Take 3 – Practical Practice Pointers© February 25, 2019 Edition

BEERS Criteria, Legacy Prescribing, Gallstone Disease

From the American Geriatrics Society (AGS)

1) 2019 Beers Criteria® for Potentially Inappropriate Medication

The Beers Criteria were first published in 1991. Since 2011, the AGS has published the Potentially Inappropriate Medication (PIM) criteria, updated on a 3-year cycle, of medications that are typically best avoided by older adults in most circumstances or under specific situations, such as in certain diseases or conditions. The primary target audience for the AGS Beers Criteria is practicing clinicians. The criteria are intended for use in adults 65 years and older in all ambulatory, acute, and institutionalized settings of care, except for the hospice and palliative care settings.

Select medications to avoid in general for patients ≥ 65:

- Medications with strong anticholinergic properties, including first generation antihistamines, antispasmotics, and tricyclic antidepressants
- Nitrofurantoin
- Peripheral alpha-1 blockers (eg; doxazocin)
- Central acting alpha-agonists (eg; clonidine)
- Digoxin as first line treatment
- Tricyclic antidepressants
- 1st and 2nd generation antipsychotics
- Barbiturates
- Benzodiazepines
- Nonbenzodiazepine, benzodiazepine receptor agonist hypnotics (ie, "Z-drugs" - Eszopiclone, Zaleplon Zolpidem)
- Testosterone
- Estrogen with or without progesterone
- Long-acting sulfonylureas
- Metoclopramide
- Non–cyclooxygenase-selective NSAIDs
- Indomethacin and ketorolac
- Skeletal muscle relaxants

Select drug combinations to avoid:

- Opioids and benzodiazepines or gabapentin/pregabalin
- Corticosteroids and NSAIDS

Select drugs to be used with caution:

- Aspirin for primary cardiovascular prevention in adults ≥ 70
- Dabigatron and rivaroxaban – Adults ≥ 75
- Diuretics, SNRIs, SSRIs (may cause SIADH or hypokalemia)
- Trimethoprim-Sulfamethoxazole (hyperkalemia with ACE/ARB or CKD)
- Tramadol (risk SIADH/hyponatremia)
- Ciprofloxacin (with decreased GFR)

- Multiple drugs for patients on warfarin (refer to your favorite drug interaction resource)

Select medications removed since 2015:
- H2-blockers
- Oral decongestants
- Stimulants
- Theobromines (theophylline, caffeine)

My Comment:
Assuring safe and appropriate use of medications by all patients, and in particular older adults, is a foundation of high-quality medical care. It is important to remember, however, that these criteria are not meant to supplant clinical judgment or an individual patient's preferences, values, care goals, and needs, nor should they be used punitively or to excessively restrict access to medications. The criteria deem these medications potentially inappropriate, not definitely inappropriate.

Having said that, the criteria do provide an important reminder that there are certain medications that do carrying a higher risk in this patient population, and should be used only after consideration of potentially safer options and with a full understanding of the potential risks. Three drug classes on the list that I see used quite often in the elderly as I perform peer review (often for sleep) are benzodiazepines, drugs with anticholinergic properties, and the nonbenzodiazepine, benzodiazepine receptor agonist hypnotics ("Z-drugs"). Finding other options to help with sleep (including implementation of sleep hygiene and recognizing normal changing sleep patterns in the elderly) are important considerations prior to prescribing medications for this group.

Reference:
American Geriatrics Society 2019 Updated AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc. First published: 29 January 2019. Abstract

From the Literature

2) "Legacy Prescribing" for Certain Drug Classes

Polypharmacy is an important clinical challenge for primary care practice. Polypharmacy raises the risks for drug interactions as well as adverse reactions to individual medications. Such effects include falling, poor nutrition, and altered cognition. With more prescriptions to manage daily, patients may face adherence challenges and risk skipping or taking extra doses. Older adults are more likely to experience multiple-medication problems and contribute disproportionately to adverse drug reaction–related hospital admissions.

Drugs that should be prescribed for an intermediate term (longer than 3 months, but not indefinitely) that are not appropriately discontinued could contribute to polypharmacy. The authors of this study named this type of prescribing to be "legacy prescribing." They identified commonly prescribed drugs with legacy prescribing potential in 3 drug classes, to include antidepressants, bisphosphonates, and proton pump inhibitors (PPIs). In this population-based retrospective cohort study, they evaluated the

proportion of legacy prescribing within these drug classes. For each of these drug classes, the researchers identified cases in which the prescription duration exceeded the recommended time for treatment, using conservative, evidence-based inclusion criteria.

They then calculated rates of legacy prescribing at any time during a 6 year period for antidepressants (prescription longer than 15 months), bisphosphonates (longer than 5.5 years), and PPIs (longer than 15 months). Results showed that the proportion of patients having a legacy prescription at any time during the study period to be 11% overall, 46% for antidepressants, 14% for bisphosphonates, and 45% for PPIs. Many of these patients held current prescriptions. Concurrent legacy prescriptions for both antidepressants and PPIs was 17%, signaling a potential prescribing cascade where the use of one drug spawns the use of a 2nd to address side-effects from the first.

The authors concluded that the phenomenon of legacy prescribing appears prevalent. The data demonstrate the potential of legacy prescribing to contribute to unnecessary polypharmacy, providing an opportunity for system-level intervention in primary care with enormous potential benefit for patients.

My Comment:
I found this study to be an interesting "twist" as to how we think about medication prescribing/maintenance, and have labelled this phenomenon in my own practice to be "refill inertia." This occurs when, in the midst of a busy day and feeling a bit overwhelmed and a lot behind schedule, it's easier to click the refill button that to stop and do the inquiry required to determine if the medication is still appropriate/necessary. Often this also requires a conversation with the patient and a strategy for having them come off the medication, particularly with PPIs and many antidepressants. This "survival behavior" is not an excuse, but certainly an explanation that I suspect happens for others as well. As for the bisphosphonate "legacy prescribing, this likely often happens because of losing track of time over 5 years without a deliberate means of tracking it. I see this happen often with implantable contraception as well.

Here at Carilion we're considering a small pilot with one of our insurers that would provide an EHR alert (BPA) for certain prescribing behavior, including potential non-adherence (not getting medication refilled as the schedule should indicate) or potential overuse/prolonged use. I suspect this would be quite informative!

A noted limitation of the study was the absence of consideration of the specific details of patients, such as circumstances that might have required unusual prescribing patterns or longer duration.

In next week's Take 3, one of the Pointers will address the process of "deprescribing" medications. Stay tuned!

Reference:
Mangin D, et al. Legacy Drug-Prescribing Patterns in Primary Care. Ann Fam Med November/December 2018 vol. 16 no. 6 515-520. Full text

A "Three-fer" From the Choosing Wisely Campaign and the Society of American Gastrointestinal and Endoscopic Surgeons

3) Managing Gallstone Disease

Avoid routine cholecystectomy for patients with asymptomatic cholelithiasis. 10-20% of people in Western countries have gallstones and 50-70% of these are asymptomatic. Incidental discovery of gallstones on imaging performed for unrelated reasons is common, often prompting surgical consultation. Treatment with observation alone is indicated for asymptomatic patients with incidental cholelithiasis, unless diagnosed with related hematologic disease. Cholecystectomy for patients with asymptomatic cholelithiasis is too aggressive. For asymptomatic cholelithiasis patients undergoing an unrelated abdominal operation, such as gastric bypass, concomitant cholecystectomy may be considered.

Avoid other imaging tests apart from ultrasound for the initial evaluation of patients with suspected gallstone disease. The diagnostic workup of acute right upper quadrant pain is informed by risk factors for cholecystitis. When acute cholecystitis is suspected the initial imaging modality of choice is ultrasound based on availability, examination time, lack of ionizing radiation, morphologic evaluation, confirmation of the presence or absence of gallstones, evaluation of bile ducts, and identification or exclusion of alternative diagnoses. When the clinical features, examination, laboratory and ultrasound findings are congruent, no further imaging is required.

Don't discharge patients presenting emergently with acute cholecystitis without first offering laparoscopic cholecystectomy. Surgeons often debate the timing of cholecystectomy in patients with acute cholecystitis. Evidence suggests that cholecystectomy during the index hospitalization is both safe and cost effective. Interval cholecystectomy may be associated with higher chance of requiring open surgery or readmission, increasing costs. Finally, acute cholecystitis patients that are discharged without undergoing surgery may have a higher risk of presenting with complications of cholelithiasis, which can be more morbid than the initial presentation.

My Comment:
I found these recently released recommendations to be a good reminder regarding a common incidental finding on imaging, and therefore thought worth sharing.

Reference:
Choosing Wisely and the Society of American Gastrointestinal and Endoscopic Surgeons. January 9, 2019. Link

Feel free to forward Take 3 to your colleagues. Glad to add them to the distribution list.

Mark

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