

Topic 2 DQ 1

Jul 25-27, 2024

The Beers criteria contain a list of drugs that are potentially unsafe for use in older persons. Refer to the "American Geriatrics Society 2023 Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults," located in the topic Resources, for assistance in completing this question.

Select a drug from the "avoid" list that you have administered to an older patient or a drug that you know is prescribed for an older adult. Relate the outcome of using this drug to the pharmacokinetics (absorption, metabolism, distribution, and excretion) of drugs in an older client.

In addition to the AGS Beers Criteria link, cite one other reference to support your post.

Make sure that you select a different drug than your peers. Include the name of the drug (bolded) above your answer so that the medication can easily be identified. Cite your references in APA style.

Phenobarbital

"Older adults have increased sensitivity to benzodiazepines and decreased metabolism of long-acting agents; continued use of benzodiazepines may lead to clinically significant physical dependence. In general, all benzodiazepines increase the risk of cognitive impairment, delirium, falls fractures, and motor vehicle crashes in older adults." This drug may be appropriate for seizure disorders and benzodiazepine withdrawal for some examples (American Geriatrics Society, 2023).

Phenobarbital works by keeping the "chloride channels open and depressing the central nervous system. This action occurs by acting on GABA-A receptor subunits" (Lewis et al., 2024). "Phenobarbital binds to these receptors, the chloride ion gates open and stay open, allowing a steady flow of these ions into neuronal cells" (Lewis et al., 2024).

Absorption: Phenobarbital is absorbed completely after 30 minutes. This can occur by IV or oral administration. "The time of peak plasma concentration ranges from 30 minutes to 1 hour for oral formulations and is around 5 minutes for IV injection" (Lewis et al., 2024).

Distribution: "Rapidly distributed to all tissues and fluids" (Lewis et al., 2024).

Metabolism: "Metabolized primarily via acetylation in the liver" (hepatic microsomal enzyme system) (Lewis et al., 2024).