Clinical Question: Is docusate effective in the prevention and treatment of constipation?

Bottom line: Docusate appears similar to placebo in increasing stool frequency and is inferior to other products for treating functional, medication-induced, or post-operative constipation.

Evidence:
- Randomized Controlled Trials (RCTs) of both brands, docusate sodium (Colace™) and docusate calcium (Survak™).
  - In functional or medication-induced constipation versus placebo:
    - 74 Palliative care patients (91% on opioids) on daily senna, received docusate or placebo.\(^1\) Over 10 days:
      - No difference in daily bowel motions (BMs) or sense of complete evacuation.
    - 74 hospitalized patients (immobilized or semi-ambulatory) in cross-over RCT received docusate or placebo.\(^2\) Over 30 days:
      - Docusate increased weekly BM by ~1/week.
      - No change in patient satisfaction.
      - Limitations: 26% lost to follow-up, statistics not performed, and study 60 years old.
  - Docusate sodium versus docusate calcium compared to placebo: Three week RCT in 46 elderly (mean age 82 years) institutionalized patients.\(^3\)
    - Neither significantly changed number of weekly BMs (our calculation as misleading statistics reported).
  - Other placebo-controlled RCTs limited by:
    - Enrolled inappropriate patients (example comatose).\(^4\)
    - Randomization not described\(^5,6\) or incorrect (flipping coin).\(^4\)
    - Patients and/or outcome assessors not likely blinded.\(^4,5\)
    - Selective reporting on sub-group of patients.\(^5,6\)
  - In functional or medication-induced constipation versus active comparator:
    - Docusate sodium versus psyllium: RCT of 170 patients (mean age 37 years, 92% females) over two weeks:\(^7\)
      - Weekly BMs: Increased with psyllium (0.5/week), docusate no change.
Post-operative patients:
- Senna and docusate versus:
  - Placebo: First BM ~1 day sooner\(^8\) with senna and docusate but benefit possibly due to senna.
  - Polyethylene glycol (PEG): First BM 1-2 days sooner with PEG.\(^9\)

Pregnant/post-partum patients:
- No RCTs on docusate alone.\(^10,11\)

Context:
- Constipation affects 12-19% of North American adults, most commonly children, elderly, and females.\(^12\)
- Despite widespread prevalence, most constipation studies limited by small numbers and short study periods.
- Docusate use may be low (~6%) in primary care patients\(^13\) but stool softner use more common (26%) in nursing home patients.\(^14\)
- For comparison, osmotic agents increase BMs in adults and children by ~2-3 per week.\(^15\)

Authors:
Jenny Carbon BSc. Pharm PharmD Student, Michael R. Kolber BSc MD CCFP MSc

Disclosure:
Authors do not have any conflicts to disclose.

References:
family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity.

The ACFP has supported the publishing and distribution of the Tools for Practice library since 2009. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at http://bit.ly/signupfortfp. Archived articles are available at no extra cost on the ACFP website.

You can now earn credits on Tools for Practice! In August 2014, the ACFP launched GoMainpro, an online accreditation tool to help facilitate MAINPRO® accreditation for the ACFP’s Tools for Practice library which has been accredited for Mainpro-M1 credits by the College of Family Physicians of Canada (CFPC). The combination of the CFPC’s Direct Entry Program and GoMainpro’s tracking and reporting features provide an easy and convenient way to earn Mainpro-M1 credits.

This communication reflects the opinion of the authors and does not necessarily mirror the perspective and policy of the Alberta College of Family Physicians.