

Review: Dutasteride, fesoterodine, and finasteride are beneficial for lower urinary tract symptoms in older patients

Oelke M, Becher K, Castro-Diaz D, et al. **Appropriateness of oral drugs for long-term treatment of lower urinary tract symptoms in older persons: results of a systematic literature review and international consensus validation process (LUTS-FORTA 2014).** *Age Ageing.* 2015;44:745-55.

Clinical impact ratings: **GM** ★★★★★☆ **HO** ★★★★★☆

Question

In older patients, which drugs are recommended for long-term treatment of lower urinary tract symptoms (LUTS)?

Review scope

Included studies assessed the efficacy, safety, and tolerability of 5 α -reductase inhibitors, α_1 -blockers, antimuscarinics, β_3 -agonists, and phosphodiesterase type 5 inhibitors in patients \geq 65 years of age who had LUTS.

Review methods

MEDLINE and Cochrane Database of Systematic Reviews (Mar 2014) were searched for clinical trials. 25 studies, including 18 randomized controlled trials (RCTs), met the selection criteria and reported on 16 drugs of interest (1 of which was reported in 2 preparations). The results of the literature search were further assessed with a 2-step Delphi process in which 5 interdisciplinary experts determined the Fit FOR The Aged (FORTA) classification of each drug based on the literature review of its safety, efficacy, and age-appropriateness, specifically in older patients. The 4 FORTA classifications are A (absolutely: indispensable drug with clear benefit with a proven efficacy/safety ratio), B (beneficial: drugs with proven/obvious efficacy but limited extent of effect or with safety concerns), C (careful: drugs with questionable efficacy/safety profiles that should be avoided or omitted in the presence of too many other drugs, with lack of efficacy or presence of side effects), and D (don't: avoid).

Main results

Of the drugs for which evidence of efficacy exists, none achieved FORTA classification A, 3 were classified as FORTA B, 8 were classified as FORTA C, and 3 were classified as FORTA D (Table).

Conclusion

In older patients, dutasteride, fesoterodine, and finasteride are beneficial for long-term treatment of lower urinary tract symptoms.

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Commentary

Evidence-based approaches to clinical problems are helpful for selecting safe and effective treatments. However, limited quality and quantity of evidence, excessive heterogeneity, and insufficient data about harms as well as benefits may limit meta-analysis and clinical applicability of data. The FORTA group has assembled information about the risk-benefit profiles of drugs used in older people, but its methodology may be unfamiliar to clinicians. In their Delphi method model, experts independently review and analyze relevant publications (assembled via systematic review) and look for consensus around broadly defined questions of drug safety and efficacy in older people. When there are discrepancies, the analyses are shared and a second review again seeks consensus. The FORTA classification system has 4 categories for drugs: indispensable, beneficial, use with caution, and avoid. This approach lacks quantitation but can offer relatively quick crowd-sourced assessments when formal tools fail. The credibility of these conclusions depends on trust in this approach.

The review by Oelke and colleagues evaluated drugs used for management of urinary symptoms—a vague clinical state—in elderly patients. The analysis does not consider unique patient characteristics or variations. The review had disheartening results: None of the drugs was indispensable, and 3 were considered more harmful than helpful. Only 3 of the drugs fell into the beneficial category and 8 were of uncertain risk-benefit and should be used with caution. Even these limited results might be questioned because the essential query is broad and will not apply to all patients (e.g., some apply only to men). Potential conflicts of interest exist, as most of the review authors have relationships with drug companies.

For most readers, this information will probably be useful only to the degree that they might be unfamiliar with use of these drugs in elderly patients. The analysis falls short of a guideline but may indicate areas for future formal study. Ideally, new studies would be more focused and quantitative. For now, I would consider these conclusions to be preliminary and most useful for clinicians who prescribe these drugs frequently but are not familiar with the particular challenges of drug treatment in older people.

Thomas Fekete, MD
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Classification of drugs for lower urinary tract symptoms in patients \geq 65 y of age for which evidence of efficacy exists

FORTA* classification	Drug name	Number of studies (n)	Approximate rate of side effects (%) [†]
A (indispensable)	No drugs identified		
B (beneficial)	Dutasteride	3 (4430)	12%
	Fesoterodine	6 (2511)	60%
	Finasteride	2 (3283)	12%
C (caution)	Darifenacin	2 (421)	58%
	Mirabegron	1 (1183)	56%
	Oxybutynin (low dose/extended release)	1 (111)	65%
	Solifenacin	2 (1159)	36%
	Tadalafil	2 (558)	26%
	Tamsulosin	2 (1121)	37%
	Tolterodine	3 (643)	48%
	Trospium	1 (178)	47%
D (avoid)	Alfuzosin	1 (2121)	6%
	Doxazosin	1 (341)	42%
	Oxybutynin (standard dose/immediate release)	2 (60)	73%

*FORTA = Fit FOR The Aged.

[†]Side effects were not assessed or reported in all studies.