

DRUGS USED TO MANAGE VIRAL INFECTIONS

Week 1: Collaboration Café

Application of Course Knowledge: Answer all questions/criteria with explanations and detail.

Describe your assigned client's situation. Why are they presenting to the clinic? What medications are they currently taking?

Kaipo Palakiko is a 15-year-old male with a history of Type 1 diabetes, and no allergies to medication were noted. He takes insulin aspart (Novalog) via an insulin pump (Total Daily Insulin Requirements: 28 daily units). The patient presented to the clinic with his mother, complaining of a two-day fever, cough, headache, chills, and fatigue. The patient's mother reported that she administered acetaminophen for symptom management before arriving at the clinic. The NP performs an assessment demonstrating otherwise unremarkable and bilaterally clear lung sounds. A rapid point-of-care test showed that the patient tested positive for COVID-19 and negative for influenza A and B. The different findings are consistent with COVID-19. Kaipo has a heart Rate of 102, a respiratory rate of 22, and a temperature of 101.2 oral, which indicates his diagnosis.

Assess the applicable clinical practice guideline (CPG) for your assigned client. What treatment is recommended by the CPG for your client's situation?

Based on the Infectious Disease Society of America clinical practice guidelines on the treatment and management of patients with COVID-19, it recommended that ambulatory patients with mild-to-moderate COVID-19 who are at high risk for progression to severe disease should initiate nirmatrelvir/ritonavir (Paxlovid) within five days of symptom onset. As is Kaipo's situation, this guideline is crucial for patients with a history of type 1 diabetes, which makes them fall within the high risk for severe disease of COVID-19. The recommendations highlight that for patients with COVID-19 who are nonhospitalized, the treatment regimens should emphasize managing symptoms with mild to moderate infection and administering antiviral medication for patients considered to be at high risk for severe infection. Therefore, antiviral medication must be initiated because Kaipo's symptoms started two days ago. Kaipo should be started on ritonavir 100mg and nirmatrelvir 300mg (Paxlovid); take one tablet of each medication twice daily for five days.

Discuss your personal professional assessment of the client's situation provided in the scenario. What pharmacological treatment is necessary and why?

Kaipo Palakiko is a teenage male presenting to the clinic with subjective and objective findings indicative of COVID-19. The therapeutic management for nonhospitalized adults and children (pediatric patients aged <18 years) with mild to moderate COVID-19 consists of symptom management, swift initiation of antiviral regimen, and risk factors for severe disease. Given Kaipo's history of type 1 diabetes and diagnosis of COVID-19, he requires an immediate