

PATIENT'S PERCEPTIONS ON THE USE OF PROPHYLAXIS ANTIBIOTICS FOR RECURRENT URINARY TRACT INFECTION WHEN USING INTERMITTENT SELF-CATHETERISATION

Hypothesis / aims of study

Recurrent urinary tract infections (UTIs) are a commonly reported problem in people who use clean intermittent self-catheterisation (CISC). Research has identified once daily low dose antibiotic prophylaxis as an effective preventative strategy for people who suffer from recurrent UTIs (1), however there is currently a lack of unequivocal evidence for effectiveness in CISC users who suffer recurrent UTIs (2). To address this gap and progress knowledge, a pragmatic randomised controlled clinical (RCT) trial is currently underway to establish whether medical reports and/or perceptions of benefit of antibiotic prophylaxis are also observed in a routine care setting: **Antibiotic treatment for intermittent bladder catheterisation: a randomised controlled trial of once daily prophylaxis (The AnTIC trial)**.

The present study aims to complement the RCT by exploring the thoughts, experiences and beliefs of individuals who use CISC and suffer UTIs, with particular consideration for quality of life (QoL), perceptions of and experience with antibiotics. To be eligible for the RCT participants had to have had at least two symptomatic UTIs during the previous year, and if using prophylaxis they had to stop for 3 months prior to commencing the study.

Study design, materials and methods

Data were collected using semi-structured interviews with 26 individuals who had participated in the AnTIC trial (15 females, 11 males). An interview guide directed discussion around experience and impact of CISC and UTI on QoL, attitude towards antibiotics and general experience on the AnTIC trial. All interviews were conducted via telephone in a private meeting room at a tertiary education institution, were audio-recorded and then transcribed verbatim. Anonymised transcript data were analysed using thematic analysis and NVivo 10 software.

Results

Three overarching themes were revealed with corresponding subthemes: **the impact of CISC and UTI on QoL** (normalisation: time to adapt and perceived burden of UTIs); **participant views on and attitudes towards antibiotics** (nonchalant attitudes and resistance ambivalence); and **adherence and non-adherence to AnTIC treatment** (habitual tendencies and supportive accountability). The themes are illustrated by direct quotes in the following table:

Main Theme	Sub Theme	Quote
1. Impact of CISC and UTI on QoL	1.1 Normalisation and psychological adjustment	"You just get on with it. To me, it's just the same as going to the toilet. I don't think about it really."
	1.2 Time to adapt	"At first, I didn't like them. It took me a wee while... to get used to what you're actually doing. I would say it can take as much as a year before you're comfortable –absolute life-saver, its wonderful!"
	1.3 Perceived burden of UTIs	"So inconvenient and uncomfortable."
2. Views on Antibiotics	2.1 Nonchalant attitude	"I feel fine about taking them"
	2.2 Ambivalence towards resistance	"I'm obviously aware, but you've got the down side to everything really. Yes you're thinking of the longer term but at the same time you want the now to be the best you can."
3. Adherence to AnTIC treatment	3.1 Habitual tendencies	"I just took it in the morning before I went to work; it was only one a day."
	3.2 Supportive accountability	"I was on it a year and I found, as if someone was listening to me. And it was nice that they kept a check on me every three months."

Interpretation of results

Many individuals had come to view CISC as a 'normal' part of their lives however psychological adapting to the process and practicalities of CISC often took a long time and normalisation was not always reached. Some participants attached positive

connotations to CISC and were grateful for the change to their previous health circumstances. Coping with UTIs was for some seen as part of their 'normal' lives; for others UTIs had a greater impact on their QoL, making them feel quite ill. Antibiotic use as a treatment was seen as a necessary ill by most. For a small number of individuals, the emotional and practical burden of CISC and UTIs was perceived as considerable and this negatively influenced their perception of QoL.

Beliefs pertaining to prophylactic antibiotic use were largely based on utility and gravity of need, though some CISC users were concerned by the concept of antibiotic resistance. These perceptions were heavily impressionable by health care professional (HCP) opinion. Whilst the outcome of the AnTIC study is still awaited, within this sub-group a number of those in the prophylactic group said they had experienced a reduced UTI incidence and UTI severity over the study duration; however some did not perceive any difference or benefit. All of those interviewed were happy to take antibiotics prophylactically; those who were randomised to intervention reported adhering to taking the medication. However, at the end of the study some participants, particularly of the control group, preferred to continue with current standard care for UTI rather than seek prophylactic treatment citing the potential risk of resistance developing due to continued antibiotic use.

Concluding message

This study provides new insight into the experience of living with CISC and recurrent UTIs, and experiences and perceptions of antibiotic use. Understanding the experience and impact of CISC and UTIs on patients' lives may help nurses and other HCPs support psychological adaptation and acceptance to CISC. Should the results of the main AnTIC trial show low dose prophylactic antibiotics to decrease symptomatic and microbiologically proven UTIs in patients using CISC, this should not be extrapolated to infer that they are effective for all individuals suffering from recurrent UTIs. Individuals who experience recurrent UTIs in association with CISC use must be supported to make informed decisions about their management. This can be facilitated by the provision of clear information from HCPs about the potential risks and benefits of antimicrobial use. HCPs ought to communicate clear information regarding antibiotic use and potential health risks to allow individuals who suffer with recurrent UTIs in association with their CISC use to make informed decisions.

References

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2. Wyndaele JJ, Brauner A, Geerlings SE, Bela K, Peter T, et al. (2012). Clean intermittent catheterization and urinary tract infection: review and guide for future research. BJU international 110(11 Pt C):E910-7.

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