ASSIGNMENT 9: CASE STUDIES

Student's Name

Institutional Affiliation

Week 9: Assignment: Case Studies

Scenario 1: Jamie's Acute Psychotic Episode Management

Jamie, a 38-year-old homeless bipolar patient, is experiencing an acute psychotic episode and is currently on lithium. Recently, he was started on amitriptyline (Elavil) 25 mg PO TID. The combination of lithium and amitriptyline can increase the risk of lithium toxicity and exacerbate psychotic symptoms. Therefore, the first step is to discontinue amitriptyline due to its potential for causing adverse interactions and worsening Jamie's condition.

To address his acute psychosis, initiate an antipsychotic medication. Risperidone 1 mg BID is a suitable choice for managing psychosis. This medication helps in reducing hallucinations, delusions, and other psychotic symptoms (Freudenreich, 2020). Continue lithium for mood stabilization but closely monitor serum lithium levels to avoid toxicity. Regular blood tests should be scheduled to check lithium levels, renal function, and thyroid function.

Educate Jamie about the importance of medication adherence and the need for regular follow-up appointments. Discuss the potential side effects of risperidone, such as weight gain, drowsiness, and extrapyramidal symptoms, and emphasize the necessity of reporting any adverse effects immediately (Freudenreich, 2020). Since Jamie is homeless, consider involving social services to provide additional support, including housing and access to mental health services. This comprehensive approach aims to stabilize Jamie's condition, prevent further psychotic episodes, and ensure continuous monitoring and support for his mental health needs.

Scenario 2: 68-Year-Old Woman's Rheumatoid Arthritis Management

A 68-year-old woman with a history of rheumatoid arthritis (RA) and comorbid conditions, including Crohn's disease and well-controlled type 2 diabetes, is experiencing increased arthritis pain despite being on nabumetone 1000 mg PO daily. Given her worsening

symptoms, adding a disease-modifying antirheumatic drug (DMARD) is appropriate. Methotrexate, starting at 7.5 mg once weekly, is a suitable option for RA management.

Regular monitoring is essential due to the potential side effects of methotrexate, including hepatotoxicity, bone marrow suppression, and gastrointestinal disturbances (Radu & Bungau, 2021). Conduct baseline and periodic liver function tests, complete blood counts, and renal function tests. Assess the patient's response to therapy through regular clinical evaluations, including joint assessments and patient-reported outcomes.

Educate the patient on the importance of adherence to methotrexate and the need for folic acid supplementation to reduce the risk of side effects. Discuss potential side effects, including nausea, mouth sores, and fatigue, and encourage the patient to report any adverse symptoms promptly (Radu & Bungau, 2021). Given her Crohn's disease, closely monitor for gastrointestinal symptoms and consider gastrointestinal protective strategies if necessary. This tailored approach aims to reduce RA symptoms, improve joint function, and enhance the patient's quality of life while managing her comorbid conditions effectively.

Scenario 3: Sheila's Seizure Management

Sheila, a 26-year-old with a history of head injury and tonic-clonic seizures, presents with symptoms suggestive of Dilantin (phenytoin) toxicity, including "funny" eye movements, uncoordinated feeling, blurred vision, and lethargy. Her current medications include Ritalin 10 mg BID, Dilantin 300 mg BID, Paxil 20 mg daily, and Lasix 20 mg daily. Her lab results show a Dilantin level of 11 and albumin of 2, indicating a need to calculate the corrected Dilantin level.

Given her low albumin, the corrected Dilantin level is higher than the measured level, likely contributing to her symptoms. The corrected Dilantin level can be calculated using the

formula: Corrected Dilantin = Measured Dilantin / (0.2 × albumin + 0.1). In this case, the corrected level is approximately 22, indicating potential toxicity.

The treatment plan includes reducing the Dilantin dose to avoid toxicity. Reduce the dose to 200 mg BID and monitor Sheila's symptoms and serum levels closely. Recheck Dilantin levels and albumin in one week (Penovich et al., 2021). Educate Sheila on the signs of Dilantin toxicity and the importance of adherence to the adjusted dosage. Additionally, review her medication list to avoid potential drug interactions that can affect Dilantin levels. This approach aims to alleviate her symptoms, achieve therapeutic Dilantin levels, and ensure safe and effective seizure management.

Scenario 4: Xavi's Low Back Pain Management

Xavi, a 44-year-old man with severe low back pain following a motor vehicle accident, rates his pain as 8 out of 10. He was prescribed Lortab 5/325 in the ER last week and requests a refill. Given the acute nature of his pain and the high pain rating, it is appropriate to continue opioid analgesics while also incorporating non-opioid pain management strategies.

Continue Lortab 5/325 every 6 hours as needed for pain but add ibuprofen 400 mg TID to address inflammation. Consider prescribing a muscle relaxant like cyclobenzaprine 10 mg TID if muscle spasms are present (de Vries et al., 2023). Regularly assess Xavi's pain levels and functional status through follow-up appointments. Monitor for signs of opioid dependence and adverse effects, such as constipation and sedation.

Educate Xavi on the importance of adhering to the prescribed medication regimen and the potential risks of opioid use, including dependence and overdose. Encourage non-pharmacological interventions such as physical therapy, stretching exercises, and heat or ice application. Discuss the importance of avoiding activities that exacerbate his pain and gradually

increasing physical activity as tolerated. This comprehensive pain management plan aims to reduce Xavi's pain, improve his functional status, and prevent complications associated with prolonged opioid use.

References

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