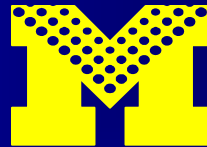




The New Normal after Bladder Removal and Urinary Diversion

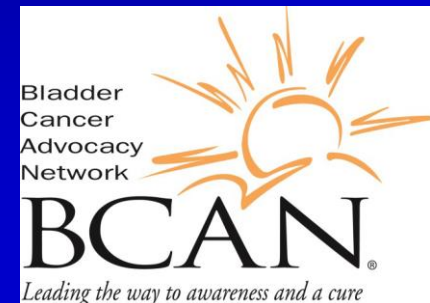


Cheryl T. Lee, MD

Dr. Robert H. and Eva M. Moyad Professor

Professor of Urology

University of Michigan



Tonight's Discussion

- Diversion Options
- Decision Making
- Complications after Urinary Diversion
- Other Considerations
- Resources

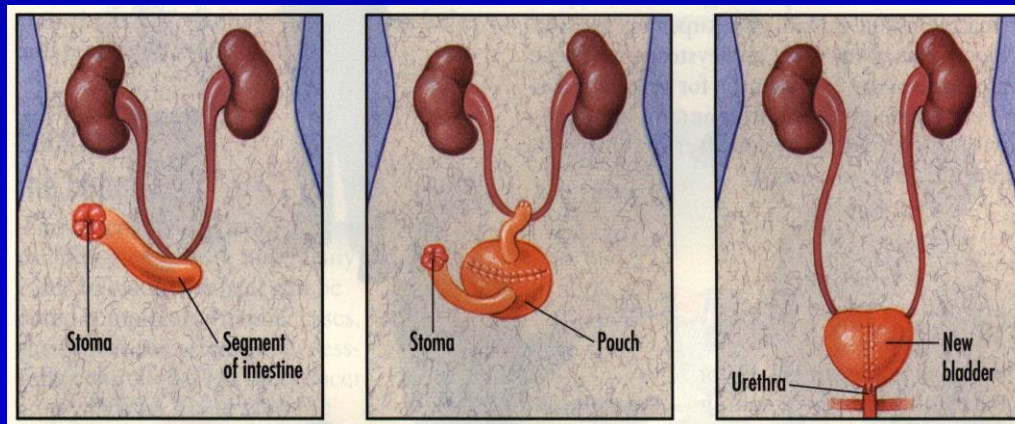
Diversion Options

- Assess your personal situation
 - Medical history, lifestyle, desires, limitations, family support
- Other Considerations
 - Prior bowel surgery
 - Tumor factors
 - Patient factors
- Continent vs Incontinent
 - Orthotopic neobladder
 - Continent cutaneous diversion (Indiana Pouch)
 - Conduit (stoma)
 - Small intestine vs colon

Urinary Diversion

Patient Concerns: Treatment Effects

- Body Image
- Sexuality
- Urinary Function
- Impact of Treatment on Family Members
- Practicality of Undergoing Radical Therapy



Consequences of Urinary Diversion

Complications	Prevalence
Sepsis	3%
Kidney infection	11-18%
Intestinal obstruction	2-10%
Parastomal hernia	2-16%
Stomal stenosis	2-7%
Stone formation	7-11%
Metabolic acidosis	13-27%
Conduit stenosis	3%
Conduit-enteric fistula	<1%
Ureteral obstruction	6-17%

Slide, courtesy Scott Gilbert, MD

Stomal Complications

- Stomal Necrosis (poor blood supply to the stoma)
- Retraction (stoma shrinks back)
- Obstruction (stoma blocks off)
- Parastomal Hernias
- Stenosis (stoma scars down)
- Prolapse (conduit falls out from the stoma)

Farnham SB and Cookson MS. World J Urol 22:157-167, 2004

Davis CB, Breyer BN, and Konety BR. AUA Update Series 29: 349, 2010.

Skin Changes



Trauma / Skin Ulceration



Allergic Dermatitis

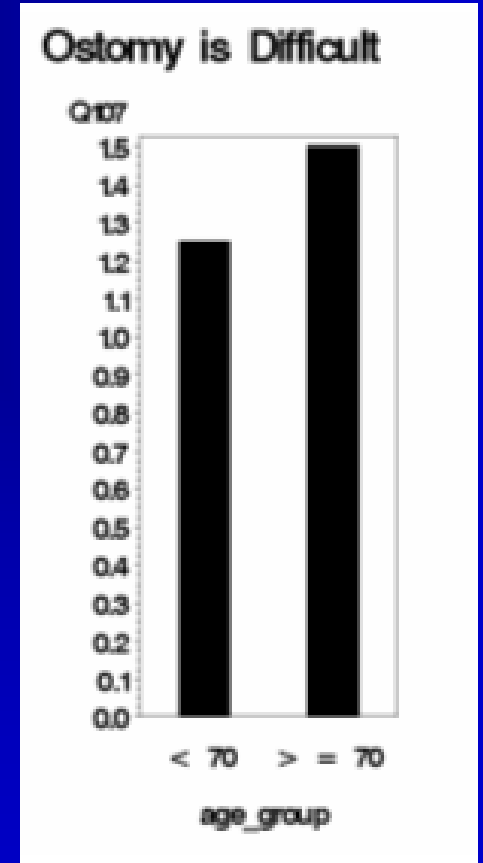
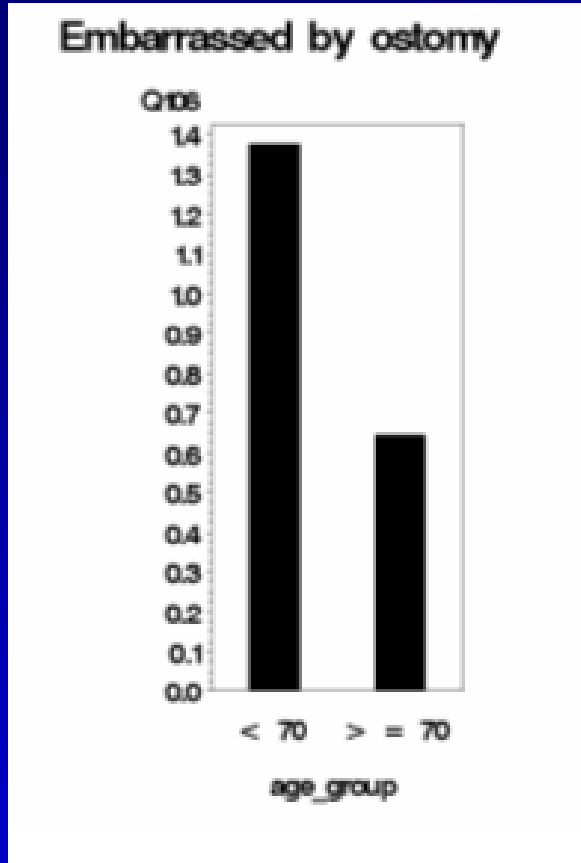
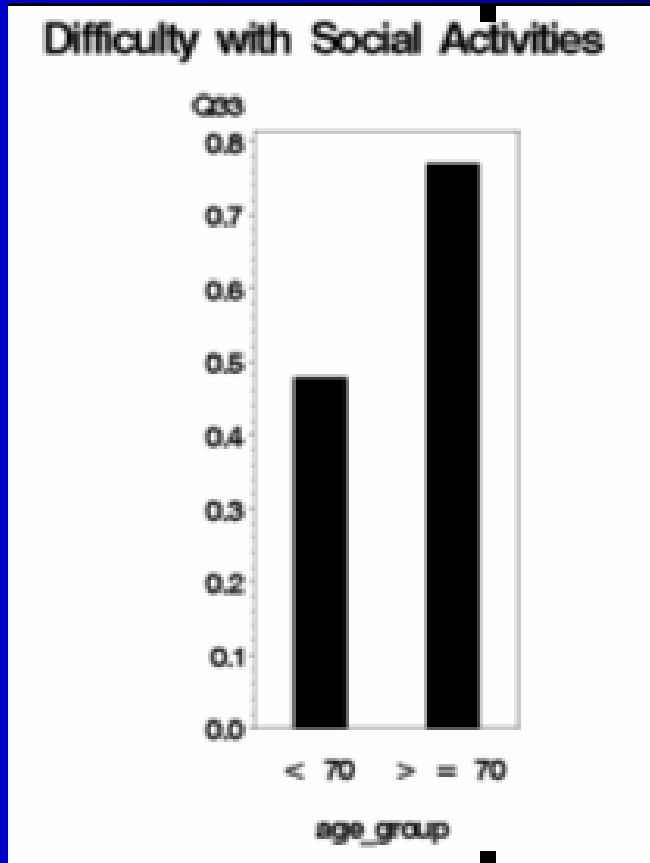


Fungal Infection



Ischemia / Necrosis

Impact of Diversion on Social Interaction Scale 0-4



90-Day Complication Rates after Orthotopic Neobladder (n=1,013)

- 587 (58%) had a complication
- Infectious – 24%
- Urinary system – 17%
- Gastrointestinal – 15%
- Wound related – 9%
- Deaths - 23 (2%)

Orthotopic Neobladder: Overall Functional Outcomes

- Overall rates described (majority men)¹⁻³
 - Daytime continence 87-96%
 - Nighttime continence 72-95%
- Rates among women less studied, but show worse continence rates overall⁴
 - Daytime continence 43-90%
 - Nighttime continence 55-76%
 - Hypercontinence (retention) 24-58%

¹Stein, JU 2004; 172:584-587. ²Hautmann, WJU 2006;24:305-314. ³Neuzillet, BJUI 2011;108:596-602.

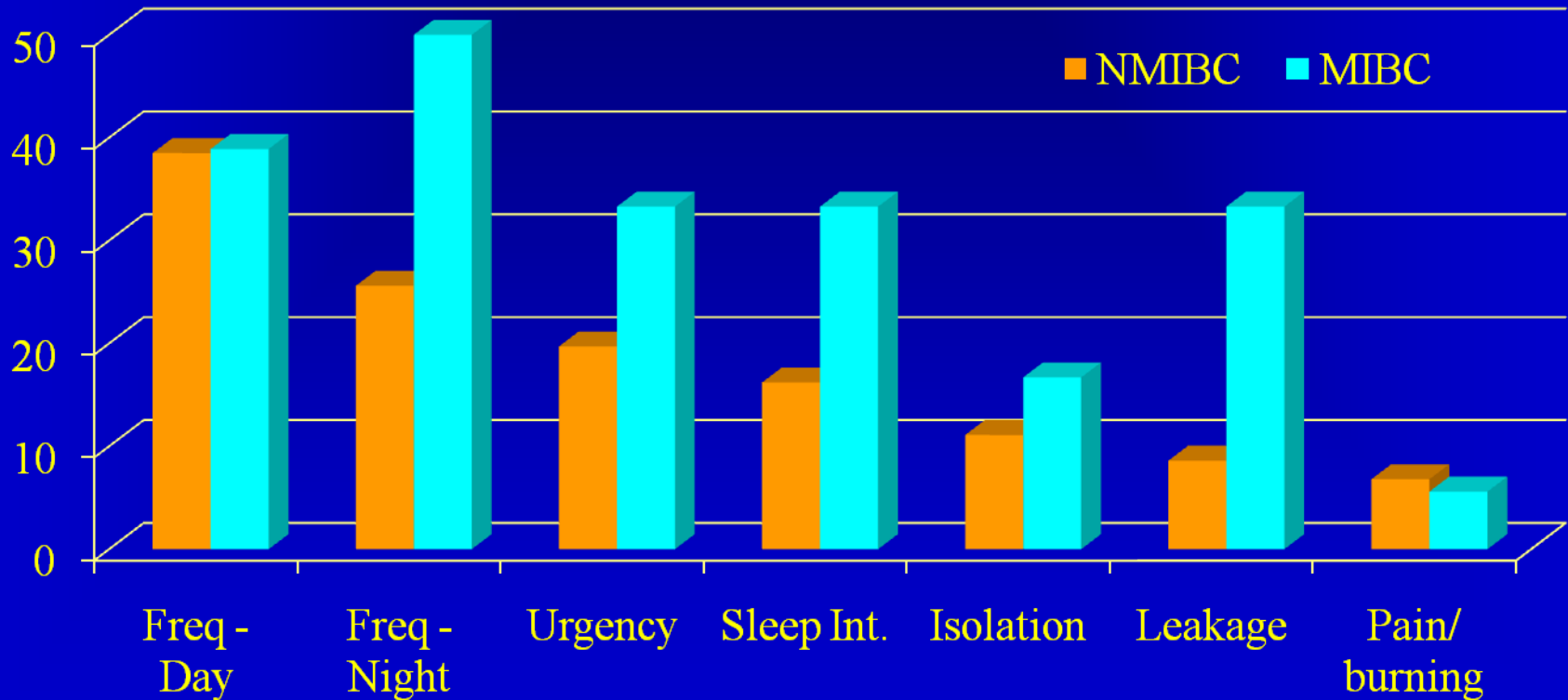
⁴Todenhofer, Curr Opin Urol 2013;23. Courtesy, Dr. Angela Smith

Continent Cutaneous Diversion

- Early complication rate <20%
 - ureteral leakage
 - pouch necrosis / perforation
 - ureteral stricture
 - pyelonephritis
- Late complication rate 28%
 - stomal stenosis 4-36%
 - stone development 5-10%
 - ureteral stricture 2.4 – 5%
 - higher in radiated pts (11-42%)
- Early reoperation rate ~2.5%
- Late reoperation rate 15%
- Incontinence
 - 1 year day / nighttime
 - 85 – 98%

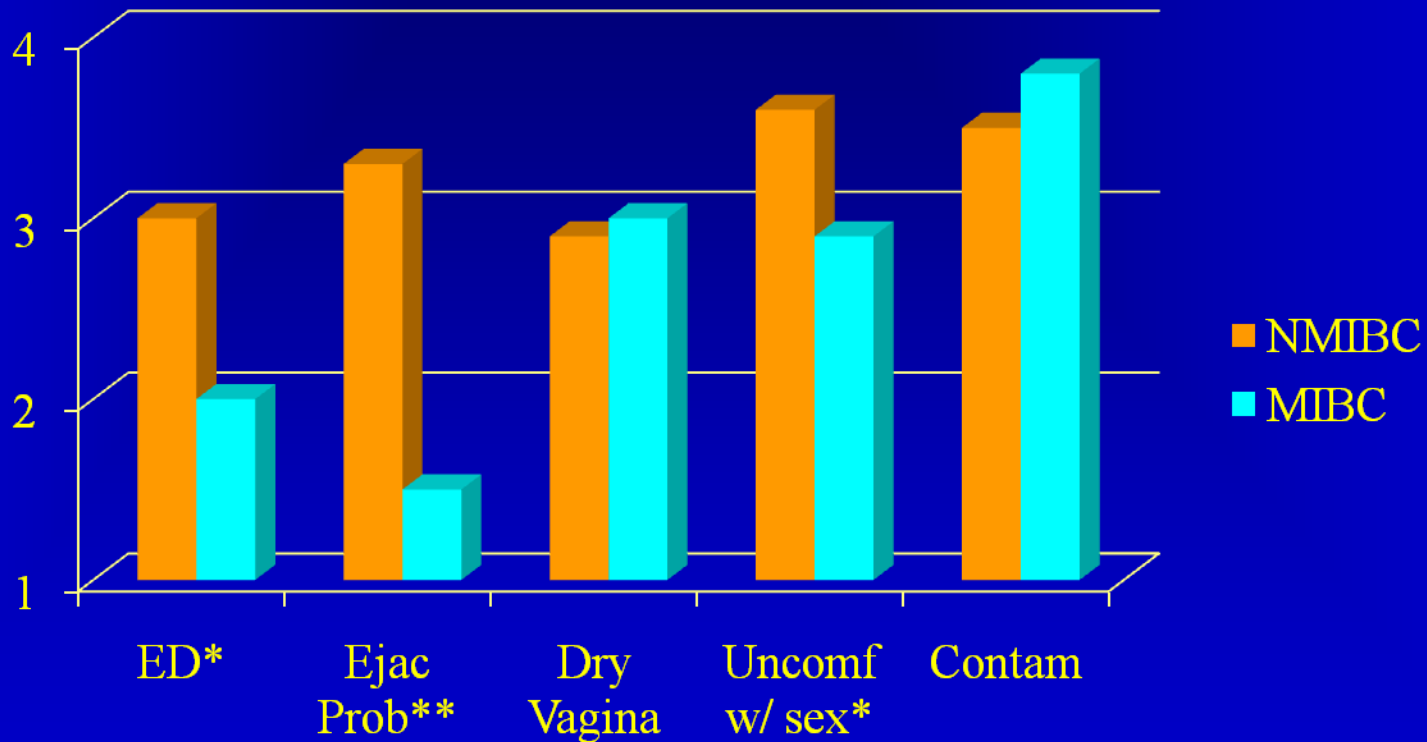
Urinary Symptoms

Percent of respondents reporting “Quite a bit/Very much”



Sexual Symptoms

Better Fx



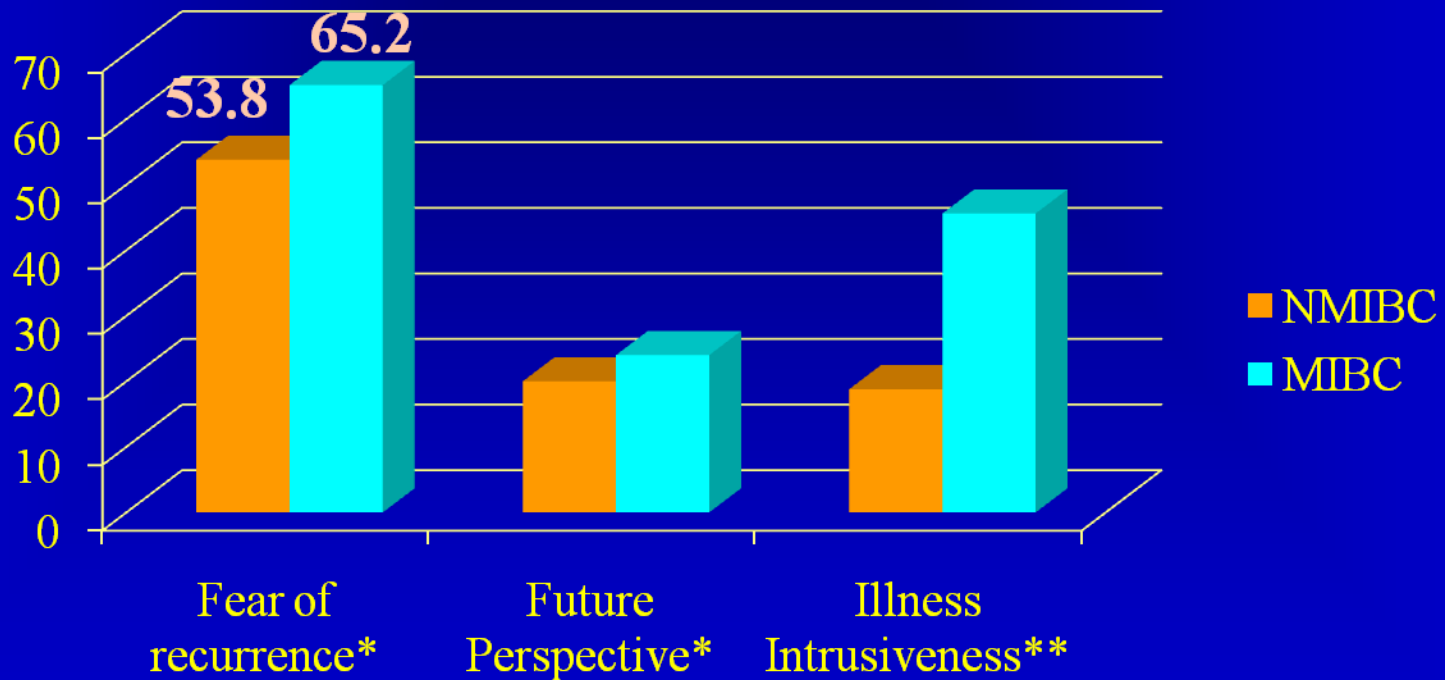
van der Aa et al, 2009 – 23% concerned about contaminating partner

* $p < .05$, ** $p < .01$

Slide, courtesy David Latini

Psychological Distress

More distress/life disruption



* $p < .05$, ** $p < .01$

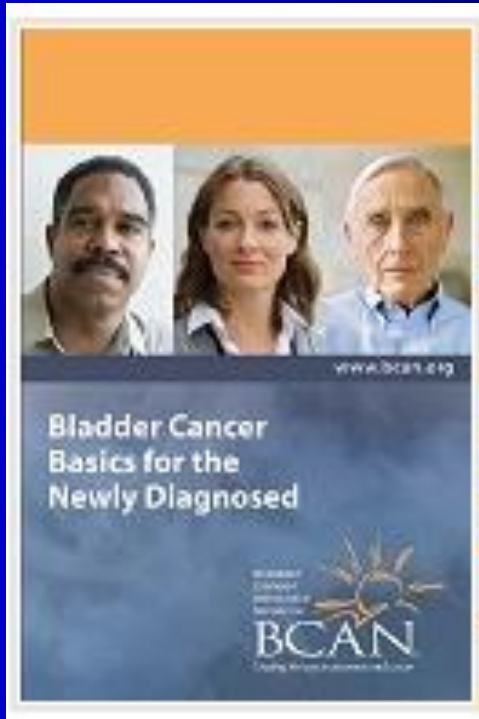
Slide, courtesy David Latini

Patient Selection

Considerations	Conduit	Continent Cutaneous	Orthotopic Diversion
Cognition	Good	High / Motivated	High / Motivated
Continence before surgery	n/a	n/a	Excellent
Native bowel function	n/a	≥ Very Good	≥ Very Good
Tumor at bladder neck or urethra	n/a	n/a	Suboptimal Candidate
Renal function		Creatinine > 2.0 mg/dl	Creatinine > 2.0 mg/dl
Manual dexterity	Good	Excellent	Good
Able to catheterize	n/a	Yes	Yes
Limited ability to care for oneself	Yes	No	No

Special considerations: elderly, locally advanced / node + / prior radiation

BCAN : Resources



Bladder Cancer Handbook
for Newly Diagnosed

The Bladder Cancer Advocacy Network presents...

Tips From Patients, For Patients: Ileal Conduit

After radical cystectomy to remove the bladder, the surgeon creates a new way for urine to leave the body. This new system is called a urinary diversion. An ileal conduit is the easiest and most common urinary diversion performed by urologists. The surgeon creates a small opening in the abdomen called a stoma, or mouth. The surgeon then takes a short segment of the small intestine (that has been removed from the rest of the intestine) and connects one end to the stoma. The ureters, which normally carry urine from the kidneys to the bladder, are attached to the other end of the segment of intestine.

Cystoscopy
TURBT
BCG

Patient Tips:

Radical Cystectomy
Ileal Conduit
Neobladder

Decision Making: Online Community

www.Inspire.com

The screenshot shows the Inspire.com website interface. At the top left is the Inspire logo with the tagline "together we're better". To the right is a user profile section with a silhouette icon, the text "You", and links for "Sign up" and "Log in". Below this is a navigation bar with buttons for "Home", "Search", "Groups", "Members", and "About". A search bar contains the text "bladder cancer" and a "Find it" button. The main content area is titled "Search results for *bladder cancer*". Below the title is a search bar with "bladder cancer" and a "Find it" button, with a note: "For exact matches, put your search in quotes, ex. 'heart disease'". The first search result is titled "Vietnam Veterans with Bladder Cancer" by user "jfbruce", posted on March 1, 2013. It is a discussion in the "Bladder Cancer Advocacy Network" group with 336 replies. The text of the discussion begins: "Most all VA Claims for Bladder cancer are tied to the veterans exposure to Agent Orange. If you filed a claim you have been denied because it is not on the Agent Orange 'presumptive list'. When the military ...". To the right of the search results is a "Groups" section listing several groups: "Bladder Cancer Advocacy Network" (with a sun icon), "Bladder Diseases" (with the Inspire logo), "Lung Cancer Survivors" (with a sun icon), and "Ostomy" (with a bird icon). Each group listing includes the group name, the Inspire logo, and a "Sign up" button.

Inspire together we're better™

You [Sign up](#) [Log in](#)

Home Search **Groups** Members About

bladder cancer [Find it](#)

Search results for *bladder cancer*

Search again: [Find it](#)

For exact matches, put your search in quotes, ex. "heart disease"

Vietnam Veterans with Bladder Cancer

By [jfbruce](#) · Posted March 1, 2013

Discussion in [Bladder Cancer Advocacy Network](#) · 336 replies





Most all VA Claims for Bladder cancer are tied to the veterans exposure to Agent Orange. If you filed a claim you have been denied because it is not on the Agent Orange "presumptive list". When the military ...

bladder cancer

By [watch](#) · Posted November 1, 2013

Discussion in [Bladder Cancer Advocacy Network](#) · 15 replies

Groups

-  **Bladder Cancer Advocacy Network**
Bladder Cancer Advocacy Network
[Sign up](#)
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...

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American Cancer Society THE OFFICIAL SPONSOR OF BIRTHDAYS®

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Reliable cancer treatment information to help you get well.

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FREE TAKE ONE HOME

Your Complete Source for Knowledge & Support

WINTER 2010 NOV. 9, 2010 \$2

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