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Validation of the InCaSaQ, a new tool for the evaluation of patient satisfaction with clean intermittent self-catheterization

Validation d'InCaSaQ, un nouvel outil pour l'évaluation de la satisfaction des patients envers leurs sondes urinaires

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Abstract

Aims. – In neurourology, the choice of catheter is of paramount importance. At the time of our study, no simple validated questionnaire has been published, evaluating patient satisfaction with the use of urinary catheters. Our objective was to construct and validate a specific tool referred to as the Intermittent Catheterization Satisfaction Questionnaire (InCaSaQ), for the purposes of evaluating patient satisfaction with intermittent self-catheterization.

Methods. – A simple tool was developed and validated in a neurourology referral centre, with 113 patients affected by a neurological bladder condition, between November 2011 and February 2012. Eight items, separated into four categories (''packaging'', ''lubrication'', ''catheter itself'', ''after catheterization'') were selected. The mean score obtained with the eight-question questionnaire was calculated for each patient. Face validity was evaluated. Reliability based on internal consistency and test-retest reliability using the intraclass correlation coefficient (ICC) was carried out.

Results. – The patients' comprehension and acceptance of the questionnaire were good. The questionnaire appears to have been well designed, with a significant Cronbach's alpha coefficient, and the ICC demonstrated good test-retest reliability.

Conclusions. – The InCaSaQ was found to be a valid tool for the evaluation of patient satisfaction with a urinary catheter. It is thus possible to compare the comfort and effectiveness of different types of catheter, and to objectify the need to change the type of catheter, in cases where patients express their dissatisfaction.

Keywords: Clean intermittent self-catheterization; Neurogenic bladder; Urinary catheter

Résumé

Objectif. – En neuro-urologie, le choix de la sonde urinaire pour l'autosondage est primordial. Au moment de notre étude, dans la littérature, aucun questionnaire spécifique n'évalue la satisfaction des patients envers leur sonde urinaire. Notre objectif était de construire et valider un outil spécifique d'évaluation de la satisfaction des patients envers leur sonde urinaire : Intermittent Catheterization Satisfaction Questionnaire (InCaSaQ).

Matériel et méthodes. – Cent treize patients neurologiques ont été inclus, tous suivis dans un service spécialisé de neuro-urologie, entre novembre 2011 et février 2012. InCaSaQ comportait 8 items regroupés en 4 catégories (« emballage », « lubrification », « sonde elle-même » et « après le sondage »). Le score total moyen obtenu était calculé pour chaque patient. La compréhension, la pertinence et l'acceptabilité (en termes de temps et psychologique) de la formulation des items ont été vérifiées. La validation psychométrique (cohérence interne [Cronbach], reproductibilité [ICC]) a été évaluée.

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Résultats. – La compréhension et l'acceptation étaient bonnes. La cohérence interne et la reproductibilité sont bonnes.
Conclusion. – InCaSaQ est un questionnaire valide permettant d'évaluer la satisfaction des patients envers leur sonde d'autosondage. Il est maintenant possible de comparer, pour chaque patient, le confort et l'efficacité de la sonde urinaire utilisée, et d'objectiver les causes d'insatisfaction, permettant un changement pour une sonde mieux adaptée.

Mots clés : Sonde urinaire d'autosondage ; Vessie neurologique ; Satisfaction

1. English version

1.1. Abbreviations

CISC	clean intermittent self-catheterization
InCaSaQ	Intermittent Catheterization Satisfaction Questionnaire
ICC	intraclass correlation coefficient

1.2. Introduction

Since the publication of Lapides et al. [15], clean intermittent self-catheterization (CISC) has been considered as the method of choice for the management of voiding dysfunction, typically the result of neurogenic pathology [4]. CISC has contributed to a decrease in the morbidity and mortality of these patients [3] and to an improvement in their quality of life [14].

As soon as the CISC technique has been learned and acquired, the question of the choice of the catheter is of primary importance, since it affects the patient's comfort and satisfaction. These are part of the goals of care, influencing the patient's compliance and long-term adherence to the technique [5].

In clinical practice, patients sometimes complain of difficulties in catheter handling (with hydrophilic catheters) or pain during catheterization, because of a sticking sensation in the urethra [9].

Until now, many different catheters have been used for CISC, with different properties in terms of handling and/or packaging and lubrication requirements of the catheter.

Although some authors have compared the tolerance and efficacy of various catheters, as well as patient satisfaction with pre-lubricated versus non-lubricated models [19], there is no simple, validated questionnaire evaluating patients' satisfaction with the use of urinary catheters. However, various aspects of the catheterization process have been described: handling of the catheter package, ease of insertion and withdrawal of the catheter, evaluation of catheter lubrication, pain during catheterization [20].

A pilot study was carried out to design and validate a specific questionnaire, referred to as InCaSaQ, with the aim of evaluating patient satisfaction with intermittent catheterization.

1.3. Materials and methods

1.3.1. Study population

The study inclusion criteria were: 18 years or older, patients using CISC for urinary retention resulting from a neurological disease. The exclusion criteria were: a confused mental state and the inability to read and understand the questionnaire.

1.3.2. Questionnaire

The items in the questionnaire were derived from a full and comprehensive review of the literature (PubMed, 1995–2012; keywords: Intermittent catheterisation; Hydrophilic-coated catheter; Questionnaire; Satisfaction; Acceptance; Compliance; Lower urinary tract dysfunction; Patients' perception; Quality of life; Clinical evaluation; Difficulties), and from feedback given by a team of healthcare providers who perform more than 400 CISC learning/teaching lessons per year, in an experienced neurourology centre. A specific survey was carried out with this team, involving 6 specialists in neurourology and 11 nurses, in order to check all possible items reported by the patients.

The eight most frequently reported items were selected and sorted into four categories:

- packaging:
  - discretion and bulk of the package,
  - hygiene and robustness,
  - opening and possible fixation of the catheter;
- lubrification: means used for lubrification (spontaneous, gel, water...);
- catheter itself:
  - holding, pushing and insertion into the urinary meatus,
  - ease of progression and insertion comfort,
  - ease with which you could void (length of the catheter accessories);
- after catheterization: ease with which your catheter could be disposed of.

These items were selected to evaluate patient satisfaction with the catheter they were using for self-intermittent catheterization, and were chosen to have wording, which would be simple to understand for all patients.

The individual items were related to discretion, the "hygienic" nature of the catheter, package opening, means of catheter lubrication, ease of catheter insertion and withdrawal, ease of voiding, ease of catheter disposal after use.