they can develop delirium tremens.

5. What is delirium tremens (DT)?

- *Delirium tremens is life threatening toxic confusional state (hyper adrenergic syndrome) that occurs in approximately 5% of patients withdrawing form alcohol. The classic triad includes clouding of consciousness and confusion.*
- *Vivid hallucinations affecting every sensory modality*
- *Marked tremor.*

It commonly begins on the third to fifth day after being abstinent or with decreased alcohol intake. Patients can also have paranoid delusions, agitation, sleeplessness and autonomic hyperactivity (tachycardia, hypertension, sweating and fever).

6. What are the risk factors for Delirium Tremens?

Severe dependence

Past history of DTs

Long history of heavy alcohol use with previous inpatient treatment for detoxification

Old age

Associated co-existing medical condition

Severe withdrawal symptoms when presenting for treatment

7. How do you manage moderate dependence or severe alcohol dependence?

Discuss with students how some patients can be managed in the community for alcohol withdrawal symptoms. Benzodiazepines can be given to control the withdrawal symptoms. Chlordiazepoxide is usually given in uncomplicated withdrawal because of its low dependence potential and relatively long half life.

Chlordiazepoxide – moderate dependence (an example regime)	
Day 1	*20 mg qds*
Day 2	*15 mg qds*
Day 3	*10mg qds*
Day 4	*5mg qds*
Day5	*5mg bd*

In cases of severe alcohol dependence patients can be given a regular dose of chlordiazepoxide over 24 hour period. This is then gradually tapered and stopped over 7- 10 days. Discussion of the use of treatments for symptomatic relief of withdrawal symptoms can also be discussed, for example, loperamide and zopiclone.

8. What's Wernicke's encephalopathy?

It is caused by thiamine (Vitamin B1) deficiency.

Patients classically present with triad of confusion, ataxia and ophthalmoplegia.

It is therefore advised that all patients undergoing inpatient detoxification should receive parenteral thiamine as a prophylaxis for Wernicke's encepahlopahty.

If this is untreated patients can go into Korsakoff's syndrome where they have irreversible anterograde amnesia(sometimes retrograde amnesia). In Korsakoff's syndrome patients can register new events but they cannot recall that information after a few minutes. They have confabulation where they try to fill in the gaps in the memory by adding false information.

You can then discuss the long term option for the patient referring the patient to drug and alcohol services. Patient can receive motivational interviewing to address issues related to alcohol.

You should also discuss the use of Acamprosate and Disulfiram in relapse prevention strategies.

Case Vignette 6: PTSD

Tutor guidance:

You are an F1 in Psychiatry. Mrs S is a 32 year old female who you are asked to see in your outpatient clinic. She presents with an 8 month history of insomnia. She recently arrived in the UK with her husband and 3 children seeking asylum. The family have fled their country following long term dispute.

Mrs S complains of poor sleep with difficulty in drifting off to sleep. When she does sleep, she feels her sleep is disrupted with frequent nightmares. On questioning, she feels constantly "on edge", unable to concentrate and finds herself feeling anxious on leaving the house. Her husband describes that she has a poor appetite and that she is tearful on occasion.

There is no significant past medical history and no past psychiatric history. She is currently medically well. There is no significant family history that she is aware of, but she was orphaned at the age of 9 and has little memory of her parents. Her brothers and sister remain in her home country and she is terrified for their well-being. You note that she is extremely reticent to discuss her life before her arrival in the UK and will persistently change the topic to avoid your questions. She does not drink any alcohol and has never used illegal substances.

On mental state examination, you find her anxious, tearful, and ruminating on her insomnia. She looks around distractedly and wrings her hands repeatedly. There is no evidence of psychosis and she denies any thoughts or plans of deliberate self harm or suicide. She feels desperately hopeless as the terrible dreams persist causing her to dwell on them throughout the day also. Her cognition is intact and she is willing to accept help but unsure what could be the cause of her insomnia.

Discussion points:

1) What is your differential diagnosis?

Allow the students to offer their thoughts and encourage them to reflect on why they have chosen these differentials. Encourage them to use ICD-10/DSM-IV. Post Traumatic Stress Disorder (PTSD), Acute Stress Reaction, Adjustment Disorder, Depression, may all be included. Parasomnias, Generalised Anxiety Disorder, Panic Disorder or agoraphobia may also be suggested by the students.

Please discuss with the students their differentials offered and work with them to understand why these are the differentials and not the working diagnosis- it is important for their learning of how to understand and manage psychiatric problems and in this instance to formulate differentials around anxiety. So, discuss the nature of the symptoms in each differential and highlight how they predominantly differ in duration and pattern and how this facilitates in diagnosis. This will aid them to work through their own differentials in the future i.e. GAD v panic disorder v acute stress reaction- the symptoms are similar but of a different pattern. Discuss adjustment disorder and how it fits into the mental health spectrum.

2) Choose your preferred diagnosis and outline your reasons for making this choice.

***PTSD** is the focus of this case. Students will likely be familiar with the term but need to understand now how to diagnose and manage the condition.*

Highlight that PTSD is the response to a severely stressful, catastrophic or overwhelming event where the individual usually fears for their life or that of another (usually close to them). There are 2 types described: Type 1– response to a single, overwhelming event e.g. rape *and* Type 2- sustained and repeated e.g. combat, persistent abuse.

> *The students will need to be aware of how to make this diagnosis according to DSM-IV or ICD-10 guidelines e.g. in ICD-10, they must show knowledge of the need for at least one positive from each of the symptom clusters (hyper-arousal, re-experiencing and avoidance) that necessitate the diagnosis. They must also demonstrate that they have knowledge of the time frame of the diagnosis i.e. symptoms begin within 6/12 of the event and present minimum 1/12.*

The presence of the 3 symptoms clusters cause clinically significant distress or functional impairment in that person's life (DSM not ICD) and that is usually the reason for seeking medical advice.

Up to 30% of those exposed to such events may be affected. Anyone may be affected but certain predisposing factors are important in triggering the onset of PTSD in some e.g. being female (2:1), from a lower social class, having a lower IQ, past Psychiatric history, no social support , occupation (e.g. higher in war veterans), childhood experience (divorce/abuse), ?genetic link etc.

Highlight to the students that co-morbid depression is common and that screening for DSH and suicide is essential. It would be worth discussing coping strategies (the maladaptive ones at present) that may be used, for example, alcohol or narcotics. Always complete a risk assessment for DSH/suicide.

3) <u>What are your management options and how will you choose between them?</u>

Encourage the students to think holistically in their approach. Management must include discussion of biological, psychological and social aspects. Ensure they understand that each case is different and that person centred care is paramount.

The guidelines for management should focus on those advocated by NICE and the Royal College- i.e. be evidence based. In essence:

- *Debriefing **not** advocated (NICE, COCHRANE)*

<u>NICE:</u>

- *Watchful waiting if symptoms present less than 4 weeks duration or are mild in nature*
- *Trauma focused CBT or EMDR is advocated. Usually 8-12 sessions, may need longer, on an individual basis for about 60 minutes per session etc..*
- *Medication not first line*
    - *Use if psychology fails or not wanted by the patient*
- *Medication (NICE guidelines)*
    - *Paroxetine*
    - *Mirtazapine*

- *Amitryptiline and Phenelzine in secondary care (role of Olanzapine as an adjunct)*
- *Medication may be used with CBT/EMDR if indicated i.e. severe depression or hyper-arousal symptoms prominent.*

Students need to be aware of the side effects of each of these different classes of commonly used medication. They will have received information on this in lectures but please use this opportunity to explore their understanding of this essential pharmacology (in basic terms!) and ensure they are aware of the SSRI activation and withdrawal syndromes as well.

4) What is the prognosis of this condition and what factors in this case may worsen or improve the outcome?

The typical course would have 50% recovery during first year. Symptoms persisting beyond this have a chronic nature with poorer prognosis but can still be treatable. Females have longer duration of illness (48 months v 12 months). Recovery is less likely if initial symptoms severe or complicated by co-morbid psychiatric issues and poor coping strategies etc.

5) Consider: would you expect someone who has lived in challenging conditions to present like this? When should anxiety become an issue for the Psychiatrist?

Allow the students to lead the discussion and help them in formulating their thoughts and ideas. From an anxiety point of view, we want them to appreciate that anxiety is a natural human response mediated by physiology and evolutionary benefit: a certain amount is beneficial for coping (flight/fight) or functioning (think back to the Yerkes-Dodson curve from basic psychology and the best analogy for the students is the need of a bit of adrenaline to motivate them for exam revision!). However, if anxiety is persistent or overwhelming clearly it will affect their functioning and then that person would perhaps seek medical help. It can lead to poor coping (e.g alcohol excess) or secondary depression and can be treatable with early and appropriate intervention.

Case Vignette 7: Old Age Psychiatry

Tutor guidance:

You are the on call Psychiatry F1. You have been asked to assess Mrs Esme Simpson, an 83 year old widow currently recovering from an emergency repair to a fractured neck of femur.

Esme is presenting erratically. Despite being attached to patient controlled analgesia and having IV fluids running, she is repeatedly trying to get out of bed. She also has a urinary catheter in-situ. Having had an uncomplicated operation 36 hours ago, Esme is now hostile with the ward staff. She is accusing them of attacking her and refuses her medication saying it is poison.

Esme has a history of hypertension, angina and bilateral cataracts. Her current medications include Pravastatin, Perindopril and prn GTN. She was commenced on Sertraline 10 days ago. She is currently receiving morphine in the form of patient controlled analgesia.

Esme had an isolated episode of depression following the death of her mother 20 years ago but is currently not receiving follow up by the CMHT. Prior to admission, Esme was living at home alone. Her husband died 6 months ago. Her 2 daughters live locally. She is a non-smoker and drinks on occasion. Her daughter has mentioned to the nursing staff that her mother has been a little confused at home prior to the admission. Esme has been forgetting days and appointments and noted to be wearing unclean clothes at times.

The trauma ward team feel that they cannot manage Esme at present. They ask you to prescribe medication to calm her and request admission to a Psychiatric unit for assessment.

Discussion points:

1a) What is your differential diagnosis?

The purpose of this scenario is to introduce the students to a common scene in Old Age Psychiatry and one which they will no doubt encounter as a F1 in both medicine and surgery. The students should, through this session, become familiar with delirium, dementia and depression in later life. The aim is to aid the students to form their differential diagnosis broadly around these 3 headings and to explore with them how they can be alerted to spotting signs and symptoms of each and to help them distinguish between each. There is no clear answer in this vignette as to the diagnosis as the aim is to introduce concepts and facilitate discussion around this.

It is worth noting to the students that whatever their chosen specialty they will need to be familiar with recognising delirium as it is a medical emergency.

The differential to be focused on should then be delirium, dementia and depression. Paraphrenia/very late onset schizophrenia-like syndromes will likely be raised as a possibility. The concept of pseudo-dementia could be introduced here or later in the tutorial. Delirium superimposed on dementia should also be introduced as a possibility. Depression is more thoroughly explored in the depression and depression vs. grief reaction vignettes: please refer the students to these.

Students should be encouraged to think of the causes of delirium and also to recognise the common types of dementia that they may encounter (see tables 1.1 and 1.2 for examples). Delirium affects up to 30% of acute hospital inpatients (BGS, 2005) and in this example, potential causes may include hyponatraemia (due to the SSRI), morphine excess or conversely pain, UTI, post operative confusion, post operative chest infection etc..

Table 1.1 Examples of causes of Delirium (note: the list given by the students will be much more exhaustive than featured here)

Infection	Consider all systems i.e. respiratory, urinary, CNS etc
Withdrawal	Alcohol, narcotics, prescribed medicines, consider any OTC or alternative medicines
Acute metabolic or endocrine	e.g. hypercalcaemia, hyponatraemia, hyperthyroid, hypoglycaemia
Trauma	Particularly cranial trauma
Central Nervous System pathology	e.g. CVA, SOL, cerebral haemorrhage, heavy metal poisoning
Hypoxia	

Table 1.2 Common presentations of Dementia.

One in 14 people over 65 years of age and one in six people over 80 years of age has a form of dementia (Alzheimer's Society, 2012)

	Alzheimer's Dementia	**Vascular Dementia**	**Lewy Body Dementia**
Incidence	Commonest: 62% of all dementias recently cited (Alzheimer's Society, 2012)	20-40% dementias in Europe M>F until later in life	Unclear- 10-20% of dementias in Europe (recent studies though suggest 4-5%)
Course	Insidious onset and gradual decline	Sudden onset and stepwise decline Fluctuating presentation	Gradual decline Fluctuating deficits
Associated symptoms	Amnesia Apathy Apraxia Aphasia Delusions and hallucinations may exist	Patchy deficits Insight may be better preserved than AD Emotional changes Depression/anxiety associated May have delusions and hallucinations	Parkinsonian symptoms Visual hallucinations Falls/unsteady on feet May have existing Parkinson's disease (PD dementia)

1b) How will you arrive at a working diagnosis? What further information will you need?

(Consider all biological, psychological and social sources)

The students have been asked to approach this question from a holistic point of view. They will likely be familiar with and comfortable to discuss physical health investigations and may need prompting with regards to more psych/social aspects. Refer them to DSM-IV (or ICD-10) for full diagnostic definitions of delirium, dementia and depression.

Before moving on to discuss the physical investigations, it would be good practice to ensure that the history and examination are complete to aid assessment of delirium v dementia v depression (see table 2). A number of aspects of the history need to be explored and supplemented. Essential examples include:

- *When the symptoms started e.g. pre or post surgery, pre or post PCA, if it preceded the operation how did it relate to the introduction of the SSRI or death of her husband etc?*

- *Nature of the onset- was this was sudden or gradual.*
- *What course has it since followed? Fluctuations in symptoms and in conscious level*
- *Other symptoms e.g. shortness of breath, fever, rigor, weakness of limbs etc*
- *Previous episodes*

*As part of their management of this case, they **must** mention the need for a **collateral** history and identify sources of where to obtain this (e.g. family, carer, GP, past notes)*

Certain elements of the scenario should be explored in greater depth e.g. the alcohol use (?DT), the amount of morphine administered (?pain ? can she work the pump especially if she has cognitive deficits, or is there morphine excess?), how bad is her visual impairment? (sensory deficits are not uncommon and can hugely complicate presentations) . Students would need to comment on the MSE and to further explore the given psychopathology and symptoms of depression.

Table 2: Delirium v dementia; essential features

	Delirium	***Dementia***	***Depression***
Onset and duration	• *Sudden over hours or days*	• *Likely gradual* • *may be acute in vascular dementia*	• *?trigger* • *2 weeks minimum of symptoms*
Course	• ***Fluctuates*** • ***Clouding of consciousness*** • ***Worse at night usually*** • ***(Usually) reversible***	• ***May be features of lucidity*** • ***no clouding of consciousness*** • ***Note sun-downing*** • ***Progressive*** • ***Generally global disruption***	• ***Static or progressive presentation*** • ***Improves with treatment***
Features	• *Disorientated especially to time and place* • *Inattention noticeable* • *Illusions* • *delusions* • *hallucinations* *May be hypo/hyperactive. Students should be aware of hypoactive delirium being confused with dementia or depression in its clinical presentation of slowness, poor concentration, and reduction in appetite.*	• *Memory or functional impairment* • *Illusions* • *Delusions* • *hallucinations* • *Near misses on cognitive assessment v "don't know" of depression*	• *Low mood* • *Low energy* • *Anhedonia* • *Biological symptoms* • *Suicidal thoughts/plans* • *?psychosis present* • *Subjective poor STM (pseudodementia)* • *"don't know answers" on cognitive testing*

Investigations would include FBC/CRP/TFT/Ca/B12 and folate/glucose (i.e. the confusion screen) as well as UE (?hyponatraemia), LFT (including gamma GT), urine dip --> MSU if needed, CT head. Syphilis/HIV serology and LP is not advocated routinely unless there is good clinical suspicion (NICE 2010). Cognitive assessment ***must*** *be mentioned (the MMSE/MOCA/AMMT/short CAM (confusion assessment method) should be discussed- NICE advises using the short CAM). A physical examination should be mentioned even at bare minimum noting the observation chart for temperature, BP and HR which could all give clues to underlying infections. The medication card should be reviewed to ensure no new medications are causing interactions.*

2) Esme wakes the next morning and tries to leave the ward. You are called and asked to section her as she is repeatedly attempting to leave. What do you do?

This question is an opportunity to discuss important ethical and legal issues. Again there is no definitive answer here as we are not stipulating a diagnosis but introducing concepts. The aim is to introduce the students to the Mental Capacity Act and to provide further scope to broaden their understanding of the Mental Health Act (they need to be aware of the basic principles relating to S2, S3 and S5(2) so please take the opportunity to outline when, where and how these are used in practice and answer their questions relating to this). In terms of the MCA students need to be aware that it exists and an introduction to its basic premise would be ideal. If possible, discuss with them (very broadly speaking!) when the MHA would be used in preference to the MCA and vice versa.

3) Esme continues to resist intervention. She is shouting and disturbing other patients. How should she be best managed?

Good clinical practice would say that if the suspicion of delirium is strong, treat for the underlying cause of that suspicion, then assess and manage any underlying cognitive deficit or psychiatric illness *(NICE guidelines Delirium 2010)**.** The students should once again be urged to consider management holistically. They must be encouraged not to wade in with unnecessary medication in patients who are challenging on the ward.*

General principles of good management can be found outlined in the NICE guidelines on delirium and on dementia, as well as the British Geriatric Society's delirium guidelines. Students will be signposted to these as web based resources for their study. In essence, person centred care by a MDT appropriately trained in delirium/dementia is needed. Family, friends or carers should be involved. In those who are agitated or distressed, non-verbal de-escalation is the first step with medication only for those with who this method is not suitable or has failed. For delirium, NICE suggests low dose and careful titration of haloperidol or olanzapine in those who are acutely behaviourally disturbed. This is for short term management only (NICE states 1 week). Anti-psychotics are to be avoided in suspected PD or Lewy Body disease. Discuss with the students why sedatives would not be ideal but may be needed in certain circumstances.

4) What are your thoughts on Esme's prognosis in general? Can you think of ways to improve her potential outcome?

Having a hip fracture is itself a risk for developing delirium and cognitive impairment either past or current is also a risk factor (NICE guidelines, 2010). People presenting with delirium are at greater risk of longer inpatient stay (and all the risks therein), discharge to residential/nursing home care, or developing future cognitive impairment.

Emphasizing good clinical practice in the detection of delirium and dementia as a way of promoting better outcomes is suggested. The role of a pro-active and multidisciplinary liaison psychiatry team has been shown to be beneficial, as evidenced by the RAID project in Birmingham.

Case Vignette 8: Personality Disorder

Tutor Guidance

You are an F1 in Psychiatry, you have been asked to assess a young woman in Accident and Emergency who came in after taking an overdose. Lisa is 25 years old and is currently living with her boyfriend of 7 months. She works as a shop assistant. Last night she took an overdose of 30 Paracetamol, at the time she wanted to die. She is well known to the department and has been seen several times for similar overdoses or cutting her wrists.

She had a difficult childhood, never knew her father and was brought up by her mother who was dependant on alcohol and used to leave her alone when she went on nights out. She found it difficult at school and was frequently bullied due to her appearance. She started to cut her arms, would truant from school and would drink and abuse solvents. She left school with no qualifications and has many jobs she does not stay in for long as she frequently gets bored or fired and moves on.

She does not like being single and has had a string of boyfriends some of whom have been violent. Relationships become intense early on, but never seem to last. Her current partner Wayne drinks heavily. Her mood is often "bored" and she feels empty most of the time. Her life seems pointless and she finds it hard to stick at things. At times she can be impulsive and is heavily in debt.

She has been prescribed antidepressants by her GP before, but rarely takes them consistently and has not found them helpful. She has been offered input from local mental health services before, but tends not to turn up to scheduled outpatient appointments. She presents at times of crisis and can sometimes be intoxicated and verbally abusive when assessed.

Discussion Points:

1. What is your preferred diagnosis? Explain how you have decided this.

Students should discuss the features of borderline personality disorder described in this case. They should be able to consider what other diagnoses that should be excluded including depression and drug and alcohol misuse. During the discussion you should address the key features of all personality disorders as well as those of Borderline Personality Disorder as is described in the case.

They are disorders of inner experience that cause distress or significant impairment in social functioning. Personality disorders are:

- ***Enduring** (starting in childhood or adolescence and continuing into adulthood)*
- ***Persistent** (not transient and continue over prolonged period)*
- ***Pervasive** (do not only occur in one situation or environment, is evident in all areas of a person's life)*

Personality disorders can manifest as problems in:

- *Cognition: ways of perceiving and thinking about self and others*
- *Affect: range, intensity and appropriateness of emotional response*
- *Behaviour: interpersonal, occupational and social functioning and impulse control*

2. What are the key points to assess when diagnosing personality disorder?

Diagnosis should be made on the accurate assessment of patient's emotions, relationships and behaviour over a period of time, in the absence of other mental illness. Information from several sources is essential. First think about the features of the person's personality and then assess the degree of distress and impairment of social functioning caused. There are many structured methods that can be used including patient questionnaires and structured interviews with patient or relatives.

3. What are the types of personality disorder?

Personality disorders are defined in a categorical manner for the purpose of ICD-10 and DSM-IV. There is some difference in the way they are categorised and the names they are given, however the features are generally the same.

Cluster A

- ***Paranoid*** *sensitive to criticism, grudging, suspicious (may distort neutral actions of others), argumentative, jealous, self-centred and mistrustful.*
- ***Schizoid*** *humourless, emotionally cold, detached, indifferent to others, little interest in relationships, solitary and may indulge in excessive introspection or fantasy.*

DSM-IV also includes schizotypal personality disorder in this cluster, however ICD-10 classifies this along with the schizophrenia and related disorders. People with schizotypal personality disorder exhibit interpersonal discomfort and have peculiar ideas and perceptions.

Cluster B

- ***Dissocial (Antisocial** in DSM-IV**)*** *callous, irresponsible, short relationships, low tolerance to frustration with low threshold for violence, lack of guilt and tends to blame others.*
- ***Emotionally unstable impulsive type*** *unpredictable, quarrelsome, explosive and difficulty sticking to one course of action.*
- ***Emotionally unstable borderline type*** *symptoms of impulsive type plus poor self-image, relationship crisis, fear of abandonment, self-harm and feeling of emptiness.*
    - *(DSM-IV only contains borderline type and calls it **Borderline Personality Disorder**)*
- ***Histrionic*** *dramatic, suggestible, labile affect, continual seeking of excitement and attention, seductive and vain.*

Cluster C

- ***Anankastic (Obsessive-Compulsive** in DSM-IV**)*** *cautious, orderly, perfectionistic and conscientious rigid, preoccupied with order and control.*
- ***Anxious (Avoidant** in DSM-IV**)*** *anxious, feeling of inferiority, fear of rejection, afraid to trust others restricted life and social avoidance.*
- ***Dependent*** *dependent on others subordinate, undemanding, helpless, fear of not coping and need for reassurance.*

4. Discuss the types of psychological therapy used to treat personality disorder

Psychological treatments involve

- *long term supportive psychotherapy, with short term problem solving, crisis intervention, focussed interventions*
- *Longer term restructuring psychotherapy (cognitive or psychodynamic)*

Specific types of psychological therapies used include:

- *Dialectical Behavioural Therapy (DBT)*
- *Cognitive-Analytical Therapy (CAT)*
- *Psychodynamic therapy*

It has been found that rather than a specific type of therapy being effective, it is the relationship with the therapist and also the wider approach of the services involved that proves effective. There needs to be a focus on using a consistent approach.

5. What is the role of medication in personality disorder?

There is no specific medication for the treatment of personality disorder and psychological work should be the mainstay of management.

There is a role in using medication for the treatment of co-morbid mental health problems such as depression or psychosis. It should be highlighted that co-morbidity is high.

Sometimes medications are used to modify some of the features of personality disorders, but it should not be the only treatment received.

Case Vignette 9: Schizophrenia

Tutor Guidance

You are an F1 in Psychiatry. Whilst in an inpatient unit, you see 22-year-old Mrs Julia Roberts who has been admitted with a diagnosis of schizophrenia. She had her first episode of psychotic illness 2 years ago. During that time she had a one month history of hearing voices and had been very suspicious. She was hearing multiple male and female voices commenting on whatever she was doing. She also believed that her house was bugged and she would check everywhere in the house to see if there were any hidden cameras. She also believed that people were talking about her behind her back. She had isolated herself within her house and was very scared to go out. She agreed to come to hospital informally.

She was commenced on risperidone, and the dose was increased to 8mg. The patient showed improvement in her symptoms but she developed stiffness, dribbling from the mouth and a shuffling gait. The treating team commenced her on procyclidne which helped her with these symptoms. She was discharged home and reviewed in Outpatient Clinic. Subsequently, she had menstrual abnormalities and developed very distressing galactorrhoea. She stopped taking her medications and had a relapse of psychotic illness.

For four weeks her family has noticed that she is talking to herself, isolating herself and was not going out. She has again reported hearing multiple male and female voices and has been extremely suspicious of everyone. She is very agitated and refusing to see a doctor. Her family contacted the GP who liaised with the mental health team and arranged for a Mental Health Act assessment; the patient has been detained under section 3 of the Mental Health Act 1983.

Discussion Points:

1. What is Schizophrenia?

Schizophrenia is a psychotic illness where people lose touch with reality. They experience hallucinations and delusions.

2. What are the symptoms of Schizophrenia? What are positive and negative symptoms? Can you identify and label some of the symptoms in this patient?

Explain to the students that the first rank symptoms are not diagnostic for schizophrenia. We use ICD10 criteria for the diagnosis. You may want to describe some of the symptoms of schizophrenia. Explain how the acute phase of the illness is different from the chronic phase. Students should be able to identify some of the symptoms in this case vignette like auditory hallucinations, persecutory and referential delusions

3. What are dopamine pathways? How are they related to symptoms of Schizophrenia?

Some researchers have suggested that dopamine systems in the mesolimbic pathway may contribute to the 'positive symptoms' of schizophrenia whereas problems with dopamine function in the mesocortical pathway may contribute to the 'negative symptoms'.

You can also explain how dopamine blockade in the nigrostrital pathway may contribute to pseudo-parkinsonism symptoms. Blockade of dopamine in the tubero-infundibular system can contribute to symptoms of hyperprolactinaemia.

4. How do you treat this patient's symptom?

Explain the bio-psycho-social approach taken to treat schizophrenia.

How is treatment different in the acute and the chronic phase of the illness?

Some patients may need to be detained under different sections of the Mental Health Act 1983 for further assessment and treatment.

5. What is the difference between typical and atypical antipsychotic medications?

Explain the mechanism of action of antipsychotic medication. Antipsychotic medications are dopamine antagonists; they block postsynaptic D2 receptors. They are generally more useful to treat positive symptoms, which is caused by dopamine excess.

Typical antipsychotic medications: these are older medications such as haloperidol, chlropromazine and depot antipsychotic medications like haloperidol, piportil and flupenthixol.

Typical antipsychotic medications tend to cause more extrapyramidal side (EPSE) effects but they are still widely used because they are effective.

Explain why depot antipsychotic medications are useful in managing some patients who have compliance issues.

Atypical antipsychotic medications: these are a newer group of medications. They do block D2 receptors but they also block 5HT2 receptors. Examples include olanzapine, risperidone, quetiapine,clozapine and aripiprazole. They cause less EPSEs.

Clozapine is useful in treatment resistant schizophrenia.

6. Why is this patient on procyclidine?

Extrapyramidal side effects are a group of symptoms that can occur in people taking antipsychotic medications. This patient has developed symptoms of Pseudo-Parkinsonism like bradykinesia, salivation, slowed movements and shuffling gait. The treatment options could be either reduction in the dose of the medication or prescription of an anticholinergic medication like procyclidine.

7. What are the most common side effects of antipsychotic medications and how do you treat them?

The most common side effects are weight gain and sedation. In addition there are extrapyramidal side effects like dystonia, akathisia and Pseudo-Parkinsonism symptoms.

Hyperprolactinaemia symptoms are sexual problems, galactorrhoea, amenorrhea, gynaecomastia (in men).

Other side effects like –increased risk of diabetes, dyslipidemia

Arrhythmias in some patients – therefore we monitor patients with ECGs

Narcoleptic malignant syndrome

8. This patient has amenorrhea. What are the possible causes for this?

Rule out possibility of pregnancy in this patient. Antipsychotic medications cause hyperporlactinaemia and thus can cause amenorrhea as side effects.

9. What are the routine tests to monitor patients on antipsychotic medication?

Anyone who is on long term antipsychotic medication needs to be monitored for the following:

- *Weight , BMI, Blood pressure*
- *Check for extrapyramidal side effects*
- *FBC, LFTs, U&Es, BM, lipid profile*
- *In addition, in some patients – check Prolactin levels & ECG*

10. What is neuroleptic malignant syndrome (NMS)?

There are very few medical emergencies in psychiatry like neuroleptic malignant syndrome, lithium toxicity, serotonin syndrome and attempted suicide.

NMS is a very rare life threatening side effect of antipsychotic medication. Usually triggered by a new antipsychotic medication or a dose increase, it is thought to be an idiosyncratic side effect in response to dopamine antagonism.

Symptoms include - muscle stiffness, rigidity, altered consciousness and disturbance of the autonomic nervous system (fever, raised pulse rate, BP)

Blood test show raised WBC and creatinine kinase.

Treatment: stop antipsychotic medications; get urgent medical treatment often in intensive care unit.

11. What is treatment resistant Schizophrenia?

It is a failure to respond to two or more antipsychotic medications, each given at adequate doses and for an adequate duration. Clozapine is useful in treatment resistant schizophrenia. Patients require regular blood monitoring because of the risk of neutropenia.

You can also discuss the use of psychological treatments like CBT and family therapy in managing the patients. Social approaches like social skills training etc.

12. If this patient wants become pregnant what advice will you give her?

If the patient is planning for pregnancy then patient should not stop medications suddenly. She should discuss her treatment with the doctors so that her medications can be reviewed and other options looked at.