

Jonathan Rosenfeld's Nursing Homes Abuse Blog

Untreated Urinary Tract Infections In Nursing Home Patients May Result In Urosepsis

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One of the most memorable cases I worked on involved a young man who was in a nursing home following a severe injuries he sustained in a construction accident. Due to the nature of the man's injuries, a catheter was used to drain urine from his bladder. Despite doctors orders to change the catheter every 30 days, months went by without any catheter change. In fact, six months went by without a catheter change.

Finally, after six months without a catheter change, a nursing home employee recognized the obvious problems: cloudy / brownish urine and testicles extremely swollen due to infection. The situation initially resulted in a hospitalization where the man's testicles were surgically removed. Unfortunately, the staff's intervention was too little, too late. Within a week of arriving at the hospital, the man died from a condition known as urosepsis.

Urinary Tract Infections

Urinary Tract Infections (UTIs) seem like a minor problem, especially in nursing homes, considering the range of common diseases, infections, and illnesses. However, UTIs can prove very dangerous, especially when nursing home facilities fail to prevent UTIs in the first place or fail to provide proper and prompt treatment.

Jonathan Rosenfeld represents victims of nursing home abuse and neglect throughout the country. For more information please visit Nursing Homes Abuse Blog (www.nursinghomesabuseblog.com), Bed Sore FAQ (www.bedsorefaq.com) or call Jonathan directly at (888) 424-5757.

Urosepsis

[Urosepsis](#) is basically a severe urinary-tract infection. A [UTI](#) occurs when bacteria travels up the urethra (the opening in the body through which urine passes) into the bladder. UITs account for over [30%](#) of infections reported by acute care hospitals and are the most common type of healthcare-associated infection.

The bacteria can stay contained in the bladder ([cystitis](#)), travel to the kidneys ([pyelonephritis](#)), or even spread into the bloodstream (urosepsis). With urosepsis, you can suffer a dangerous drop in blood pressure, which can deprive your organs of oxygen. It can even prove fatal if you do not receive prompt antibiotic therapy, with an associated problem of increased use of antibiotics and [multidrug-resistant](#) bacteria.

[Symptoms](#) of UTIs include:

- Strong, persistent urge to urinate
- Burning sensation when urinating
- Passing frequent, small amounts of urine
- Blood in urine
- Cloudy, strong-smelling urine
- Bacteria in urine
- More severe UTIs can also cause the following symptoms:
 - Flank (upper back and side) pain
 - Lower abdomen pain
 - Fever
 - Shaking and chills
 - Nausea

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- Vomiting
- Frequent, painful urination
- While most urinary infections are mild, they can progress to more serious infections. [Risk factors](#) for urosepsis include:
 - Older age
 - Being female
 - Having an indwelling urinary catheter (Foley catheter)
 - Suffering from kidney stones
 - Having impaired immunity

Urosepsis and catheter usage

UTIs are a common problem for the elderly because they are more likely to suffer from common risk factors. There is a marked [increase](#) in the prevalence of UTIs in both women and men after age 65. Females are more likely to suffer from UTIs as they age because of physiology and hormone changes.

First, women have a shorter urethra, making it easier for bacteria to travel into the bladder. Second, as women age because the tissues of the vagina, urethra, and base of the bladder become thinner and more fragile. In addition, decreased estrogen levels causes pH changes in the vagina, allowing E.coli colonization, which causes about 80% of all UTIs. [Men](#), on the other hand, suffer more UTIs when older because of prostatic disease.

[Risk factors](#) include:

- Atrophic urethritis
- Atrophic vaginal mucosa (atrophic vaginitis)
- Benign prostatic hyperplasia
- Prostate cancer

- [Catheter use](#)
- Chronic bacterial prostatitis
- Genitourinary abnormalities
- Genitourinary calculi
- Renal and perinephric abscess formation
- Urinary diversion procedures
- Urethral strictures

Improperly maintained catheters are one frequent cause of UTIs. Usually, the longer a catheter is in place, the more likely an infection will develop. Up to 35% of patients requiring a urinary catheter for seven days or more will develop a CAUTI. About 50,000 long-term care residents have catheters at any given time according to the CDC's 2009 [report](#) on catheter-associated urinary tract infections (CAUTIs).

It is recommended that catheters are used only in appropriate situations and are left in place only as long as necessary. (See "[Never Event #4: Catheter Associated Urinary Tract Infections](#) and [Nursing Homes Abuse Blog: Catheter Usage](#))

There are steps that nursing homes can take in order to [reduce](#) the risk of CAUTIs (proper use, proper technique, and proper situations). Proper use of urinary catheters is important, including:

- Not using urinary catheters to manage incontinence
- Using urinary catheters only in patients as necessary
- Remove the catheter as soon as possible
- Not using urinary catheters as a means of obtaining urine for culture or other diagnostic tests when the resident can voluntarily void

- Instead, urinary catheters should only be used when necessary. Situations where indwelling urethral catheters are [appropriate](#) include:
- When resident has a bladder obstruction
- Critically ill patient cannot voluntarily void urine for tests or to measure urine output
- Patients undergoing urologic surgery
- To help genital or anal wounds heal
- If resident requires prolonged immobilization
- To improve comfort for end of life care
- [Proper technique](#) for urinary catheter insertion can also help reduce the risk of CAUTIs including:
 - Washing hands before and after inserting or touching the catheter or catheter area
 - Ensuring that only properly trained professionals insert/maintain the catheter
 - Only touch the catheter when necessary
 - Use sterile equipment
 - Ensuring that healthcare personnel who take care of catheters receive periodic in-service-training

If used properly (proper situation and proper technique), indwelling urinary catheters can be a helpful tool when caring for nursing home residents. However, when proper technique, use, and care of catheters are not achieved, serious bacterial infections can occur.

It is frightening how quickly a simple UTI can turn into a dangerous bacteria infection (urosepsis) that could prove fatal. Bloodstream infections in the elderly are associated with a higher mortality rate compared to bloodstream infections

in younger age groups. Therefore, prevention of dangerous UTIs and proper treatment is important.

If you or a family member has an indwelling catheter, it is important to ask questions about why it is necessary, for how long it is necessary, and proper and hygienic care.

Thanks to Heather Keil, J.D. for her assistance with this Nursing Homes Abuse Blog Entry

Sources:

[Nursing Homes Abuse Blog: Never Event #4: Catheter Associated Urinary Tract Infections](#)

[Nursing Homes Abuse Blog: Catheter Usage](#)

[CDC: Guideline for Prevention of Catheter-associated Urinary Tract Infections, 2009](#)

[The Merck Manual of Geriatrics: Urinary Tract Infections](#)

[Gerontological Nursing: Urinary Tract Infection - Guidelines to assessment, treatment, and prevention in the older adult](#)

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[Journal of the National Medical Association: Problems in diagnosing infections in the elderly](#)

[The Journal of Urology: Chronic indwelling catheter replacement before antimicrobial therapy for symptomatic urinary tract infection](#)

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[Emerging Infectious Disease Journal: Engineering out the risk for infection with urinary catheters](#)

[Journal of the American Medical Directors Association: Complications of chronic indwelling urinary catheters](#)

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