Depression workshop

ANSWERS

Person Centered Medicine from Bench to Bedside (PHA-6020Y)

Clinical Workshop

The purpose of the lecture material and workshop is for you to:

- To improve your understanding and knowledge of depression and its management
- Review case studies. From the case studies the questions will direct you to:
    a. Identify care issues
    b. Formulate care interventions

Pre-task activity 1

80-year-old man with a history of cardiac disease is suffering from depression and poor sleep.	
Possible treatment	**More than one answer may apply**
SSRI	Y
TCA	N (anticholinergic side effects) • orthostatic hypotension • urinary retention • Longer half-lives and decreased oral clearance values in elderly observed. Slower metabolism in elderly • TCAs affect cardiac contractility. Some TCAs linked to ischaemic heart disease and sudden cardiac death. Avoid in coronary artery disease. • Contraindicated in patients with recent MI
Psychological therapy	Y
Zopiclone	Y
Sleep hygiene	Y
Diazepam	N (accumulation in the elderly)- low accumulation and delayed washout of diazepam in elderly, slower metabolism in elderly Risk of Falls
Pregabalin	N-for GAD (*Generalized Anxiety Disorder*)

Pre-task activity 2

EN has been struggling to get off to sleep whilst waking extremely early. He has also lost his appetite and 6kg in weight. He is unable to concentrate for long periods of time.	
Possible treatment	**More than one answer may apply**
SSRI	Y (seems likely EN is suffering from depression) **Moderate depression**
Psychological therapy	Y
Zopiclone	Y
Sleep hygiene	Y
Promethazine	N

1st agent ▼ 2nd agent ▶	SSRI	TCA *	Venlafaxine	Duloxetine	Mirtazapine	Reboxetine**	Agomelatine
SSRI with the exception of fluoxetine	Discontinue first SSRI gradually and stop - start second SSRI at low dose the following day [2] ***or*** Immediate switch [8,9,15]	Discontinue SSRI gradually and stop - start TCA the following day. If the SSRI being stopped is paroxetine or fluvoxamine, ideally leave a gap of a few days [3] ***or*** Cross-taper cautiously with very low dose of TCA* [2]	Cross-taper cautiously, starting with venlafaxine 37.5mg daily and increase very slowly [2] ***or*** Immediate switch (caution if fluoxetine or paroxetine used) [8,9]	Immediate switch starting with duloxetine 60mg daily has been well tolerated [2,3,10]	Cross-taper cautiously [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]
Fluoxetine 20mg daily §	Stop fluoxetine abruptly – start second SSRI at half the normal starting dose 4 to 7 days later [2]	Stop fluoxetine abruptly – start TCA at low dose 4 to 7 days later and increase dose very slowly [2,3,9]	Stop fluoxetine abruptly – start venlafaxine 37.5mg daily and increase dose very slowly [2]	Immediate switch starting with duloxetine 60mg daily has been well tolerated [2]	Cross-taper cautiously starting with mirtazapine 15mg daily [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]
TCA*	Gradually reduce the dose of TCA to 25-50mg daily - start SSRI then slowly withdraw TCA* over next 5 to 7 days [3]	Cross-taper cautiously [2]	Cross-taper* cautiously, starting with venlafaxine 37.5mg daily [2]	Cross-taper cautiously starting with duloxetine* 30mg daily and increase dose very slowly [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]
Venlafaxine	Cross-taper cautiously starting with half the normal starting dose of SSRI e.g. paroxetine 10mg daily [2] ***or*** Immediate switch (caution if fluoxetine or paroxetine	Cross-taper* using a very low starting dose of TCA e.g. amitriptyline 25mg daily [2]		Discontinue venlafaxine gradually and stop – start duloxetine 30mg daily the following day and increase dose slowly [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]	Cross-taper cautiously [2]

Case study 1

Sandra is a 32-year-old lady with two young children. She is married and works part-time in a supermarket. Her husband has recently been made redundant which has caused some worries for the family. She has recently been very tense and short tempered and is finding it difficult to concentrate at work. Sandra feels most of her problems are because she hasn't been sleeping well and as a result is always tired with no energy.

Her husband convinces her to visit her GP which she reluctantly agrees to as she feels she would be wasting their time. At the surgery she admits to having felt down a lot recently and perhaps her symptoms have been going on for longer than she realised. On further questioning the GP discovers Sandra feels her husband is better at looking after their children than she is and most nights she lies awake dreading the day ahead. She has even had thoughts of preferring to be dead than continuing to feel this way.

Sandra doesn't take any medication and apart from these symptoms is fit and well and usually a happy character.

The GP diagnoses Sandra with a moderate depression and prescribes Citalopram 20mg OM.

1. From the information provided about Sandra, identify the likely causes, signs and symptoms of her depression.

Causes	Signs	Symptoms
Psychological aspects	**Objective – what you see**	**Subjective – how the patient feels**
1. life events (+ve and -ve) Husband made redundant	Agitation	Poor concentration
2. psychological stressors • disruption in normal activities: • Difficulty in concentration at work • Poor sleep, no energy	Poor concertation/poor sleep	Fatigue
	Anxiety	Agitation
Genetic factors	Self-neglect	Sleep disturbance
- predisposition		Poor memory
Biological factors		Self-neglect (children)
1. hormonal influences		Negative thinking, anhedonia **(lack of interest/enjoyment from life experiences),** suicidal thoughts
3. monoamine hypothesis (The monoamine hypothesis of depression predicts that the underlying pathophysiologic basis of depression is a depletion/imbalance in the levels of neurotransmitters such as serotonin, norepinephrine, and/or dopamine in the central nervous system.)		Anxiety

4. What information would you as a pharmacist provide to Sandra before initiating citalopram?

   How might it make her feel?

- Take your dose once a day in the morning. If you take it at night, it can affect your sleep and you will not sleep as well.
- If you feel sick when you first start taking citalopram, this should only last for a few days. It can help by taking your dose with or after food.
- The effect of citalopram will probably start in a few days and may start to be noticeable in a week or so but then continues to build up over the next few weeks (2-6 weeks to assess response)
- Missed doses.
- Citalopram is not addictive.
- If you carry on taking it for eight weeks or more and suddenly stop you may experience discontinuation effects (feeling dizzy or lightheaded, vertigo, feeling sick, headache, 'electric shocks' in the head, not sleeping, stomach cramps, flu-like symptoms, and increased or more vivid dreaming).
- Exploring how she feels taking antidepressants and addressing any concerns. (Stigma around mental health medications: feeling judged, being embarrassed, medication adherence)

5. What non-pharmacological interventions/advice could you give for Sandra's depression?

1. **Guided Self Help:** Printed or digital materials that follow the principles of guided self-help including structured cognitive behavioral therapy (CBT), structured behavioral activation (BA), problem-solving or psychoeducation materials. These can be delivered in person, by telephone, or online.
   Patient can also be guided about mental health charities (for e.g. Mind) that can provide them with further support if needed.
   Emergency and crisis helpline information should be given to patients.
2. **Group or individual cognitive behavioral therapy (CBT):** Focuses on how **thoughts, beliefs, attitudes, feelings, and behaviour interact**, and teaches coping skills to deal with things in life differently.
   a. May be helpful for people who can recognise negative thoughts or unhelpful patterns of behaviour they wish to change.
3. **Group or individual behavioral activation (BA):** Focuses on identifying the link between an **individual's activities and their mood.** Helps the person to recognise patterns and plan practical changes that reduce avoidance and focus on behaviours that are linked to improved mood.
   May be helpful for people whose depression has led to social withdrawal, doing fewer things, inactivity, or has followed a change of circumstances or routine.
4. **Group exercise:** Does not directly target thoughts and feelings. Moderate intensity aerobic exercise.
   May allow peer support from others who may be having similar experiences.
5. **Interpersonal psychotherapy (IPT):** Focus is on identifying how **interpersonal relationships or circumstances are related to feelings of depression**, exploring emotions, and changing interpersonal responses.
   May be helpful for people with depression associated with interpersonal difficulties, especially adjusting to transitions in relationships, loss, or changing interpersonal roles.
6. **Counselling:** Focus is on **emotional processing and finding emotional meaning**, to help people find their own solutions and develop coping mechanisms.
   Provides empathic listening, facilitated emotional exploration and encouragement.
   May be useful for people with psychosocial, relationship or employment problems contributing to their depression.

Non- Pharmacotherapy

Subthreshold, Mild, Moderate and severe depression (as per NICE)

- **Social support (very important)**

Low intensity Psychosocial and Psychological Interventions (initial steps, milder depression)

- Guided self-help (books and leaflets)
- Being active
- Computer based CBT

High Intensity Psychological Interventions

- Psychological therapies, CBT, Interpersonal Therapies (IPT) relaxation therapy, anxiety management, mindfulness-related therapies and counselling
- General support and advice e.g. on financial matters, to reduce stress

Severe and complex depression (as per NICE)

- High Intensity Psychological Interventions
- ECT (electroconvulsive therapy) for acute severe depression
- TMS (transcranial magnetic stimulation) may possibly be useful.

6. Sandra has requested if can be switched from citalopram tablets to citalopram oral drops. How would you switch this?

Citalopram liquid comes as drops. Before giving or taking the liquid, the drops should be mixed with water, orange juice or apple juice.

Citalopram Oral Drops have approximately 25% increased bioavailability compared to tablets

Citalopram dose as tablets	The same citalopram dose as drops	How many drops for that dose
10 mg	8 mg	4 drops
20 mg	16 mg	8 drops
30 mg	24 mg	12 drops
40 mg	32 mg	16 drops

A week later Sandra approaches the Pharmacy counter and asks to buy some ibuprofen for her backache.

7. Would you sell her the ibuprofen, and if not, why?

No- SSRI use roughly double the risk of upper GI bleeds, and this is increased to 3-fold by concurrent NSAIDs,
Advise Paracetamol 1gram QDS instead.

Explore patient's history. History of GI bleeds? Would be worth exploring what they have tried in the past and how long they plan to use it for. Also, whether they are already on a gastroprotection)

- Can also consider gel as topical application rather than oral if ibuprofen is really needed.

After 4 weeks Sandra returns to the GP for a review. She feels there has been some improvement but not enough for her to say she feels significantly better.

8. Consider the options available now. Decide on the best course of action and provide a rationale for your decision.

- Check adherence and ask about side effects.
- Continue treatment for another 2 weeks.
- Check any further changes in personal life that could have caused further deterioration in mood.
- Increase the dose to 40mg OM if there are no significant side effects.
- Switch to another antidepressant

The GP decided to increase the citalopram dose to 40mg and review in two months, but two months later the doctors want to change Sandra to an alternative antidepressant after she failed to respond sufficiently to the higher dose of citalopram.

9. What antidepressant would you recommend switching to and provide advice on how to switch to the new antidepressant from citalopram. Also briefly discuss the potential risks that could occur while switching.

		week 1	week 2	week 3	week 4
Withdrawing citalopram	40mg	20mg	10mg	5mg	Nil
Introducing mirtazapine	Nil	15mg	30mg	30mg	45mg (if required)

		week 1	week 2	week 3	week 4
Withdrawing citalopram	40mg	20mg	10mg	5mg	Nil
Introducing sertraline	Nil	25mg	50mg	100mg	150-200mg

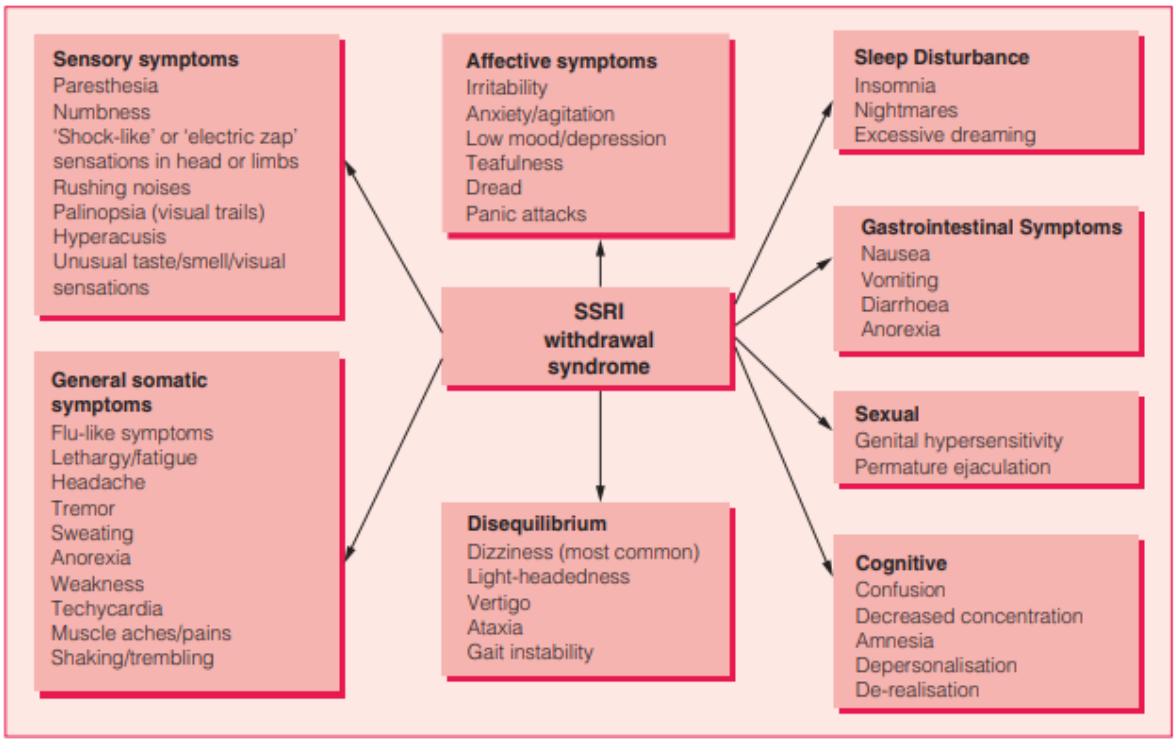
Potential dangers of simultaneously administering two antidepressants include pharmacodynamic interactions (serotonin syndrome, hypotension, drowsiness; depending on the drugs involved) and pharmacokinetic interactions (e.g., elevation of tricyclic plasma levels by some SSRIs).

Serotonin syndrome – symptoms[11]

Increasing severity

Severity	Symptoms
Mild	Insomnia, anxiety, nausea, diarrhoea, hypertension, tachycardia, hyper-reflexia
Moderate	Agitation, myoclonus, tremor, mydriasis, flushing, diaphoresis, low fever (<38.5°C)
Severe	Severe hyperthermia, confusion, rigidity, respiratory failure, coma, death

Withdrawal effects:



Sandra subsequently fails to respond to sertraline and mirtazapine. A fourth antidepressant, venlafaxine, is started and Sandra makes significant improvement. However, her effective dose is 300mg and this is causing her blood pressure to increase.

10. The doctor asks for your advice. What options could you suggest?

Venlafaxine effect on blood pressure: Some increase in postural blood pressure. At higher doses increase in blood pressure

How high is the blood pressure? Employ strategies to reduce BP via
diet change, pharmacotherapy.
How long patient has been on the medication? Is she stable? Risk of relapse if venlafaxine reduced or stopped? Consider reducing the dose if possible?
If all in-effective, then you need to stop the treatment by gradually weaning the patent off venlafaxine.
Discuss if psychological therapies have been explored such as CBT (gold standard with antidepressants)

Case Study 2

You are a pharmacist working in a community pharmacy on a Saturday and a patient walk in and wants to speak to you. She mentions she has been taking paroxetine for a few months. She was due to collect her medications today, but her usual pharmacy was closed. She has had a dose this morning, but she is not sure if she has any left for tomorrow or Monday before she can collect from her usual pharmacy. She is asking if she will be okay to miss one or two doses of her medication.

What would your advice be in this case and what will be your rationale?

- The onset and severity of symptoms are related to the half-life of the antidepressant. Short half-life antidepressants like paroxetine (17-22 hours) and venlafaxine produce symptoms within a day or two, whereas symptoms with fluoxetine can be delayed by 2–6 weeks.
- Antidepressants with short half-lives and cholinergic or noradrenergic effects tend to be associated with more severe withdrawal – venlafaxine, duloxetine and paroxetine are the most often implicated.
- Consider checking patient's records: E-tracker if any prescription available, SCR records etc. Consider making an emergency supply if appropriate.
- Advice patient on the importance on not missing the dose with this medication.
- Even with other mental health medications with longer half-lives- consider psychological impact on patient if missing medication.