

# HSCI 5230 Week 3 Case Study Branching Scenario Script

Background: Mrs. Smith. Mrs. Smith is a 61-year-old school teacher hospitalized with severe bronchitis and shortness of breath. She was started on ciprofloxacin, an antibiotic. She has a history of lupus and takes prednisone for that. Mrs. Smith says she is trying to wean herself off of the prednisone because of a 20-pound weight gain in the past three months. Mrs. Smith was also diagnosed with deep vein thrombosis and takes Warfarin, an anticoagulant. In addition to her prescription medications, she takes several dietary supplements, including a daily multivitamin, calcium, garlic, and ginkgo.

Question 1: How would you counsel Mrs. Smith regarding the interactions between antibiotic medications and her vitamin and mineral supplements?

Option A: Tell Mrs. Smith that antibiotics bind with minerals, reducing absorption of both the mineral and the medication.

Option B: Tell Mrs. Smith to take the antibiotic with a vitamin-mineral supplement to increase absorption of the drug.

That's right! Antibiotics can bind with the minerals and reduce the absorption of both the mineral and the medication.

Not quite. Antibiotics can bind with the minerals and reduce the absorption of both the mineral and the medication.

Question 2: What would you tell Mrs. Smith about possible medical or nutritional risks associated with long-term corticosteroid use?

Option A: Weight loss, and increased blood glucose levels are possible risks associated with long-term corticosteroid use.

Option B: Weight gain, muscle wasting, bone loss, and elevated blood glucose are possible risks associated with long-term corticosteroid use.

Not quite. Long-term corticosteroid use is associated with weight gain, muscle wasting, bone loss and elevated blood glucose.

That's right! Long-term corticosteroid use is associated with weight gain, muscle wasting, bone loss and elevated blood glucose.

Question 3: What would you tell Mrs. Smith about the potential interactions between her dietary supplements and anticoagulant medication?

Option A: Certain supplements, such as garlic and ginkgo may increase the risk of bleeding when used with anticoagulant drugs and should be avoided because they may enhance the activity of warfarin.

Option B: Anticoagulant drugs should be taken with garlic to thin the blood.

That's right! Certain supplements, such as garlic and ginkgo may increase the risk of bleeding when used with anticoagulant drugs and should be avoided because they may enhance the activity of warfarin.

Not quite. Certain supplements, such as garlic and ginkgo may increase the risk of bleeding when used with anticoagulant drugs and should be avoided because they may enhance the activity of warfarin.

Which supplements would you recommend Mrs. Smith discontinue?

Option A: Avoid excess vitamin K in her diet, because it can weaken the effect of warfarin.

Option B: Increase vitamin K in her diet, because it enhances the effect of warfarin.

That's right! Mrs. Smith should avoid excess vitamin K in her diet because it can weaken the effect of warfarin.

Not quite. Mrs. Smith should avoid excess vitamin K in her diet because it can weaken the effect of warfarin.

Congratulations! You have completed this case study.