

APPLYING NARROW BAND IMAGING® IN COMPLEMENT WITH WHITE-LIGHT IMAGING CYSTOSCOPY IN THE DETECTION OF UROTHELIAL CARCINOMA OF THE BLADDER

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OBJECTIVE

To investigate the value of narrow-band imaging (NBI®) flexible cystoscopy in the detection of urothelial carcinoma (UC) of the bladder.

EQUIPMENT USED

- CYF-V2/VA2



Narrow band imaging view of carcinoma *in situ* (CIS) of urothelial carcinoma. White light imaging view of CIS (Left). Enhanced visualization of CIS with narrow band imaging (Right).

RESULTS

WLI and NBI confirmed UC in 143 patients; a total of 285 tumors were detected. The patient-level detection rates for NBI and WLI were 97.9% (140/143) and 88.8% (127/143), respectively ($P = 0.002$). The patient-level false-positive detection rates for NBI and WLI were 21.8% (39/179) and 29.1% (52/179), respectively ($P = 0.12$). NBI detected a total of 59 additional tumors (17.2%; 34pTa, 17pT1, 3pT2, and 5pTis) in 44 of 143 patients (30.8%). NBI found 1 additional tumor in 34 cases, 2 additional tumors in 6 cases, 3 additional tumors in 3 cases, and 4 additional tumors in 1 case. The mean \pm SD (range) number of identified UCs per patient was 1.97 ± 0.67 (1-5) for NBI and 1.78 ± 0.53 (1-4) for WLI ($P = 0.01$). The tumor-level detection rates for NBI and WLI were 96.8% and 79.3%, respectively ($P < 0.001$).

CONCLUSIONS

Compared with WLI, NBI improves UC detection. It has a higher rate of detection and a comparative rate of false-positive detection. NBI is simple and requires no dyeing. It can be conveniently applied to complement WLI.

Note: This summary is for informational purposes only. Publication abstract and access to full article can be found at:

<http://www.ncbi.nlm.nih.gov/pubmed/22079940>

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