Did You Know?

HEALTHDIRECT PHARMACY SERVICES
Personalized care. Direct to you.

March 2019

2019 Updated AGS Beers Criteria

In 2019, the American Geriatrics Society released an updated list of potentially inappropriate medications used in the older adult. This list, commonly referred to as the Beers Criteria, is widely used by clinicians, educators, administrators, and regulators in long-term care. It includes medications that are typically best avoided in the older adult in most circumstances or in certain diseases or conditions. What follows is a summary of some of the noteworthy changes from the previous Beers Criteria published in 2015:

- Medications removed since 2015:
  - Ticlopidine and Pentazocine removed as they are no longer on the US market.
  - Disease/Syndrome interactions removed:
    1) Chronic seizures or epilepsy and the following medications: Bupropion, Chlorpromazine, Clozapine, Olanzapine, Thioridazine, Thiothixene, Tramadol. These drug/disease interactions were removed as they are not unique to older adults. These medications can lower the seizure threshold and should be addressed accordingly.
    2) Dementia and H2-receptor antagonists (i.e. famotidine, ranitidine): removed the recommendation to avoid the H2-receptor antagonists in patients with dementia or cognitive impairment due to weak evidence for adverse effects and to avoid overly restricting options for older adults with dementia who have GERD as PPI's are also on the Beers list. However, the H2-receptor antagonists remain on the criteria as "avoid" in patients with delirium.
    3) Insomnia and concurrent use of oral decongestants (pseudoephedrine, phenylephrine), stimulants (amphetamines, modafinil), theophylline, and caffeine. Interaction is not unique to older adults. Use of these medications can lead to insomnia in any patient.
    4) Abilify was removed as a preferred antipsychotic in older patients with Parkinson disease because of safety and efficacy concerns.
    5) Syncope and vasodilators were removed. Interaction is not unique to older adults.

- Medications added since 2015:
  - Glimepiride (Amaryl) was added due to its higher risk of producing severe prolonged hypoglycemia.
  - Disease/Syndrome interactions added:
    1) The SNRI's (i.e. Cymbalta, Effexor) were added to the list of medications to avoid in patients with a history of falls or fractures.
    2) Pimavanserin (Nuplazid) was added as an exception to the general recommendation to avoid all antipsychotics in older adults with Parkinson disease. The 2019 Criteria now recognizes quetiapine (Seroquel), clozapine, and pimavanserin (Nuplazid) as acceptable for the treatment of psychosis in Parkinson disease, although none are close to ideal in efficacy or safety in these patients.

3) The following medications were added to the "drugs to be used with caution" table:
   - Rivaroxaban (Xarelto) added due to emerging evidence of increased risk of serious bleeding compared with other anticoagulant options.
   - Tramadol added due to its risk of inducing SIADH/hyponatremia.
   - Dextromethorophan/quinidine (Nuedexta) added due to limited efficacy in treating patients with dementia symptoms disorder in the absence of PBA while potentially increasing risk of falls and drug/drug interactions.
   - Trimethoprim (TMP)/Sulfamethoxazole (SMX) (Bactrim) added due to increased risk of hyperkalemia in combination with ACEIs and ARBs in patients with reduced kidney function.

- TMP-SMX (Bactrim) was added to the table of medications that should be avoided or have their dosage reduced with decreased kidney function. A reduced dose is recommended if the CrCl is 15-29 ml/min. The medication should be avoided if the CrCl <15 ml/min. This is due to an increased risk of worsening of renal function and hyperkalemia.

- Clinically important drug/drug interactions added:
  1) Avoid use of opioids concurrently with benzodiazepines and opioids concurrently with gabapentin/pregabalin (except when transitioning from the former to the latter), due to increased risk of overdose.
  2) Concurrent use of TMP-SMX and phenytoin (Dilantin) puts the patient at an increased risk of phenytoin toxicity.
  3) Concurrent use of warfarin (Coumadin) with ciprofloxacin, TMP-SMX, or macrolides (excluding azithromycin), increases risk of bleeding.
  4) Ciprofloxacin increases risk of theophylline toxicity when used with theophylline.

- Other changes from 2015:
  - Clarifications made to the following sections (see original document for details): Digoxin and atrial fibrillation/heart failure wording changed, definition of sliding scale insulin revised, criteria on drugs to avoid with heart failure were reorganized, modified age and indication for aspirin when used as primary prevention.
  - Changed "sedative/hypnotics" to Non-benzodiazepine, benzodiazepine receptor agonist hypnotics (i.e. "Z" drugs: zolpidem, eszopiclone, and zaleplon). These drugs should be avoided in older adults with delirium as they have the potential of inducing or worsening delirium.
  - Duration of use added to Metoclopramide (Reglan). It is recommended to avoid this medication, unless for gastroparesis, with duration of use not to exceed 12 weeks except in rare cases. This is due to its ability to cause EPS, including tardive dyskinesia.

Note: This is not an all-inclusive list of the changes. For the complete criterion update, please see reference.

Reference: "American Geriatrics Society 2019 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults." Journal of the American Geriatrics Society, 29 Jan. 2019, pp. 1–21., doi:10.1111/jgs.15767.