

## A 3-Year Review of Urethrocystoscopy in Port Harcourt

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### ABSTRACT

**Background:** Urethrocystoscopy also known as cystoscopy is an important tool for the urologist for both diagnostic and therapeutic purposes. The aim of this study is to present a 3-year audit of urethrocystoscopy service in a public and private facility in Port Harcourt.

**Aim:** This study aims to review the cystoscopies done at the Department of Surgery, Rivers State University Teaching Hospital (RSUTH) and Colworths Medical Centre and to discuss its importance as a diagnostic tool in lower urinary tract symptoms.

**Materials and Methods:** This study was a prospective study of all cystoscopies carried out in Colworths Medical Centre and RSUTH between November 2012 and June 2015. Information obtained from case records include age, gender, diagnosis, procedure, duration of surgery, and complications and were analyzed. Rigid cystoscopes were used for all procedures. Data analysis was done using SPSS version 20.

**Results:** During the period of the study, 103 cystoscopies were performed on 103 patients with an age range of 3–89 years with the mean age of 66.99. There were 98 (95.14%) males and 5 (4.85%) females. Indications for cystoscopies were 6 (5.82%) bladder tumors, 53 (51.45%) benign prostatic hyperplasia, 20 (19.41%) prostate cancer, 16 (15.53%) urethral stricture, 3 (2.91%) hematuria, 4 (3.88%) bladder calculi, and 1 (0.97%) posterior urethral valve. The duration of procedure had a mean time of 9 min. Sixty-one (59.22%) cases were done in Colworths while 42 (40.77%) cases were done in RSUTH and outcomes were satisfactory as there was no complication seen.

**Conclusion:** The most common indication for cystoscopy in the two study centers was benign prostatic hyperplasia. Cystoscopy is a vital diagnostic tool in urology as it offers a life image of the urinary tract and aids in prompt and effective therapeutic decision.

**Key words:** Review, urethrocystoscopy, Colworths, Port Harcourt.

### INTRODUCTION

The practice of endourology is increasing rapidly in most developed countries of the world.<sup>[1]</sup> Urethrocystoscopy entails the visualization of the urethra and bladder. Since the invention of the solid rod-lens system and the fiber optic light source by H.H. Hopkins, in 1959, the level of practice has increased from simple diagnostic procedures to complex therapeutic applications in the upper and lower urinary tracts.<sup>[2]</sup> At the moment, many open surgical procedures of the upper and lower urinary tracts can be safely performed by luminal and extraluminal.<sup>[3]</sup> There is a considerable acceptance from patients in Port Harcourt for this kind of procedure despite it being new and the challenges in cost of the equipment.<sup>[2]</sup>

In the two centers chosen, we used rigid cystoscopes and therefore reviewed our experience over 3 years.

### Aim

This study aims to review the cystoscopies done at the Department of Surgery, Rivers State University Teaching Hospital and Colworths Medical Centre and to discuss its importance as a diagnostic tool in lower urinary tract symptoms.

### MATERIALS AND METHODS

We reviewed prospectively the medical records of all the patients who underwent urethrocystoscopies in Colworths Medical Centre and Braithwaite Memorial Specialist Hospital between November 2012 and June 2015. Information obtained include age, gender, diagnosis, procedure, duration of surgery, and complications, which were presented in simple descriptive forms and tables. The type of anesthesia was instillation of 2% lignocaine gel into the urethra for 7 min before insertion of scope.

### RESULTS

During the period of the study, 103 urethrocystoscopies were performed on 103 patients with an age range

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of 3–89 years with the mean age of 66.99. The most common indication was benign prostate hyperplasia 53 (51.45%), prostate cancer 20 (19.4%), urethral stricture 16 (15.53%), bladder tumors 6 (5.82%), bladder calculi 4 (3.88%), hematuria 3 (2.91%), and posterior urethral valve 1 (0.97%). The duration of the surgery had a mean of 9 min. Sixty-one (59.22%) cases were done in Colworths Medical Centre while 452 (40.77%) cases were done in Braithwaite Memorial Specialist Hospital with satisfactory outcomes.

## DISCUSSION

Urethrocystoscopy can be done for both therapeutic and diagnostic purposes; however, we concentrated on only diagnostic reasons.<sup>[1]</sup> The most common indication for an endourological procedure was diagnosis of bladder outlet obstruction. Prostatic enlargement constitutes the bulk of the patient treated 63%. In the review of the spectrum of urologic diseases in West Africa by Mbibu, prostatic enlargement was the most commonly encountered urological problem. In some studies, rigid cystoscopies were done under general anesthesia, but in all our patients, we did under local instillation of 2% lignocaine gel.<sup>[4]</sup> Flexible urethrocystoscope is more tolerable to the patients and can be done as office procedures. Urethrocystoscopic complications are generally minor and may include urinary tract infection, hematuria, dysuria, and injury to the bladder and urethra.<sup>[2,3]</sup> The development of an iatrogenic urethral stricture is a known possible complication of instrumentation.<sup>[5,6]</sup>

Urethrocystoscopy was valuable in the evaluation of patients with hematuria.<sup>[4]</sup> Apart from the diagnosis and biopsy of lesions in the bladder, bleeding from the upper urinary tract was detected from one ureteric orifice in one patient.<sup>[2,3]</sup> Our requirements are poorly maintained by few and inexperienced technicians and

their lifespan is usually shortened. Several accessories were not available to do satisfactory manipulations with the urethrocystoscopes.<sup>[6,7]</sup>

## CONCLUSIONS

Urethrocystoscopy is a very valuable tool in the assessment of the lower urinary tract. In the developing countries, where endourology is growing, the major drawback had always been the cost and maintenance of the endoscopes. Subventions from the government health agencies will go a long way in making it more available in the government hospitals.

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