A review of antimuscarinic prescribing for urinary incontinence in primary care

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In Collaboration with AVCCG Aylesbury Vale Clinical Commissioning Group Chiltern Clinical Commissioning Group
Introduction

- Urinary incontinence is a common problem and its prevalence increases with increasing age.
- In females, prevalence ranges from 20% in young adults to 50% in older women. This could be due to:
  - Stress incontinence
  - Urge incontinence
  - Mixed incontinence
- Overactive Bladder Syndrome affects 16% of adults, increasing to 35% in those aged over 75 years.
- Patients experience urinary urgency, with or without urinary incontinence, increased frequency and nocturia.
Introduction

- NICE recommendations:
  - Conservative management
    - Supervised pelvic floor muscle training
    - Bladder training
    - Lifestyle advice
  - Drug treatment
    - Antimuscarinic medication – no evidence of a clinically important difference in efficacy between antimuscarinics

- There is a natural remission rate in urinary incontinence
- Once started continued treatment should be regularly reviewed. However, in practice......
Introduction

- medication is often continued long term
- A recent review reported that the benefits from medication are small with less than 200 cases of continence per 1000 treated
- Long term concordance is poor
  - 37% did not re-order after initial prescription
  - 80% stopped within 6 months
  - Patients who do re-order only take their medications about a third of the time
  - Withdrawal rates with oxybutynin are as high as 23%
Introduction

- Safety is a prime consideration
  - Tolterodine is associated with a risk for hallucinations at long term follow up
  - Anticholinergic medication increases the risk of cognitive impairment and mortality
- News reports:

  **Medicines for Elderly Linked to Dementia and Death**
  *(BBC News)*
Warning over combining common medicines for elderly

By James Gallagher
Health reporter, BBC News

Combinations of commonly used drugs - for conditions such as heart disease, depression and allergies - have been linked to a greater risk of death and declining brain function by scientists.

They said half of people over 65 were prescribed these drugs.

The effect was greatest in patients taking multiple courses of medication, according to the study in the Journal of the American Geriatrics Society.
Introduction

- What we did.....
  - Joint primary and secondary care treatment guidance on treatment of urinary incontinence was produced
  - Primary care prescribing of antimuscarinic medication was explored
  - Bid for funding a pilot project was made to the SHA
  - A project was run at practice level in 4 practices, to identify the extent and quality of antimuscarinic prescribing and to assess if stopping treatment made a subjective difference to patient symptoms
Method

- Computer search by a pharmacist for all patients prescribed antimuscarinic medication for urinary incontinence
- Baseline data collection tool was produced and information was collected:
  - GP
  - Pt ID, age, sex
  - Drug name, dose and indication
  - Date started, if regular and reviewed in the last 6 months
  - Previous oxybutynin use
  - Pt on diuretic or has a history of falls
- A Patient Overactive Bladder Questionnaire was developed
## Patient Overactive Bladder Questionnaire

### Stage 1: Prior to trial of stopping anticholinergic

<table>
<thead>
<tr>
<th>Date:</th>
<th>Choose the statement which best describes how bothered the patient is by each symptom during the last 4 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>During the past 4 weeks, how bothered were you by a sudden or uncomfortable urge to urinate</td>
</tr>
<tr>
<td>2a</td>
<td>During the past 4 weeks, how bothered were you by accidental loss of small amounts of urine</td>
</tr>
<tr>
<td>3a</td>
<td>During the past 4 weeks, how bothered were you by waking up at night because you had to go to the toilet</td>
</tr>
<tr>
<td>4a</td>
<td>During the past 4 weeks, how bothered were you by urine loss associated with a strong desire to urinate</td>
</tr>
<tr>
<td>5a</td>
<td>Which of the following statements describes your bladder condition best at the moment?</td>
</tr>
<tr>
<td>6</td>
<td>How often do you take your medicine?</td>
</tr>
<tr>
<td>7</td>
<td>Have you had any advice on bladder training or how you can change your lifestyle to improve symptoms?</td>
</tr>
</tbody>
</table>

### Stage 2: Follow up after trial of stopping anticholinergic

<table>
<thead>
<tr>
<th>Date:</th>
<th>After stopping medication, how bothered were you by a sudden or uncomfortable urge to urinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1b</td>
<td>After stopping medication, how bothered were you by accidental loss of small amounts of urine</td>
</tr>
<tr>
<td>2b</td>
<td>After stopping medication, how bothered were you by waking up at night because you had to go to the toilet</td>
</tr>
<tr>
<td>3b</td>
<td>After stopping medication, how bothered were you by urine loss associated with a strong desire to urinate</td>
</tr>
<tr>
<td>4b</td>
<td>Which of the following statements describes your bladder condition best at the moment?</td>
</tr>
<tr>
<td>5b</td>
<td>Did you need to restart your medicine?</td>
</tr>
<tr>
<td>8</td>
<td>If yes to Q8, what was the reason for restarting?</td>
</tr>
<tr>
<td>9</td>
<td>* Most questions had a standard graded answer for the patient to select</td>
</tr>
</tbody>
</table>

*Most questions had a standard graded answer for the patient to select.*
Method

- GP contacted for approval for their patient to have a trial of stopping treatment
- Pharmacist contacted patient by telephone to discuss project
- If patient agreed, the Patient Overactive Bladder Questionnaire was completed
- Patient was contacted again at 4 weeks for follow up
- Patients could contact their GP within the 4 week period if their symptoms deteriorated
Results
(n=176)

<table>
<thead>
<tr>
<th>Baseline information</th>
<th>% patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31%</td>
</tr>
<tr>
<td>Female</td>
<td>68%</td>
</tr>
<tr>
<td>Over 65 years</td>
<td>62%</td>
</tr>
<tr>
<td>Reviewed in previous 6 months</td>
<td>23%</td>
</tr>
<tr>
<td>Prescribed:</td>
<td></td>
</tr>
<tr>
<td>• oxybutynin</td>
<td>43%</td>
</tr>
<tr>
<td>• solifenacin</td>
<td>14%</td>
</tr>
<tr>
<td>• tolterodine</td>
<td>39%</td>
</tr>
<tr>
<td>• propantheline</td>
<td>1%</td>
</tr>
<tr>
<td>• festoterodine</td>
<td>2%</td>
</tr>
<tr>
<td>• trospium</td>
<td>2%</td>
</tr>
<tr>
<td>• propiverine</td>
<td>1%</td>
</tr>
</tbody>
</table>
Results

Review for continued treatment: patient outcomes (% patients)

- GP did not consider patient suitable to stop
- Unable to contact patient
- GP reviewed patient
- Pt. did not agree to stop
- Pt. agreed to stop, re-started
- Pt. agreed to stop, not-restarted
Results

- Reasons why pharmacist did not contact patient:
  - Contact details were not on file
  - Patient was in hospital
  - GP carried out the review

- Another 30% were not included in the review due to:
  - GP not responding to requests
  - Difficult social circumstances
  - Certain clinical conditions e.g. multiple sclerosis
Patient reasons for NOT restarting treatment:

- Did not feel the medication made a difference
- Has not had any problems with stopping. Body feels better for stopping
- No difference with or without medication. Was initially prescribed with an ordinary catheter. Has now been changed to a suprapubic catheter
- Symptoms did get slightly worse but side effects of dizziness and stomach problems less. Overall would prefer to stay off treatment
- Symptoms ok without it. Feels more alert without medication and is able to do more
Results

- For a one year period, the total cost saving was £10,475.34
Discussion

- Oxybutynin and tolterodine were prescribed to equal extents
- In some cases, tolterodine was started without an initial trial of oxybutynin
- A large proportion of patients had not been reviewed in the last 6 months
Discussion

Patients were:
- Responsive to stopping if they had assurance that medication would be restarted if needed
- Happy to make an informed decision themselves on whether they, personally, needed to continue treatment

Comments from patients agreeing to stop were:
- Worried about affecting cognition
- Still had symptoms on treatment
- Were happy to help the NHS

Comments from patients not wanting to stop were:
- They would prefer to discuss with their GP
- Does not want to be part of a trial – panics her
- Not happy to stop - has noted some improvement
Discussion

- **Reasons for patients not restarting treatment:**
  - Did not experience any difference in symptoms on or off treatment
  - Were able to develop techniques for managing symptoms e.g. stopping caffeine intake, planning journeys
  - Antimuscarinic was being prescribed to prevent bladder spasm on insertion of catheter, on changing to a suprapubic catheter the antimuscarinic had not been reviewed
Discussion

- Advantages/Disadvantages of the Patient Overactive Bladder Questionnaire
  - Time consuming to administer
  - Allowed questions about specific symptoms to be asked
  - Enabled the patient to talk openly about quite personal symptoms
  - Enabled any change to be objectively measured
  - Enabled information to be gathered about why patients decide to stop or continue treatment
Conclusion

- Routine practice should include:
  - Advice on conservative management techniques and promoting these first line
  - Informing patients when treatment is started that there will be a break in treatment at 6 months before long term treatment is considered
  - At 6 months, to review treatment and include in the review:
    - Patients perception of treatment effectiveness
    - Any adverse effects experienced
    - Consideration of stopping treatment for a short period to assess if there is any natural remission in the condition
Conclusion

- Theses simple measures would:
  - Ensure conservative management is tried first
  - Prevent waste due to ineffective treatment being prescribed
  - Ensure the benefits of treatment are balanced with the risks of cognitive decline and increased mortality associated with antimuscarinic medication
References

- Anon. Managing incontinence due to detrusor instability. DTB 2001;39:59-64