Cysview-Assisted Transurethral Resection of Bladder (TURB)

September 01, 2011
By Maximillian Burger, MD [1]

During a routine check-up with his primary-care physician and an irregular urinalysis, a 61-year-old man was found to have microhematuria. After the microhematuria recurred for five months, the patient was referred to a urologist for a cystoscopy.

Clinical History

During a routine check-up with his primary-care physician and an irregular urinalysis, a 61-year-old man was found to have microhematuria. After the microhematuria recurred for five months, the patient was referred to a urologist for a cystoscopy. The patient had a smoking history of approximately one pack a day for 15 years, but had no history of bladder neplasia or further urological problems.

Findings and Diagnosis

A white light cystoscopy was performed, which revealed a singular papillary tumor (Ta G2, low grade). Until recently, the standard option for diagnosis of bladder cancer in the US was a white light cystoscopy; however, a blue light option that has been proven to significantly improve the accuracy of bladder cancer detection is now available. When a Cysview™-assisted TURB blue light cystoscopy was used during initial resection, it revealed a second, smaller papillary tumor (Ta G1, low grade) that was overlooked by the white light cystoscopy. Cysview is an optical imaging agent for use in the cystoscopic detection of non-muscle invasive papillary cancer of the bladder in patients with known or suspected lesion(s) on the basis of a prior cystoscopy.

Both tumors were removed during the surgery. Based on these findings, a diagnosis of non-muscle-invasive bladder cancer was given and the patient was classified as low-risk. Additional tests included urine cytology that was inconclusive and an ultrasound of the kidneys and urinary bladder that showed no abnormal findings.

Treatment and Follow-up

The overall goal of treatment was to prevent recurrence of the non-muscle-invasive bladder cancer. The patient was given a post-operative dose of mitomycin C 40 mg (the standard of care), which was followed by six weeks of the same dosage. The patient was then assessed after three months of treatment and no additional tumors were found. It was determined that the resection was complete, so no further surgeries were needed.
White light cystoscopic image (Mode 1). Image supplied by Burger
Maximilian Burger, MD, FEBU, is associate professor of urology at the University of Regensburg, Germany.

[1] Burger M. Case study: Hexvix- assisted TURB. Dept. of Urology, Caritas St. Josef Medical Centre, University of Regensburg.


Disclosures:

Source URL: http://www.diagnosticimaging.com/articles/cysview-assisted-transurethral-resection-bladder-turb

Links: