

## Urosepsis and the Urologist!

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**Introduction:** Urosepsis is defined as sepsis caused by an infection in the urogenital tract. Studies have reported that up to 86% of patients admitted with urosepsis have an underlying urological condition (1,2). There has been no study to date in Ireland assessing the urological contribution to urosepsis rates in patients admitted to hospital. The purpose of this study is to investigate the aetiology of urosepsis and the associated complications.

**Methods:** A total of 2679 urine cultures and 654 blood cultures performed in Connolly Hospital Emergency Department were reviewed between 2016 and 2018. Patients were included if they had a matching urine and blood culture performed within 24 hours of admission. A retrospective chart review was performed for all patients included in the study.

**Results:** Our study included 85 patients admitted with these strict criteria of urosepsis between 2016 and 2018. The mean age was 70.3 years (21–100). 61% (n = 52) of patients were female. 18% (n = 16) of patients had a long-term indwelling catheter. 11.8% (n = 10) of patients admitted with urosepsis had an underlying urological condition. The most common urological cause of urosepsis in this study was obstructive uropathy due to benign prostatic hyperplasia. 4.7% (n = 4) of patients died as a result of urosepsis during their admission. Complications as a result of urosepsis included a prostatic abscess, psoas abscess, ileus, infected renal cyst and emphysematous pyelonephritis.

**Conclusions:** In this study, the majority of patients admitted with urosepsis did not have an underlying urological condition. Early imaging should be performed to outrule any treatable urological cause.

## References

- Hofmann W. [Urosepsis and uroseptic shock]. *Z Urol Nephrol*. 1990 Jun; 83(6):317–324.
- Serniak PS, Denisov VK, Guba GB, Zakharov V V, Chernobrivtsev PA, Berko EM, *et al*. [The diagnosis of urosepsis]. *Urol Nefrol (Mosk)*. 1990;(4):9–13.

## Development of the RUHFI-Q Questionnaire to Quantify the Impact of Recurrent Urinary Tract Infections on Quality of Life

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**Background:** Recurrent urinary tract infections (rUTIs) affect many adult women. Whilst several questionnaires evaluating lower urinary tract symptoms in females exist,<sup>1–3</sup> no established instrument quantifies symptom severity or quality of life (QoL) impact specific to rUTIs. We aimed to design such a tool.

**Methods:** Best practice guidelines in health-related survey design<sup>4</sup> were reviewed. A literature review informed creation of an interview guide. Following ethical approval, 10 female patients (23–38 years) with rUTIs were invited to participate in phase 1 of questionnaire design; all agreed. Individual semi-structured interviews were conducted exploring the impact of rUTIs on patients' QoL. Interviews were repeated with 5 staff members (3 urology nurses and 2 consultant urologists). Responses were recorded and thematic analysis

performed, to inform the design of a new questionnaire. A further 20 patients were recruited to assess feasibility of completion.

**Results:** All participants found available questionnaires unfit for assessment of rUTI-related QoL. Multiple themes emerged as integral to an rUTI questionnaire, including: frequency of UTIs, duration of symptoms, time to full recovery, specific symptoms of UTI, constitutional symptoms, impact on work/education, impact on leisure activities, impact on interpersonal relationships, impact on sexual relationships, psychological aspects and implications of treatment. Data saturation was reached. Based on responses we drafted the **Recurrent Urinary tract infection Health and Functional Impact Questionnaire (RUHFI-Q)**, comprising 10 domains and 26 items.

**Conclusions:** We propose a novel self-administered questionnaire, the RUHFI-Q, as an instrument to standardise evaluation of the QoL impact of rUTIs. Further validation studies are in progress.

## Bibliography

- Kelleher CJ, Cardozo LD, Khullar V and Salvatore S. A new questionnaire to assess the quality of life of urinary incontinent women. *Br J Obstet Gynaecol*. 1997; 104: 1374–1379.
- Abrams P, Avery K, Gardener N, Donovan J and Board IA. The International Consultation on Incontinence Modular Questionnaire: www.iciq.net. *J Urol*. 2006; 175: 1063–6; discussion 6.
- Clayson D, Wild D, Doll H, Keating K and Gondek K. Validation of a patient-administered questionnaire to measure the severity and bothersomeness of lower urinary tract symptoms in uncomplicated urinary tract infection (UTI): the UTI Symptom Assessment questionnaire. *BJU Int*. 2005; 96: 350–359.
- Mc Coll E, Jacoby A, Thomas L, *et al*. Design and use of questionnaires: a review of best practice applicable to surveys of health service staff and patients. United Kingdom: NHS Health Technology Assessment, 2001.

## Improvement in the accuracy of acute stone referrals following the introduction of a standardised referral proforma

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**Introduction:** When patients are referred for specialist care from an outside hospital, referral letters are often the only source of relevant clinical information. It is essential therefore, that the information is presented clearly, concisely and precisely to facilitate appropriate triage of that patient. The aim of this study was to assess whether the introduction of a referral proforma could improve the quality of referrals for acute ureteric colic.

**Methods:** Fifty consecutive referral letters for patients with acute ureteric colic were audited in a structured manner. Following this, a standardised referral proforma was introduced. After a six week induction period, seventeen consecutive referral proformas were re-audited using the same variables.

**Results:** Most referrals contained information regarding the size and location of the stone. However proformas were more likely to contain other relevant clinical information such as creatinine (100% vs 72% p = <0.001), white cell count (100% vs 68%, p = <0.001) and temperature (94.1% vs 44%, p = <0.001). Proformas were also more likely to include the patients' medical history (100% vs 30%, p = <0.001) and medications (100% vs 32%, p = <0.001). Due to a prompt on the proforma, these patients were also more likely to have a plain x-ray performed to facilitate the follow up of conservatively managed stones (58.8% vs 36%, p = 0.09).