Spectrum of the Diagnostic Yield of Cystoscopy in the Evaluation of Haematuria: A Hospital-based Study

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Haematuria is a common condition confronting clinical urologists. Majority of patients with haematuria are found to have significant underlying pathology, with many having a urological malignancy. Cystoscopy is a valuable investigation in evaluating the lower urinary tract of such patients. The objective is to study the spectrum of the diagnostic yield of cystoscopy in the evaluation of haematuria in a local population.

This is a descriptive study of patients referred for cystoscopy in the evaluation of a lower urinary tract cause for haematuria at the Surgical Unit of Teaching Hospital Peradeniya, from August 2008 to August 2011. All were having normal renal function tests. Patients with known bladder carcinoma, upper urinary tract or systemic causes for haematuria were excluded. Patients' clinical details and cystoscopic findings were recorded in a pre prepared data sheet.

A total of 52 patients were included in the study group with a mean age of 53 (SD=16) years. Of the study population, 76.92% (n=40) were males and 23.07% (n=12) were females. Of the sample 51,92% (n=27) had abnormal cystoscopy findings while 48.0% (n=25) had no abnormality detected in cystoscopy. Majority of patients (n=18, 72%) with normal cystoscopy findings were below 50 years of age while n=7 (28%) were above 50 years. Of the patients with abnormal cystoscopy findings n=20 (74.98%) were above 50 years of age while n=7 (25.02%) were below 50 years. Among them 33.32% (n=9) were having malignant lesions while 66.68% (n=18) had benign lesions. Out of male subjects, n=23 (44.2%) had abnormal cystoscopic findings while in n=17 (32.69%) were normal. Of the abnormalities n=7 (13.46%) were malignant lesions (bladder carcinoma) while n=16 (30.76%) were benign. The commonest benign lesion was prostatomegaly (n=7, 13.46%) while prostatitits was found in n=5 (21.7%) and cystitis, urethral stricture, meatal stenosis and highly vascular prostate accounted for n=1(1.9%) each. Out of female subjects n=4 (7.6%) had abnormal cystoscopic findings while in n=8 (15.38%) it was normal. Among abnormalities, bladder carcinoma and cystitis were found in n=2 (3.8%) each.

Cystoscopy yields diagnostic information in more than 50% of patients with haematuria in the assessment of lower urinary tract. These lower urinary tract pathologies were detected commonly in subjects above 50 years of age and those who were males. Eighteen percent of the study group was found to have bladder malignancies. Thus, this study reconfirms the view that cystoscopy is an essential and productive investigation for the local patients with clinical presentation of haematuria.