

## SELF CARE IN URINARY INCONTINENCE

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### ABSTRACT

Urinary incontinence and its associated urinary symptoms have a major impact on the lives of those who suffer from them.

The prevalence of the condition is high with estimates of as many as one in three women over the age of 18<sup>1</sup>. Despite this, only a small minority of sufferers are known to health services with only 20% of people with the condition receiving active treatment<sup>1</sup>.

The impact on quality of life for those with the condition is large. There are high levels of fear and anxiety associated with the symptoms suffered, together with a social stigma which leaves sufferers reluctant to discuss the problem. This reluctance applies even to those who could help, such as their GP.

In addition to the existing problems associated with incontinence, society faces an ageing population which will inevitably lead to a rise in prevalence of a condition which worsens with age. This, combined with the current financial pressures on the National Health Service (NHS), causes a 'perfect storm' of rising need and diminishing resources.

The challenge we face is how to both help existing patients and to reach out to the many who are not receiving active treatment. As health services are unlikely to be able to do this alone, self-care, supported by trained pharmacists, could, and should, become an important method for tackling this distressing condition. Widening the range of settings where help is available for those with urinary incontinence may also tackle some of the reticence to talk to doctors about the condition. Importantly, it may also start to de-stigmatise the problem.

**Key words:** Urinary incontinence, urge incontinence, mixed urinary incontinence.

### THE TYPES OF URINARY INCONTINENCE

In considering expanding self-care, we need to look at the types and causes of urinary incontinence that may need treatment.

In women, the three most common types are:

- a) Stress urinary incontinence (SUI)—the involuntary leakage of urine when the intra-abdominal pressure is raised by activity such as sport, lifting or when coughing or sneezing.

- b) Urgency Incontinence (UUI)—loss of urine because the patient is unable to reach the toilet in time. This is associated with Overactive Bladder (OAB); a syndrome which causes urgency and frequency of urination plus a tendency to nocturia.
- c) Mixed urinary incontinence (MUI)—a mixture of both stress and urgency incontinence.

In men, SUI is uncommon, Urgency Incontinence is more common and there is the possibility of overflow incontinence—a continuous dribbling of urine linked to retention of urine within the bladder caused by conditions such as benign prostatic enlargement.

The first possible barrier to self-care that needs to be explored is whether it is possible to distinguish between these different types in a community pharmacy setting. There are existing recognised guidelines in use in the UK covering the diagnosis and treatment of urinary incontinence. The National Institute for Health and Clinical Excellence (NICE) published a guideline on Female Urinary Incontinence in 2006<sup>1</sup> and male incontinence is covered by the Male Lower Urinary Tract Symptoms guideline 2010<sup>2</sup>. In Scotland there is a guideline published by the Scottish Intercollegiate Guidelines Network on Managing Incontinence in Primary Care<sup>3</sup>. In turn the NHS Clinical Knowledge service have published online summaries to guide management in the conditions<sup>4,5</sup>.

What is reassuring from all these guidelines is that the diagnosis can be made in most circumstances from the history the patient gives. In addition, none of the guidance suggests that complex tests, such as ultrasound, urodynamics or cystoscopy, are required before starting treatment in a primary care setting.

This opens up the possibility that many patients could be diagnosed following a series of questions or, perhaps more practically, a self-completed questionnaire.

One possible stumbling block is the recommendation from CKS/NICE that urinalysis for infection and glycosuria should be carried out as part of the routine management. With increasing numbers of retail pharmacies taking part in minor illness schemes, it may be that facilities and equipment are already present to allow urinalysis to be performed. However, the absence of the ability to perform urinalysis may not preclude self-care in a pharmacy setting.

The urinalysis recommendations in the guidance reflect that fact that they are aimed towards primary care and continence services in the NHS. In these services there is no possibility to restrict management to low-risk patients and, for high-risk patients, the higher prevalence of urinary tract infection means the positive predictive value of urinalysis is improved. In addition the guidance already advises that any symptoms of urinary tract infection mean that a negative urinalysis result is not sufficient to exclude urinary tract infection.

So, for self-care, the best approach is to filter out high-risk patients for urinary tract infection (see table 1). This leaves patients who may not need urinalysis to exclude infection.

The aim with testing for glycosuria is to detect patients with symptoms associated with high volumes of urine due to diabetes. Whilst diabetes can increase symptoms such as frequency and nocturia, it is less likely to cause incontinence unless the patient already has contributing

**Table 1. Patients with high risk of Urinary Tract Infection**

- Patients with symptoms of active infection; such as fever, dysuria (pain on urination) loin pain, cloudy or foul smelling urine and blood stained urine.
- Patients with recent onset of symptoms (less than 3 months)
- Patients with a past history of frequent or recurrent urinary tract infections.
- Patients over 70 years-old due to increased possibility of atypical presentation of urinary tract infection.

factors or pre-existing incontinence. In addition, urinary symptoms in diabetes will rarely be present without other symptoms of the disease, so questions on the volume of urine passed and the presence of excessive, thirst, tiredness or weight loss can target the need for urinalysis to detect glycosuria.

A self care questionnaire should also be designed to screen for other factors that would make self-care unwise (see table 2). In all these cases the person should be advised to seek medical help.

**Table 2. Symptoms or previous history that contraindicate self-care**

- Recurrent Urinary Tract Infection
- Symptoms of Pelvic Prolapse (e.g feeling of a vaginal lump)
- Symptoms of overflow incontinence
- Voiding difficulties (slow stream, need to strain to pass urine)
- Associated faecal incontinence
- Previous pelvic surgery or radiotherapy
- Symptoms of neurological disease ( weakness, numbness)
- Previous failed attempt at self-management

## TREATMENT

The guidelines<sup>1,2,3,4,5</sup> all contain recommendations for treatment of the different types of urinary incontinence. Three types of treatment are described:

- Conservative—including lifestyle modification and specific exercises or techniques to reduce incontinence
- Pharmacological—such as antimuscarinic drugs
- Surgical

In addition to these active treatments, containment - pads and urinary appliances - can continue to be offered as a coping strategy for continuing incontinence.

I believe that both the conservative and pharmacological approaches could be used in a self-care setting.

Treatment depends on the type of urinary incontinence present. This might appear to present a problem in the case of mixed incontinence. Should treatment tackle the stress or urgency

symptoms first? In this circumstance, the guidelines recommend that the predominating incontinence type should be treated first. This can be readily determined by asking the patient which type of incontinence causes them the most bother.

In practice it is very unlikely that matters would be made worse by picking the wrong symptoms to target first. Treating stress urinary incontinence will not worsen urgency incontinence and *vice versa*. It is also entirely possible to treat several symptoms simultaneously.

The other decision, which needs to be made in consultation with the patient, is whether to pursue an active treatment strategy or use pads or other containment to ameliorate the inconvenience from the incontinence. The Female guideline from NICE is clear that it feels that containment is second best:

*Absorbent products, hand held urinals and toileting aids are not a treatment for UI. Use them only as:*

- a coping strategy while awaiting definitive treatment*
- an adjunct to ongoing therapy*
- long-term management of UI only after treatment options have been explored<sup>1</sup>.*

Another factor to take into account when making this decision, is that patients seeking help for urinary incontinence from doctors have probably tried containment already. As a result they are likely to be seeking more active treatment. This does not preclude advice about more effective containment or, as NICE suggests, using containment whilst awaiting more definitive treatment. However, I would always seek to cure rather than contain as this will cause greater improvement in quality of life.

Self care is more likely to be appropriate for patients before they reach the point where containment is seen as a major part of management.

## **STRESS URINARY INCONTINENCE**

There has to be a degree of caution about recommending a purely self-care approach for stress urinary incontinence. Many doctors would be unhappy recommending a treatment without carrying out a vaginal examination to look for prolapse or pelvic mass. However, it is worth noting that some of this caution may be unnecessary as only vaginal prolapse as far as the introitus is recommended for specialist referral in the NICE guideline<sup>1</sup>.

The first-line treatments for stress urinary incontinence are lifestyle changes and pelvic floor muscle training (PFMT). The former includes weight loss, smoking cessation, adequate but not excessive fluid intake and avoidance of excessive amounts of caffeine in drinks. Discussion of such lifestyle measures may also be an opportunity to lead onto discussion of other areas of self-care to support these changes.

NICE<sup>1</sup> is very clear that simply giving a leaflet to the patient about PFMT is insufficient as the

unaided training requires to be taught by someone skilled in the technique. This would seem to preclude self-care.

One solution already available in many pharmacies is provision of pelvic floor exercise devices. These vary from simple mechanical devices that resist the muscle contraction and give simple feedback to the user, through to systems that use electrical stimulation to produce involuntary contraction of the pelvic floor musculature. The advantage of all these products is that they are designed for self-care without the need for instructions from a professional. Studies comparing the electrical-stimulation devices suggest they are as good as, but not better than taught PFMT<sup>6,7</sup>.

Unfortunately, pharmacological therapy has not been particularly successful for stress incontinence. There is a licensed drug – duloxetine but this has failed to live up to its early promise and has a relatively poor side effect profile. As it has largely dropped out of use in specialist care, it is unlikely to find a place in self-care.

### **URGENCY INCONTINENCE**

In my view, it is in urgency incontinence that there lies the greatest opportunity for self-care to improve the situation for sufferers.

Initial lifestyle advice remains the same as for stress urinary incontinence. However, there are three options for more active treatment.

The first is bladder retraining. This is a technique where the patient is taught to gradually increase the interval between visits to the toilet to urinate. This has the effect of reducing both frequency and urgency. This improvement will mean less impact on the patient's life as they no longer need to plan their journeys or working day around accessible toilets. Ultimately it can also increase the time between the urge to pass urine and involuntary leakage, hence avoiding episodes of incontinence. As this does not involve a learned physical technique, it is amenable to instruction using written or online material.

The second option is the use of an antimuscarinic drug licensed for OAB. There are a number of these available as prescription medicines (see table 3).

**Table 3. Antimuscarinic drugs used to treat OAB**

<ul style="list-style-type: none"> <li>• <b>Oxybutinin</b> <ul style="list-style-type: none"> <li>- Immediate release (IR)</li> <li>- Modified release (MR)</li> <li>- Patch</li> </ul> </li> <li>• <b>Darifenacin</b></li> <li>• <b>Fesoterodine</b></li> <li>• <b>Propiverine</b></li> <li>• <b>Solifenacin</b></li> <li>• <b>Tolterodine (IR and MR)</b></li> <li>• <b>Trospium (IR and MR)</b></li> </ul>
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Finally there is the possibility of combining the bladder retraining and pharmacological therapy. The NICE 2006 guideline<sup>1</sup> examined the evidence for the three options and decided that bladder retraining should be tried for 6 weeks before introducing medication. The reason for this was that the studies they examined showed similar cure rates for pharmacological treatment (in this case oxybutynin) and bladder retraining. Given the higher side-effect profile for drug treatment and the extra costs involved, this staging of treatments made sense for the NHS.

It is worth revisiting this decision in the light of a Cochrane Systematic Review<sup>8</sup> comparing oxybutynin and tolterodine with non-drug treatments. This found drug treatment or combination (drug and bladder retraining) treatment to be better than non-drug treatment alone.

The other decision NICE made was to recommend immediate release (IR) oxybutynin as first line drug therapy. This decision was controversial as this preparation has higher than average adverse effects compared with other forms of oxybutynin and the newer antimuscarinics.

Again, it is worth exploring the reason for the decision. The guideline<sup>1</sup> makes it clear that the efficacy of all the preparations was similar. However the price for IR oxybutynin was considerably below that of the other preparations. This meant that the health economic model used by NICE showed oxybutynin IR dominating the newer, and apparently better tolerated drugs despite the potential for increased adverse effects.

For self-care, I feel that the increased efficacy of combining pharmacological and bladder retraining makes good sense, particularly if one of the newer antimuscarinic preparations is chosen. The increased efficacy, likely quicker onset and reduced side effects compared with oxybutynin, make sense outside the resource constraints of the National Health Service.

Antimuscarinics are not risk-free, so provision of them to patients would require a further checklist and pharmacist assessment to ensure there are no contraindications or potential for interactions with pre-existing diseases and treatment.

## **REVIEW**

Even with self-care, there would be the need for patient follow-up and review. The management of urinary incontinence is unlikely to be achieved on the basis of a single encounter at a pharmacy. The outcome of lifestyle recommendations, non-drug and pharmacological treatments will need to be followed up. This could be supported by a patient-held record which would allow the patient to seek refills of medication from other pharmacies, if required. Patients that fail to respond will need to seek medical advice and pharmacies could be required to ensure that they are made aware of this.

## **MAKING IT HAPPEN**

Before any of this can happen, one of the manufacturers needs to seek a switch from prescription only (POM) to Pharmacy sale (P) for their product. It will also need the regulatory authorities to adopt a similar approach as was taken with non-prescription tamsulosin. As with tamsulosin,

the switch would need to be part of a full package of assisted self-care with pharmacies being supplied with the tools and training to allow safe usage of the drug.

## IN CONCLUSION

I feel that increasing self-care of urinary incontinence would represent a major step forward in the management of a distressing condition. This would be facilitated by a POM to P switch of one or more antimuscarinic preparations.

This is a challenge, as it would require regulatory change and the learning of a new set of skills for pharmacists and their staff. Despite this, I feel that it is a step worth exploring. It offers the opportunity to widen and improve the care for patients with urinary incontinence and, in turn this could make a significant difference to the lives of the many who currently suffer in silence.

**Conflict of Interests:** The author has served on several NICE guideline working groups on urological conditions.

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