Clinical Pharmacology & Toxicology Pearl of the Week

~ Medication Safety, Part 2 – Deprescribing ~

Background

- ✓ Deprescribing is the planned and supervised process of reducing or stopping medications that may no longer be of benefit or may be causing harm.
- ✓ It is an integral part of appropriate prescribing, managing chronic conditions and avoiding adverse effects.
- ✓ The goal is to reduce medication burden and harm while maintaining or improving quality of life.
- ✓ Reducing the use of potentially inappropriate medications in Canadians saves money.

Key points

- ✓ Discuss deprescribing with patients before initiating any new medicines.
- ✓ It is sometimes better to not start a medicine than to tackle deprescribing in the future.
- ✓ It is essential to deprescribe, reduce or substitute inappropriate medicines. Medications deemed potentially inappropriate for seniors include:
    - Long-term use of proton-pump inhibitors for acid reflux
    - Use of opioids for chronic non-cancer pain
    - Antipsychotics for behavioral and psychological symptoms of dementia
    - Sleeping pills and sedatives
- ✓ It is important to consider patient groups that are likely to be taking many medicines and are particularly vulnerable to adverse drug reactions. These include:
    - Multi-morbidity patients - presence of two or more long-term health conditions
    - Polypharmacy- patients taking large numbers of medicines
    - Elderly (>75yr) frail patients
    - Housebound patients
    - Patients with indications of shortened life expectancy/ end of life
    - Vulnerable patients
    - Decline in hepatic function / renal function

Methods of deprescribing

- ✓ Stepwise approach (i.e. one at a time)
    - Useful if the patient is well and clinically stable but there is a risk that multiple changes in drugs will destabilize their situation.
    - Tapering the dose helps reduce the likelihood of withdrawal for some medicines.

- ✓ All at once
    - Useful if the patient is unwell because of likely drug side effects or in a safe monitored environment (e.g. admission to hospital).

- ✓ Mixed approach
    - Stopping several drugs at once and tapering certain drugs (e.g. antidepressant and antipsychotic drugs) more cautiously.

5-step approach to deprescribing

1. Take a comprehensive medication history.
2. Identify any potentially inappropriate medications.
    a. Medications never or rarely taken (i.e. little to no adherence)
    b. Medications that do not match with any of the patient's conditions
    c. Patient conditions for which drug therapy is not beneficial
    d. Medications for which the patient is at high risk of harm with continued use
3. Determine whether the medication(s) can be stopped.
4. Plan and begin the method of deprescribing (stepwise, all at once, mixed).
5. Check for benefit or harm after each medicine has been reduced or stopped.

Caveats to deprescribing

- ✓ Deprescribing is a complex process involving multiple steps, not a single act.
- ✓ Deprescribing must be done judiciously and with monitoring to avoid worsening of disease or causing withdrawal effects.
- ✓ Deprescribing needs careful discussion on an individual basis to gain patient understanding and acceptance.

References

Tools to identify polypharmacy and assist with appropriate medication use[5,6,27-30]

Tool	Description
Beers criteria[5]	An evidence-based list of potentially inappropriate medications that are best avoided, prescribed at reduced dosage or with caution, or carefully monitored in older adults and in those with certain diseases or syndromes
STOPP/START criteria[6]	A Screening Tool of Older People's Prescriptions (STOPP) and Screening Tool to Alert to Right Treatment (START)
Deprescribing.org	4 evidence-based guidelines to support clinicians in safely reducing or stopping medication in 4 specific drug classes: proton pump inhibitors, benzodiazepine-receptor agonists, antipsychotics, and antihyperglycemics
Medication Management Instrument for Deficiencies in the Elderly (MedMaIDE)[27]	Addresses issues surrounding medication compliance and management in the home setting
Medi-Cog[28]	A 7-minute tool designed to assess cognitive literacy and pillbox skills in order to optimize medication safety. It is a combination of the Mini-Cog, a validated cognitive screen, and the Medication Transfer Screen (MTS), a pillbox skills test.
Appropriate Medications for Older people (AMO)–Tool[29]	Composed of 8 open-ended questions. Developed for the long-term care setting, the tool does not provide specific, rigid prescribing criteria, but asks open-ended questions and, therefore, relies strongly on interpretation by the prescriber.
Good Palliative-Geriatric Practice Algorithm[30]	Assists with drug discontinuation in the outpatient setting. Asks the prescriber to consider drug indication, dose, benefits, and potential adverse effects.

The Clinical Pharmacology (CP) physician consultation service is available Mon-Fri, 8am-5pm. The on-call physician is listed in ROCA on the AHS Insite page. CP consultations are also available through Netcare e-referral and Specialist Link. You can also find us in the Alberta Referral Directory (ARD) by searching "Pharmacology" from the ARD home page. Click HERE for more details about the service.

The Poison and Drug Information Service (PADIS) is available 24/7 for questions related to poisonings. Please call 1-800-332-1414 (AB and NWT) or 1-866-454-1212 (SK). Information about our outpatient Medical Toxicology Clinic can be found in Alberta Referral Directory (ARD) by searching "Toxicology" from the ARD home page.

More CPT Pearls of the Week can be found HERE.

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