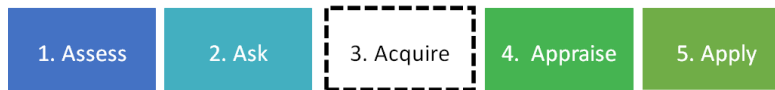


Assignment 3.1 – Anxiety Case Part 2

Apply and Educate



Clinical Situation:

See Blackboard to view clinical situation.

Part 3. Apply and Educate (30 points)

5. Apply
<p>Directions:</p> <ul style="list-style-type: none">• Complete Option A if you have a clinical background• Complete Option B if you do not have a clinical background

Option A
1. State the therapeutic objectives for the patient.
2. Identify any patient-related variables (ex. kidney/liver function, manual dexterity, other diseases or conditions, low health literacy, financial/health insurance, support systems) that need to be considered before recommending medical cannabis for the primary problem.
3. Identify any medication-related variables (ex. mechanism of action, available formulations, administration, pharmacokinetic properties [onset, peak, duration of action, methods of metabolism and elimination], adverse effects, cost) that need to be considered before recommending medical cannabis for the primary problem.
4. Based on the literature you reviewed and the patient-related and agent-related variables you identified, does this patient have any contraindications to treatment with medical cannabis?
5. Do you think this patient would be a good candidate for medical cannabis? Describe the benefits and risks of cannabinoid therapy in this patient. In your assessment, consider traditional therapy and non-pharmacological options.
6. If you decide to recommend medical cannabis, recommend a cannabinoid, formulation, and dosing strategy. Include a rationale for your choice of therapy and cite resources supporting your decision.
Patient Education:

7. Use patient-friendly terms to educate the patient about what is known about cannabis for the treatment of this disease state. Provide a short (5 – 10 sentence) summary about the evidence.

Option B

1. State the therapeutic objectives for the patient.

The goal is to determine if medical cannabis is a viable alternative to traditional medication

Objectives

- Review current medications
- Review how long the patient had anxiety and how long they have been undergoing traditional treatment.
- Assess how well the traditional meds are working for the patient. Do we need to remove/add meds? Do we need to increase dosages and monitor?
- Determine if cannabis along with the current meds are more harmful or will they help the patient.
- Determine if weening the patient off current meds and slowly adding in cannabis would be an option

2. Identify any patient-related variables (ex. kidney/liver function, manual dexterity, other diseases or conditions, low health literacy, financial/health insurance, support systems) that need to be considered before recommending medical cannabis for the primary problem.

- The patient has a family history of depression/anxiety.
- Patients' physical exam results were favorable.
- Patient was previously prescribed Ketamine and Bupropion for depression

3. Identify any medication-related variables (ex. Mechanism of action, available formulations, administration, pharmacokinetic properties [onset, peak, duration of action, methods of metabolism and elimination], adverse effects, cost) that need to be considered before recommending medical cannabis for the primary problem.

The patient, in my non-clinician opinion, is on too many medications that perform the same or similar functions or have the same or similar side effects. All the medications except for the supplements cause drowsiness. I'm concerned about drug- drug interactions. The patient is taking Alprazolam 3 times per day. That would equate to a dosage every 8 hours. Even though the dosage for Alprazolam is low (1mg), she is consuming Propranolol 10 minutes before bedtime (dosage unknown) and both drugs are in her system simultaneously. What effect does that have on the patient?

Trazadone and Zaleplon are for insomnia and she takes both at night.

Gabapentin and Tramadol have similar adverse effects (dizziness, drowsiness, etc.)

4. Based on the literature you reviewed and the patient-related and medication-related variables you identified, does this patient have any contraindications to treatment with medical cannabis?

Yes, there are some contraindications to treatment with medical cannabis. My concern is the number of medications this patient is currently consuming along with their individual side effects. For example, Alprazolam's side effects include drowsiness, impaired coordination and increased or decreased appetite. Propranolol has similar side effects, and the patient was prescribed this as well. Cannabis is known to increase

appetite. Could the patient experience an issue with weight gain from excessive eating? The patient stated that she uses cannabis at night. She is also taking Trazodone and Zaleplon at night for insomnia. Could the addition of cannabis make the patient excessively lethargic?

Gabapentin is another concern as it causes euphoria. THC in cannabis has the same effect and consuming both could be harmful to the patient.

5. Do you think this patient would be a good candidate for medical cannabis? Describe the benefits and risks of cannabinoid therapy in this patient. In your assessment, consider traditional therapy options. Please cite any additional sources used. In your assessment, consider traditional therapy and non-pharmacological options.

No, I don't think that this patient is a good candidate for medical cannabis. The medications that she is currently taking need to be reviewed. The patient has been treated with traditional therapy methods for 25 years and to use medical cannabis she would either need to be weened off her current meds or determine if her meds at lower dosages along with cannabis would be an option.

The risk of her using cannabis with THC and her current regimen could potentially make her symptoms worse. Also, with THC being a partial agonist at CB1, using cannabis alone could trigger anxiety.

CBD may be an alternative for her since it has been found to be an antagonist at CB1 and can inhibit cannabinoid agonist activity. Research has shown that it reduced the efficacy and potency of 2-AG and Delta 9 THC.¹ This would be something to consider in the future but for now I think that adjusting the current medications and psychotherapy to determine why her anxiety has gotten worse this month would be a good course of action. What in her life has recently changed that could be potentially causing increased anxiety? Getting to the root cause of that I think would be more beneficial.

¹Cannabinoid 1 receptor antagonist. Cannabinoid 1 Receptor Antagonist - an overview | ScienceDirect Topics. <https://www.sciencedirect.com/topics/chemistry/cannabinoid-1-receptor-antagonist>. Accessed February 11, 2022.

Patient Education

6. Based on the research you reviewed about medical cannabis and this disease state, use patient-friendly terms to educate the patient about what is known about cannabis for the treatment of this disease state. Provide a summary (around 250 to 500 words) about the evidence.

Hi Mary, my name is Angela and I work with your provider as a cannabis consultant. I understand that you have experienced increased anxiety this month and are concerned and somewhat afraid about what is going on with you. You are wanting to know if medical cannabis would rid you of your panic attacks. There has been some research performed around the effects of cannabis and anxiety. Now I admit there needs to be more, but from what has been done here is what we know.

All of us has this system in our bodies called the endocannabinoid system. In layman's terms it is a system that regulates some functions in our bodies. Our bodies naturally produce these neuro (nerve) transmitters that have behavioral effects. Some of these transmitters have psychoactive effects that are similar to THC in cannabis. The concern is that THC could potentially make your symptoms worse. Even though you have tried it and found it to be relaxing, long term usage with or without your current medicine regimen could be harmful. There just isn't enough research to fully know the long-term effects. I saw that you mentioned that you have tried tinctures and edibles. I do want to caution you about edibles so that you are aware in case you

decide on your own that you want to continue using them. What you may not know is that when ingested, THC is changed in your body to a more potent substance. The psychotic effects are heightened and lasts much longer which could be more harmful to your condition.

There has been some research about CBD potentially helping to reduce the effect of those nerve transmitters that I talked about earlier. That would be something to look into in the future but for now your doctor wants to continue working with you on a treatment plan with your current regimen and continue to research if using CBD would be a viable option for you.