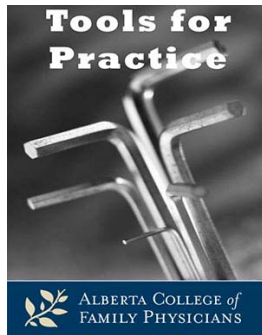


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Overactive bladder, urge incontinence and anticholinergic drugs

Clinical Question: In patients with overactive bladder (OAB), or urge incontinence, how well do medications work and are any of them better?

Evidence:

Overactive bladder (OAB) responds well to placebo¹ but slightly more to anticholinergics.

- Systematic review,² 61 trials, 11,956 patients, comparing anticholinergic drugs like oxybutynin (Ditropan) and tolterodine (Detrol) to placebo, statistically significant difference
 - o Patient reported cure or improve: 55.6% anticholinergic versus 41% placebo, number needed to treat (NNT) 7
 - Anti-cholinergic reduced leaks 0.58/day better than placebo
 - Anti-cholinergic reduced micturitions 0.64/day better than placebo
 - o Dry mouth was more common with anticholinergic (30.9% versus 9.8%).
 - Withdrawal due to adverse events not different
- Reviews comparing anticholinergic and other drugs:
 - o Comparing anticholinergics (ie oxybutynin vs tolterodine)³
 - Oxybutynin: more dry mouth (NNH 6) and withdrawal (NNH 20).
 - No difference in incontinence outcome
 - o Extended versus immediate release formulations offer no advantage except perhaps less dry mouth.³
 - o Reviews by the Canadian Expert Drug Advisory Committee found:
 - Darifenacin (Enablex): No consistent difference to oxybutynin or tolterodine.⁴
 - Solifenacin (Vesicare): Less dry mouth than oxybutynin and some inconsistent results compared to tolterodine, showing possible worsening constipation but small improvements in incontinence symptoms.⁵

Context:

- Guidelines recommend confirming if a urinary tract infection (and treating as necessary), caffeine reduction and weight reduction, supervised bladder training, and anti-cholinergic bladder medications as needed.⁶

- All anticholinergic treatments increase the risk of constipation:
 - Comparisons are limited but tolterodine appears to have the lowest risk.⁷

Bottom-line: Both anticholinergic drugs and placebo improve overactive bladder, although medications slightly more (about ½ a trip less to the bathroom/day). The drugs oxybutynin, tolterodine, solifenacin and darifenacin are very similar in efficacy while adverse events (dry mouth and likely constipation) vary.

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6. Neurourol Urodyn. 2010;29(1):213-40.
7. Dig Dis Sci (2011) 56:7–18.

Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. If you are not a member of the ACFP and would like to receive the TFP emails, please contact subscribetfp@acfp.ca to be added to the distribution list. Archived articles are available on the ACFP website.

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