

MICROSCOPIC HEMATURIA SCREENING IN A MALE CONSUMER POPULATION WITH LOWER URINARY TRACT SYMPTOMS

Hypothesis / aims of study

Microscopic hematuria is regarded as an index for underlying significant urological conditions. Relevant AUA guidelines recommend evaluation algorithms for microscopic hematuria. Population based studies have focused on risk pools such as heavy smokers and elderly men. This study evaluated whether men who express an interest in self-managing their lower urinary tract symptoms (LUTS) with an over-the-counter (OTC) product should be screened for microscopic hematuria to detect possible undiagnosed urothelial malignancy or other significant conditions causing hematuria.

Study design, materials and methods

Urine dipstick testing was conducted in men who believed that an OTC product would be suitable for self-managing their male LUTS (self-selectors). Urologic assessment was conducted by a study urologist to determine conditions causing or contributing to the urinary symptoms. Sub-groups included men < 45 years; and men ≥ 45 years who self-selected and were found to have a trace or more of glucose, leukocyte, and/or blood in their urine; or had an AUA Symptom Index score ≥ 20. Men who reported experiencing 1 or more of the following: complete urinary retention, dysuria, extreme thirst, gross hematuria, and urethral discharge (i.e., "Do Not Use" [DNU] symptoms in this study) were also assessed. Men ≥ 45 years of age who did not meet any of these criteria were not referred for a urologic assessment.

Results

Of the 1274 men who self-selected and had a urine dipstick performed, 266 (20.9%) men had positive urine dipstick results and 160 (12.6%) had hematuria. Among the 141 men with hematuria who underwent urological assessment, a total of 16 men had a newly diagnosed medical condition, other than benign prostatic hyperplasia, identified as causing or contributing to the urinary symptoms. Prostate cancer, bladder outlet obstruction, and overactive bladder were the most commonly identified medical conditions. None of these men were diagnosed with urothelial malignancy (Table).

Interpretation of results

Screening for microscopic hematuria in a population of men who believe they can use an OTC product to relieve their bothersome LUTS, shows very few medically significant conditions detected by algorithm based evaluation for incidentally found hematuria.

Concluding message

Although microscopic hematuria can be a sign of underlying significant urological conditions including urothelial malignancy, very few medically significant conditions were observed in a population of men with LUTS who had urologic assessment.

Table

	< 45 years	≥ 45 years, n (%)	
		DNU symptoms	Positive urine dipstick
Number of men who self-selected	131	244	168
Men who had urologic assessment	112 (100.0)	208 (100.0)	148 (100.0)
Men with hematuria	12 (10.7)	39 (18.8)	90 (60.8)
Men with hematuria and newly diagnosed medical conditions causing/contributing to urinary symptoms	8 (7.1)	4 (1.9)	4 (2.7)
Relevant urological conditions identified			
Bladder outlet obstruction	1 (0.9)	0 (0.0)	1 (0.7)
Overactive bladder	1 (0.9)	0 (0.0)	1 (0.7)
Prostate cancer	0 (0.0)	0 (0.0)	1 (0.7)
Urolithiasis	2 (1.8)	1 (0.5)	0 (0.0)

DNU, Do Not Use

Disclosures

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