Drug Information

2013 ACC/AHA Cholesterol Guidelines: What to know for practice
By John Doric, PharmD (Providence Pharmacy Monroe)

One year out on the press; many clinics are still assimilating to the new lipid guidelines. In order to provide up to date and evidence based recommendations we need to periodically review and adjust therapy as needed. Some of the key changes include:

Select patients should receive high or moderate dose statin therapy, should not titrate to LDL goals, and non-statin therapy should not be routinely recommended.

Guidelines focus on 4 major groups for evidence based therapy management.

*Pooled Cohort Risk Assessment app available at: http://my.americanheart.org/cvriskcalculator

<table>
<thead>
<tr>
<th>Group</th>
<th>Criteria</th>
<th>Therapy</th>
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<tbody>
<tr>
<td>1.</td>
<td>Patients with atherosclerotic cardiovascular disease: ASCVD= Coronary Heart Disease (CHD), Stroke, and Peripheral Arterial Disease</td>
<td>- ≤75 years: High Dose&lt;br&gt;- &gt;75 years: Moderate Dose</td>
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<td>2.</td>
<td>Patients age ≥21 to ≤75 with LDL ≥190 mg/dL</td>
<td>- High Dose</td>
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<tr>
<td>3.</td>
<td>Patients age 40-75 with diabetes (but without ASCVD) and LDL 70-189 mg/dL</td>
<td>- High dose if ASCVD risk ≥7.5%, Medium dose if &lt;7.5%</td>
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<td>4.</td>
<td>Patients age 40-75 without ASCVD or diabetes, LDL 70-189 mg/dL, with ASCVD risk ≥7.5%</td>
<td>- Both High and Medium doses appropriate</td>
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How to apply guidelines to practice: Pooled Cohort Risk Assessment Equation considerations:

- **Positive**: Adaptation of Framingham to include stroke risk.
- **Negative**: Not generated from randomized trial (absolute risk reduction is unknown), and data may overestimate risk up to 75-150% (new REGARDS study is ongoing but may clarify).

Pooled Cohort calculator will classify a rate of 7.5% treatment risk in the average U.S. adult population:

- 40-79 years: 44.3% of all men and 22.5% of all women
- 70-75 years: 99% of persons
- >75 years only those with atherosclerotic cardiovascular disease

**Conclusion:**

- Consider individual patient factors in recommendations (drug interaction, pregnancy, age, ASCVD risk, etc)
- Take special focus when using pooled cohort equations (groups 3 and 4) who have questionable benefit versus risk of starting or continuing a statin.

References:

2. Risk Assessment Full Work Group Report - Circulation vol. 129 no. 25 suppl 2 S49-S73
In 2005, the US Food and Drug Administration (FDA) warned that use of atypical antipsychotic drugs are associated with an increased risk of mortality in elderly patients with dementia. In 2008, the FDA expanded this warning to include conventional antipsychotics.\textsuperscript{1} There have been many studies linking use of these medications with an increase risk of stroke, deep vein thrombosis or pulmonary embolism, and most recently, myocardial infarctions.\textsuperscript{2,3} The association of risks for these adverse events remains unclear. However, what is clear is that risks associated with antipsychotic use is dose dependent with risk further increasing in short-term users, male patients, elderly patients or patients with dementia.\textsuperscript{4}

Despite FDA warnings and the growing amount of literature cautioning prescribers against overuse of antipsychotic use in the elderly and patients with dementia, some researchers believe the use of these drugs are likely to continue because of the “continued growth of the dementia population” and the need for some type of intervention.\textsuperscript{5}

This brings up discussion of ethical and philosophical considerations for use of these medications to control behavior, especially in situations where a patient is unable to provide informed consent. Some ethical considerations include beneficence (the obligation to do good) and nonmaleficence (the obligation to do no harm). It is important to remember that behavior is another form of communication and that there may be other factors, such as pain or anxiety, which could be the underlying cause of a patient’s problem behavior. In most cases, environmental modifications and non-drug therapy to prevent and minimize distress is key to managing problem behaviors in elderly patients with dementia.

Centers of Medicare and Medicaid Services regulations for long-term care facilities defines appropriate antipsychotic treatment targets as: aggressive behavior (especially physical), hallucinations (if distressing to person), severe distress as presenting a danger to the person or others. Before resorting to these types of medications, it is imperative to rule out reversible causes and to try non-drug therapies first.
References


ACIP Update for Pneumococcal Vaccines

By Cyurry Choi, PharmD (QFC Pharmacy)

To give or not to give? Prevnar or Pneumovax? How long do I have to wait between vaccines? These questions continue to arise with the updated ACIP recommendations for pneumococcal vaccines—which pneumococcal vaccine to give and when to give it.

Old recommendations

- PPSV23 for people age 65 years and older
- PPSV23 for people age 64 years or younger who have chronic illness or other risk factor:
  - Chronic cardiovascular or pulmonary disease
  - Chronic liver disease
  - Alcoholism
  - Diabetes
  - Cigarette smoking
- PCV13 and PPSV23, separated by 8 weeks or 1 year depending on what was administered first, for people age 19 years and older at highest risk for serious pneumococcal infection
  - Anatomic or functional asplenia
  - Immunocompromised condition or immunosuppressive therapy
  - Cerebrospinal fluid (CSF) leaks
  - Organ or bone marrow transplant
  - Cochlear implant

Why are the recommendations changing?

- CAPITA (Community-Acquired Pneumonia Immunization Trial in Adults) trial results demonstrated statistically and clinically significant efficacy of PCV13 against vaccine-type pneumococcal pneumonia and invasive pneumococcal disease (IPD)
  - Note: The study population was pneumococcal-vaccine naïve.
- Broader protection will be provided when both PCV13 and PPSV23 are used in series
  - PCV13 covers serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 23F
  - PPSV23 covers serotypes: 1, 2, 3, 4, 5, 6B, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19A, 19F, 20, 22F, 23F, 33F
  - The serotypes are the serotypes that differ between the two vaccines.
- Immunogenicity studies showed that PCV13 before PPSV23 resulted in higher antibody responses
- Safety was evaluated to be comparable between PCV13 and PPSV23 for both incidence of serious adverse events and the types of reported common adverse reactions
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ACIP Update for Pneumococcal Vaccines (continued)

What are the NEW recommendations (as of September 19, 2014)?

- Both PCV13 and PPSV23 should be administered routinely in series to all adults aged ≥65 years, using recommended intervals (figure 1)
  - **Pneumococcal vaccine-naïve persons, aged ≥65 years.** PCV13 followed by a dose of PPSV23 6-12 months after PCV13 dose. Two vaccines should NOT be coadministered. Minimum acceptable interval between PCV13 and PPSV23 is 8 weeks.
  - **Previous vaccination with PPSV23, aged ≥65 years.** Dose of PCV13 ≥1 year after most recent PPSV23 dose. If an additional PPSV23 dose is indicated, then subsequent PPSV23 should be given 6-12 months after PCV13 and ≥5 years after most recent PPSV23.
  - No change in recommendations for PCV13 in adults aged ≥19 years with immunocompromising conditions, functional or anatomic asplenia, cerebrospinal fluid leak, or cochlear implants.

On a final note, the ACIP recommendations for routine use of PCV13 among adults ≥65 years will be reevaluated in 2018 and revised as needed. Another practical consideration is insurance coverage as patients’ insurance may not cover PCV13 if they have already received PPSV23.

References:

Clinical Service

QFC Community Health Screening

By Cyurry Choi (QFC Pharmacy)

Salmon Days 2014

Each year the city of Issaquah hosts the Salmon Days festival over a weekend in early October, and each year QFC hosts a booth at the fair providing influenza and pneumococcal vaccines for festival attendees. The reactions are varied. “Who would want to get a shot at the fair?” “I already got mine.” “Children, look, we can get flu shots!” “I keep forgetting to get my flu shot; I might as well get it now since you’re here.” “I was looking all over for you guys; I get my flu shot at Salmon Days every year.” The latter two reactions are probably the most fulfilling as community pharmacists—since we are being recognized for our promotion of preventive health and immunizations and for our presence within the local community.

The two days at the fair was comparably successful to past years. 115 immunizations were administered, including 20 Fluzone high dose vaccines. We offered immunizations at reduced fees or billed to Medicare. A lot of people were curious about the high dose vaccines and wanted to know more about who should get it and what the benefits were. It was also reassuring to hear that so many individuals either received their flu vaccine already or intended to in the near future at their local pharmacy. Overall, it was an exciting event and an indication of community pharmacists successfully making their presence known.
Pharmacists are medication experts who excel in medication management and monitoring. It just goes to show that they can be an invaluable member of the team working with a collaborative practice agreement to manage medication refill authorizations. At the Providence clinic in Monroe, pharmacist residents have been managing internal medicine refills since 2005 to reduce physician workloads, improve timely and accurate medication approval, as well as perform periodic medication reviews.

Refill authorizations also allow for a second eye to review medications after they are prescribed with the full power of information of the electronic medical record on hand. This allows pharmacists a chance to follow up with patients to address side effects, dose adjust due to drug interactions or drug clearance, encourage patients to complete labs, and ensure more targeted follow up appointments with their primary care provider.

This service owes much of its success due to a history of diverse clinical pharmacist involvement in the clinic and provider confidence in pharmacist services. However it also comes at a time where reducing healthcare costs with improved clinical outcomes is a focus in the modern primary care concept. The patient centered medical home has justification for pharmacist services through improved clinic efficiency, pay for performance incentives, as well as population health management contracted with companies such as Boeing. As such the medication authorization services at Providence is pushing the envelope to improve patient care and advance our profession.

As a resident with UW Pharmacy Cares (UWPC), I provide consulting pharmacy services to different elder living facilities in the Seattle and Greater Seattle area. The University of Washington School of Pharmacy has developed a campus-community collaboration that allows practicing pharmacists to provide the best care for older adults, while also developing new, innovative practices in the field of pharmacy.

I provide comprehensive medication management services to the residents living in these facilities. With UWPC, I have the opportunity to provide one-on-one sessions and home visits for the elder residents. I am also able to provide education and training for facility staff members. It is a pleasure working on an interdisciplinary team that includes a variety of providers, nurses, and social workers. UWPC is in the process of expanding its services to 19 different resident living facilities. It is exciting to be involved in this process and taking part in what is considered a new area of pharmacy practice.