

Can posthysterectomy cystoscopy be utilized as a screening test for bladder cancer?

Kann die Zystoskopie nach Hysterektomie als Screeningtest für Harnblasenkrebs verwendet werden?

Abstract

It is currently undisputed that cystoscopy is required after each hysterectomy to confirm the integrity of the urinary tract before leaving the operating room. Sometimes, secondary findings are detected on cystoscopy like interstitial cystitis and exophytic tumors. We are reporting a case of asymptomatic bladder cancer discovered incidentally during a posthysterectomy cystoscopy. The chance of a woman having this cancer is about 1 in 85. This demonstrates the additional merit of performing cystoscopy after hysterectomy as a screening test for bladder cancer.

Keywords: hysterectomy, cystoscopy, screening, bladder cancer

Zusammenfassung

Es ist derzeit unbestritten, dass nach jeder Hysterektomie eine Zystoskopie erforderlich ist, um die Integrität des Harntrakts zu überprüfen, bevor der Patient den Operationsraum verlässt. Bisweilen werden bei der Zystoskopie zusätzliche Befunde erhoben, wie z. B. interstitielle Zystitis oder ein oberflächlicher Tumor der Harnblase. Wir berichten über einen Fall von asymptomatischem Harnblasenkrebs, der zufällig bei einer Zystoskopie nach Hysterektomie entdeckt worden ist. Die Häufigkeit von Blasenkrebs beträgt bei Frauen 1:85. Dieser Befund demonstriert den zusätzlichen Nutzen einer Zystoskopie nach Hysterektomie als einen Screeningtest für Blasenkrebs.

Schlüsselwörter: Hysterektomie, Zystoskopie, Screening, Blasenkrebs

Case presentation

Hysterectomy is the second most frequent major surgical procedure among reproductive age women with approximately 600,000 hysterectomies performed annually in the United States [1]. It is currently undisputed that cystoscopy is required after each hysterectomy to confirm the integrity of the urinary tract before leaving the operating room [2]. Unrecognized injuries to the bladder or ureters are unacceptable and lead to serious complications. Sometimes, secondary findings are detected on cystoscopy like interstitial cystitis and exophytic tumors. We are reporting a case of asymptomatic bladder cancer discovered incidentally during a posthysterectomy cystoscopy.

A 42 year old patient, gravida 0, with a known fibroid uterus and history of menometrorrhagia is admitted for definitive surgical treatment. The uterus is 14 weeks size. Her endometrial biopsy shows mild endometrial hyperplasia and her Pap smear is within normal limits. Informed consent is obtained to proceed with total laparoscopic

hysterectomy. So, laparoscopic hysterectomy is performed with uterine morcellation and as routinely done at the end of the operation cystoscopy is performed. This reveals an exophytic bladder tumor above the ureteral orifice on the right side (Figure 1A). Biopsies are taken with three passes of a cup biopsy forceps and sent for pathology. The bleeding site is fulgurated with point cautery using the 20/20 cautery setting which gives good hemostasis with no evidence of bladder injury (Figure 1B). Pathology report comes with the diagnosis "papillary transitional cell carcinoma, histologic grade I with no evidence of invasion." The specimen labeled "Uterus and Cervix" weighed 520 grams and was negative for malignancy. Because the bladder is the final storage cistern for excreted toxins, there are many risk factors for bladder cancer including smoking, occupational exposures, drinking water with arsenic contamination, chemo- and radiotherapy and chronic cystitis. The American Cancer Society estimates that 68,810 new cases of bladder cancer will be diagnosed in the United States during 2008 of which 14,100 people will die of the disease [3]. The

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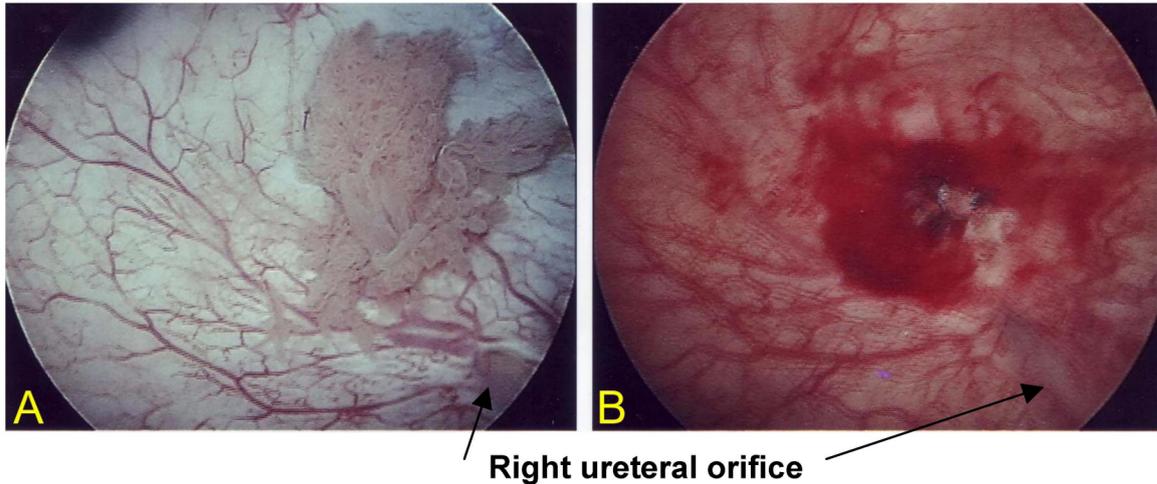


Figure 1: A: An exophytic tumor in the bladder discovered incidentally during posthysterectomy cystoscopy. B: The bleeding site after biopsy.

chance of a woman having this cancer is about 1 in 85 [3]. For men, it is 1 in 27 [3].

Fortunately, most people with bladder cancer will not die of the disease. Upon diagnosis, most patients have their cancer confined to the bladder (74%). In 19% of the cases, the cancer has invaded nearby tissues and in 3% of cases there are metastases [3]. Earlier diagnosis is important in reducing mortality. Females, however, are approximately twice as likely as males to die from the disease because of delay in diagnosis [4].

A conscientious gynecologist should not be timid about biopsying bladder abnormalities detected at the time of postoperative cystoscopy. Superficial mucosal biopsies of papillary lesions will not bleed significantly and can yield important diagnostic information. It is easier to treat bladder cancer if it is caught early. At this point, a routine effective bladder cancer screening test has not yet been established. There is insufficient evidence that a decrease in mortality from bladder cancer occurs with hematuria or urinary cytology testing [5]. This case illustrates the additional merit of performing posthysterectomy cystoscopy as a screening test for bladder cancer.

Notes

Conflicts of interest

None declared.

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