

## THE YIELD OF OFFICE CYSTOSCOPY IN THE EVALUATION OF FEMALE LOWER URINARY TRACT SYMPTOMS

### Aims of Study

To determine the yield of office cystoscopy for the detection of benign and malignant lower urinary tract lesions, during the evaluation of female lower urinary tract symptoms.

### Methods

The study population included all patients evaluated with office cystoscopy at a single continence center between 1991- 2001, due to one or more of the following symptoms: urinary frequency, urgency, nocturia, dysuria, hematuria, bladder tenderness or urethral tenderness. Evaluations were performed awake without sedation, and routinely included urethroscopy (0° endoscopy lens), followed by cystoscopic evaluation at maximum cystometric capacity using a 70° cystoscope. Office cystoscopy reports, intake history, visual analog symptom questionnaires, pathology and cytology reports were manually reviewed for this analysis.

### Results

Chart reviews were performed for 1011 patients undergoing cystoscopy, representing all consecutive studies performed during the study period. The study sample had a mean age of 60 years (17-95); 8.2% were active smokers, and 47.5% had a history of prior pelvic surgery. Irritative lower urinary tract symptoms were highly prevalent including nocturia (90.2%), urgency (73%), and urinary frequency (median voiding interval 2.0 hrs, range 0-8); 59.9% of women reported stress incontinence, and 70.2% reported urge incontinence. Other signs and symptoms prompting cystoscopy included urethral tenderness (27.6%), bladder tenderness (23.7%), hematuria (21.6%), dysuria (19.2%), recurrent or persistent infections (16.8%), postvoid dribbling (15.6%), urethral mass (3.3%), and previous pelvic surgery (47.5%). Diagnoses cited to 'rule out' with cystoscopy included post-surgical foreign body (13.6%), sensory urgency (15.5%), metastases from prior non-urological cancer (11.6%), and diverticulum (2.7%). Cystoscopy findings, by order of frequency, included: chronic urethrotigonitis (30.0%), trabeculation (13.2%), atrophic urethrotigonitis (11.3%), glomerulation (6.9%), urethral stenosis or stricture (4.8%), cystitis cystica (3.0%), cystitis glandularis (2.1%), absent ureteral efflux (2.1%), benign polyp (1.4%), urethritis (1.0%), radiation cystitis (1.0%), vesicovaginal fistula (0.3%), urethrovaginal fistula (0.2%), permanent suture material (0.2%), bladder stone (0.1%), retained surgical 'coil' (0.1%), and duplicated ureter (0.1%). Transitional cell carcinoma was diagnosed in 0.9% (9 women); of these, 8 (89%) were superficial and one was invasive. No cases of adenocarcinoma, squamous cell carcinoma, or metastatic lesions from other primary cancer sites were detected.

### Conclusions

Within the setting of a referral-based urogynecology practice, outpatient cystoscopy for the evaluation lower urinary tract symptoms is an integral tool. Analysis of this large cohort revealed a substantial incidence of inflammatory conditions, non-malignant anatomic abnormalities, and a small but clinically significant incidence of malignancy.