DRUG THERAPY IN THE OLDER ADULT

Often a little less may offer a lot more!

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Links & Resources for Drug Tx in Older/Frail Adults

RxFiles LTC Links & Resources:
http://www.rxfiles.ca/rxfiles/Modules/ltc/ltc.aspx

RxFiles in CFP Journal Article Links:
- Opioids & Pain http://www.cfp.ca/content/57/8/907
- Diabetes targets http://www.cfp.ca/content/58/5/543.full
- Behaviour in Dementia http://www.cfp.ca/content/57/12/1420.full

UTI/Elderly Links:
- TOP- UTI in LTC: http://www.topalbertadoctors.org/download/401/urinary_tract_infection_guideline.pdf
- SK Guideline for UTI in LTC: http://www.health.gov.sk.ca/UTI-guidelines-apr2013

5 Drugs/Doses to Watch Out For
1) temazepam >15mg
2) digoxin >0.125mg
3) nitrofurantoin in renal dysfunction
4) amitriptyline esp high dose
5) hydroxyzine ATARAX

Drugs & Falls: Top 4 Classes to Watch:
1) Anticonvulsants
2) Antipsychotics
3) Sedatives
4) TCAs & SSRIs

medSask - for drug information in SK:
http://medsask.usask.ca/
Phone: Saskatchewan Only
In Saskatoon (306) 966-6340
SK 1-800-667-DIAL (3425)
Text: (306) 260-3554

New abbreviation:
T2B =*time to benefit*. Some therapies require several years before benefit (vascular benefits with glucose lowering). This should be evaluated in context of *life expectancy*.

INSIDE... **pg**

a *sneak peak* at Geri-RxFiles

More Art than Science

Sometimes geriatric medicine is described as "the art of taking people off their medications". Optimizing drug therapy in older adults is challenging as there are many competing factors at play.

- Evidence lacking: with greater age & number of comorbidities, there is less chance that such individuals are studied in clinical trials.
- Paradox of polypharmacy: as one gets older, a decline in health often spurs a need for more & more drugs. However, this high volume of drug use greatly increases the chance of drug-related problems that also threaten health.[1]
- No ideal option: it is easy to recognize problematic drugs, but what does one do when there are no good drug options & not treating also has its consequences.

Previous attempts to outline "appropriateness" have suffered from oversimplification & limitations in "real world" applicability. Fortunately the most recent version of the Beers Criteria[2] & STOPP-START Criteria[3,4] provide more opportunity for the clinical judgment essential to "real world" applicability.

Geri-RxFiles is a new tool to help in optimizing medications in older adults. It synthesizes information from the above criteria. It also considers Canadian guidelines & the practical experience of geriatricians, family physicians, nurses & pharmacists in sorting through potentially preferred options. In the end however, it is the patient, the family & their team of health professionals that must make **"the best decision, for this patient, at this time"**.

Happy cautious prescribing, or alternately,
happy & cautious de-prescribing!

Tips for Success

1) If any deterioration in function, ask if there could be a drug cause.
2) Make one drug change at a time
3) Titrate or taper drug doses, & assess for any change in function (e.g. better or worse)
4) Involve the family or caregiver
5) Consider life expectancy, patient values & quality of life when deciding to add or stop medications. Re-evaluate in later life when a more conservative approach is often desirable.

Highlights from Geri-RxFiles: Challenging Areas

Chronic Insomnia In The Frail Elderly (See page 2)

- Encourage & facilitate non-drug measures
  - Get up / position up during day
  - Take advantage of windows or light therapy to set circadian rhythm
  - Institute a nighttime routine; whenever possible, employ family to assist
  - Sleep restriction, clock out of room
  - See pg 2 for many more possible options
- Trial the initiation or ↑dose of pain medication
  - E.g. **acetaminophen** 650mg TID & HS, or long acting TYLENOL ARTHRITIS, 1300mg AM & HS
- Sedative drugs often offer little benefit & often increase risk of falls & confusion.
  - Drugs may be an option for some.
  - If on a benzodiazepine, do not suddenly stop as long-term taper is required

Urinary Tract Infections & Asymptomatic Bacteriuria

- Practice recommendations include:
  - Avoid ordering urine cultures in those who are asymptomatic
  - Rule out a UTI in someone who has a change in mental status
  - Avoid nitrofurantoin in patients with renal dysfunction (e.g. CrCl <40-60ml/min)
  - Reserve broad spectrum agents, such as fluoroquinolones, for when narrow spectrum agents are not an option

See Geri-RxFiles UTI chart, page 7

Avoiding hypoglycemia in the "Frail Elderly" (See page 11)

- Intensive management of blood glucose increases the risk of hypoglycemia & may offer more harm than benefit in this group.
- A1C targets have recently been changed & suggest an A1C of ≤8.5% is suitable for frail elderly (CDA 2013[5]).
- **Metformin** has evidence for macrovascular benefit & low hypoglycemia risk; however the dose should be adjusted for renal function.[6]
- **Gliclazide** may be preferred over glyburide.

Some Blood Pressure Targets Relaxed (CHEP 2013[7])

- Isolated Systolic Hypertention (ISH) – age ≥80y: new SBP target ≤150mmHg.
- Chronic Kidney Disease - Non-diabetes: 140/90 mmHg

Deprescribing PPIs: it is often possible to reduce or stop PPIs if no longer indicated. This may decrease some of the long term potential harms (low Mg++ & B12 levels, fracture risk, C. difficile & aspiration pneumonia infection). 1) Taper dose & plan for rebound heartburn (e.g. calcium carbonate or ranitidine prn x2-4 wks). 2) Consider alternate day or PRN dosing.

[1] Patterson SM, Hughes C, Kerse N, Cardwell CR, Bradley MC. Interventions to **improve the appropriate use of polypharmacy** for older people. Cochrane Database of Systematic Reviews 2012, Issue 5. Art. No.: CD008165.

[2] The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc. 2012 Apr;60(4):616-631.

[3] Gallagher P, O'Mahony D. *STOPP (Screening Tool of Older Persons' potentially inappropriate Prescriptions): application to acutely ill elderly patients and comparison with Beers' criteria*. Age Ageing 2008;37:673-9.

[4] O'Mahony D, Gallagher P, Ryan C, Byrne S, Hamilton H, Barry P, O'Connor M, Kennedy J. STOPP & START citeria: A new approach to detecting potentially inappropriate prescribing in old age. European Geriatric Medicine. 2010 Jan 6; 1(1):45-51.

[5] Canadian Diabetes Association. **Canadian Diabetes 20013 Guidelines (April 2013)**: Accessed 16 Sept 2013 online at http://guidelines.diabetes.ca/.

[6] Lalau JD and Race JM. Metformin and lactic acidosis in diabetic humans. Diabetes, Obesity and Metabolism 2000;2:131-137.

[7] Hackam DG, Quinn RR, Ravani P, et al. Canadian Hypertension Education Program. The 2013 Canadian Hypertension Education Program (CHEP) Recommendations for Blood Pressure Measurement, Diagnosis, Assessment of Risk, Prevention, and Treatment of Hypertension. Can J Cardiol. 2013 Mar 28.