
FROM THE DESKS OF
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To Our Patients,

Hopefully you feel some sense of calm now that the election is over. Regardless of where you fall on the political spectrum, it is one less piece of our lives that is in limbo. Several years ago, I was looking for books to help me better understand the divisions in our country and came across a book that made quite an impression on me. This is by no means a homework assignment, I just know that a few of you may be interested in reading *The Righteous Mind: Why Good People are Divided by Politics and Religion*, by Jonathan Haidt. I'm sure other suggestions from our patient community will follow and I'm happy to share.

Like this funny story, I want to share from one of our patients who was reminiscing after reading the newsletter piece about falls.

When I was a child in grade school, I was always tripping and falling down a lot. Spending lots of time outside in the summer, roller skating forward and backward down the sidewalk in front of our house, riding my bicycle, playing softball on our team, running up and down the stairs in our house, etc. I was just kind of a clumsy active kid. :) Whenever my Dad would see me trip and fall, he would always ask me, "Walk much?" When my Dad would say that to me, I would always tell him, "I just have extra-long legs, so they get tangled up Dad!" I don't know where I came up with that.

Of note, one Halloween photo came in as I was sending the last newsletter and it is quite special. It must be included in this week's edition.

COVID Updates

1. Do NOT let yourself or those around you get complacent. Four hospitals in Denver have stopped elective surgeries because they have no bed available. Hospitals are using conference rooms and halls to place patients and post-operative areas to create additional



ICU space. Last I heard there were NO ICU beds in Denver and we are currently trying to make more.

2. I am not saying this to scare you. I just keep seeing people without masks and hearing people say that this is just like the flu. It is not.
3. We keep getting calls from patient about wanting to travel for the holidays or to see family. We know you miss your families. We do too. Dave and I will NOT be visiting with our families for the holidays and I am giving up my annual tradition of “Friendsgiving”. We feel that, for us, this is too dangerous. Yes, our patients have been surviving, but we don’t want you to end up with hearing loss, loss of vision, shortness of breath, ongoing fatigue, chest pain, heart problems, weakness from strokes, etc. or the guilt of having given this to someone that you love. There is no way to safely eat a meal with others. You have to take your mask off. We do respect that this is a very individualized decision. We just ask that you think it through very carefully. This is just one year of many that you have to share with your loved ones.
4. Remember we only give you this advice because we care about you and love you.



This week’s topic: Urinary Tract Infections

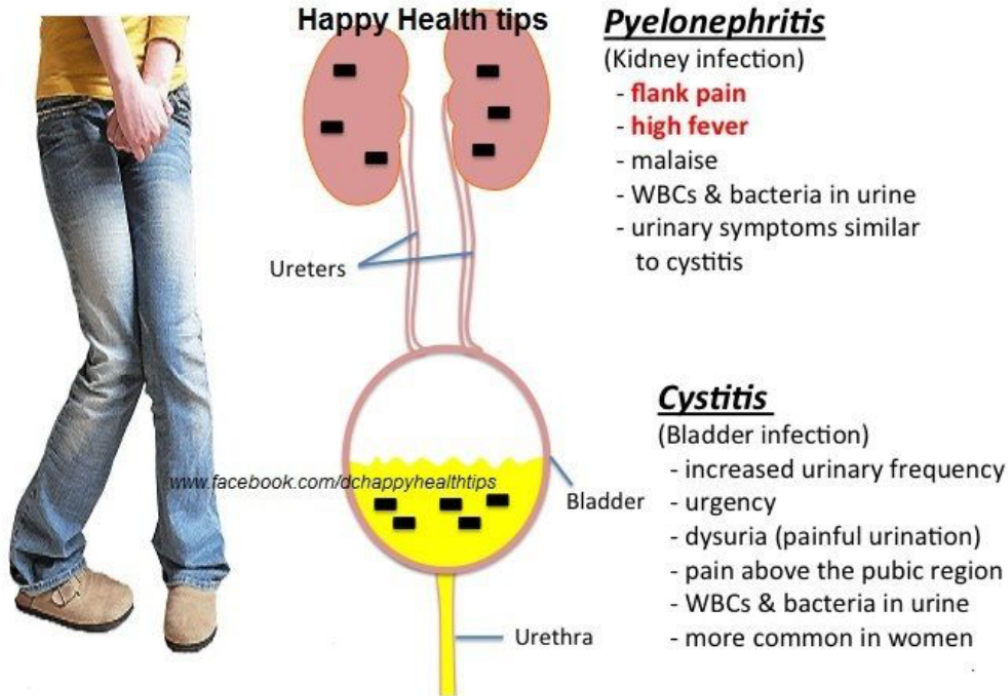
Mama said to drink cranberry juice...

There are so many myths about urinary tract infections, commonly abbreviated UTIs. Myth: To prevent UTIs clean your vagina with soap and water. Myth: If your urine is cloudy or odorous, you have a UTI. Myth: Only women can get UTIs. Myth: You have to be sexually active to get a UTI. Myth: Taking probiotics can protect you from a UTI. Myth: For women, wiping from front to back is better than back to front. Myth: Drinking cranberry juice or extract can prevent or treat a UTI. Sorry mama, it is just a myth. Cranberry juice itself doesn’t work. Even though cranberries have proanthocyanidins which inhibit bacteria from sticking to the wall of the bladder, some fascinating discoveries in the lab don’t pan out in the real world. It is drinking fluids that helps not the cranberry juice itself. This list of myths was compiled by Joanna Langner at Stanford and given all the myths around UTIs, I thought it was most important to discuss.

Physicians use the term urinary tract infection to describe an infection of the bladder and urethra, which is the tube that allows urine to flow from the bladder to the world outside of your body. If the infection spreads to the kidneys, it is called pyelonephritis. Symptoms include increased urinary frequency, urgency to urinate, burning with urination, blood in the

urine, and pain in the mid lower abdomen above the pubic bone. Sometimes elderly people only experience increased confusion. If the infection spreads to the kidneys, patients experience upper back and side pain, with fever, shaking chills and sometimes even nausea and vomiting.

Symptoms of Urinary Tract Infection(UTI)



Most UTIs are caused by bacteria that can be found in the gastrointestinal tract, like Escherichia coli (E. coli). Sexually transmitted infections can also cause infection of the urethra in both men and women.

If you have talked with your friends and family, you may have noticed that some people are more likely to get urinary tract infections than others. Here are some risk factors that make people more likely to get UTIs:

- **Female Anatomy** – Women have shorter urethras than men, making it easier for bacteria to make their way into the bladder. Even among women, the length, width and angle of the urethra, puts some women at higher risk for infection than others.
- **Sexual Activity** – The reason that sex causes UTIs is because the physical act causes bacteria from the genitals and anus to be in direct contact with the urethra. Having a new sex partner and being exposed to new bacteria also increases your risk.
- **Birth Control** – Diaphragms and spermicidal agents can alter anatomy and hold bacteria against the urethra, increasing the risk of infection.
- **Menopause** – With decreased estrogen, the tissue around the urethra atrophies and the urethra widens, making it easier for bacteria to climb into the bladder. The absence of

estrogen also changes the pH of the vagina, making it harder to ward off bacteria that cause infection.

- Kidney Stones – Can trap urine, making the urine becomes stagnant, and thus increasing the risk of UTIs.
- Enlarged Prostate - Can trap urine, making the urine becomes stagnant, and thus increasing the risk of UTIs.
- Prolapsed Bladder - Can trap urine in the bladder and increase the risk of UTIs.
- Damaged nerves, bladder weakness, or surgically reconstructed bladder – These can all cause urinary retention that increases the risk of UTIs and may require patients to put a tube in their bladders to drain them several times a day with a catheter.
- Scarring in the Urethra – Prior gonococcal infections from gonorrhea, can cause narrowing (strictures) in men’s urethras, that can trap urine in the bladder and increase the risk of UTIs.
- Catheter Use – If a catheter is not inserted using sterile technique, bacteria from the skin can be introduced into the bladder. If the catheter is left in, it provides an open path for the bacteria to enter the bladder and bacteria are able to stick to and climb the catheter material very easily.
- Suppressed Immune System – Diseases that impair the immune system, like diabetes or rheumatoid arthritis or even advanced age, prevents the body from mounting an early defense against the first bacterial invaders, resulting in infections.
- Recent Urinary Procedure - If procedural equipment is not inserted using sterile technique, bacteria from the skin can be introduced into the bladder. But also, tiny tears in the lining of the urinary tracts from the equipment can also increase the risk of infection.
- Pregnancy – Pregnancy itself relaxes the smooth muscles in the urethra and ureters (the tubes connecting the bladder and kidneys), widening these passageways and allowing bacteria to travel more easily along these widened super highways.

Diagnostically, if you seldomly get urinary tract infections and you have the classic symptoms, then your doctor may be able to prescribe antibiotics by just hearing your story over the phone. However, if you get recurrent infections, or are feeling sick, then you should see your doctor. Your doctor will check your vital signs, feel your abdomen, tap on your kidneys and if you are male, check your prostate and epididymis for infection. Then your urine should be tested. Doctors often start with an office dipstick, which will show if your urine has white blood cells, which could indicate infection, and nitrites which are produced by bacteria. If those are positive, your doctor may treat you with antibiotics or send your urine for microscopy and culture. Microscopy will provide more specific and accurate information about your urine and the culture will provide information about what bacteria is in your urine, how much bacteria is there and which antibiotics would be best to treat the infection.

Treatment usually entails a short course of oral antibiotics. Due to increasing antibiotic resistance, on rare occasion people need to go to the hospital for IV antibiotics to treat a simple urinary tract infection because the bacteria is resistant to all oral antibiotics. If the kidneys are

involved, patients often need a brief course of IV antibiotics in the hospital prior to transitioning to oral antibiotics.

Prevention of course is always best. I am presenting a range of preventative options that you can discuss with your doctor.

- Drink plenty of water, in the range of 2-3 liters per day... This allows you to flush out bacteria before an infection can take hold.
- Decrease alcohol and caffeine consumption as they can irritate the bladder.
- Urinate when you have to. Don't hold urine in your bladder for long periods of time.
- Empty your bladder as much as possible when urinating. Take your time. Don't rush.
- Clean the perineal area (groin) once or twice daily with warm water, a mild non-perfume soap and washcloth.
- Remove garments immediately if they become soiled. Clean the perineal area (groin) twice daily with warm soapy water and washcloth. For individuals who are unable to tell you if they have urinated or had a bowel movement, check incontinence briefs every 2 hours.
- Women:
 - Urinate after intercourse and after a bowel movement to rinse bacteria from the urethra
 - Avoid spermicidal jellies and diaphragms (though I'm not sure women use diaphragms anymore!)
 - Estrogen cream to the urethra
 - Consider pessaries for prolapsed bladders
 - Avoid douches, sprays, scented powders and other irritants to the vaginal area
- Men:
 - Urinate after anal intercourse to rinse bacteria from the urethra.
 - If you are uncircumcised, clear the foreskin daily to avoid the bacteria getting trapped near the urethra.
 - Treat your enlarged prostate with medication or a surgical procedure as recommended by your urologist
- Take extra care if you self-catheterize, and if you have a catheter be sure to have it changed monthly and clean the perineal area (groin) twice daily with warm soapy water and wash cloth.
- Treat your underlying disease, such as diabetes.
- Antimicrobial prophylaxis
 - Some women need to take antibiotics with intercourse to prevent UTIs
 - Some women need to take low dose antibiotics continuously to prevent UTIs
 - Most people get prophylactic antibiotics around the time of urinary procedures
- Currently under investigation: Whole cell vaccines and oral immunostimulants derived from heat killed E. coli are under investigation to reduce the risk of UTIs

Now, let's delve a bit deeper into the myths.

1. Myth: To prevent UTIs clean your vagina with soap and water. (That is if you have one.)

- a. Cleanliness is very important because the groin area is full of bacteria as described above, but you do not have to apply soap up into the vagina. The vagina itself is able to keep itself clean.
2. Myth: If your urine is cloudy or odorous, you have a UTI.
 - a. The odor of urine is stronger with dehydration and can change with foods. It is not a sign of infection. Women often have cloudy urine and most people with catheters have cloudy urine, without having an infection.
3. Myth: Only women can get UTIs.
 - a. Sorry gentleman, you are not immune.
4. Myth: You have to be sexually active to get a UTI.
 - a. Nuns and priests get UTIs also and others who live a celibate life.
5. Myth: Taking probiotics can protect you from a UTI.
 - a. So far, there isn't any consistent data to support this conclusion. Some have tried D-mannose, vitamin C, and/or probiotics to prevent UTIs. I continue to be frustrated by the lack of data when it comes to supplements for many diseases. This may be because the contents within supplements is so highly variable.
6. Myth: For women, wiping from front to back is better than back to front.
 - a. There was also a study in women to see if the direction of wiping, front to back or back to front, made a difference. While many still advise to wipe from front to back, the study did not note any differences in the frequency of UTIs. I believe the key is to wipe well, making sure you are dry and clean.
7. Myth: Drinking cranberry juice or extract can prevent or treat a UTI.
 - a. I know that some people swear by cranberry juice, while the studies do not show any evidence that it works. My suspicion is that cranberry juice works based on liquid volume, just like drinking a lot of water works, rather than the properties of the cranberry juice itself. While the cranberries juice and extract do have proanthocyanidins which inhibit bacteria from sticking to the wall of the bladder they don't exist in high enough concentrations in the bladder to be effective. Same goes for blueberries.

Questions for Dave and I

- 1. Someone asked: Do you have or recommend a first aid self help guide? I used to use The Barefoot Doctor overseas, but it now seems dated. Any suggestions?**

We didn't have an answer... The only responses that I got back was for Where There is No Doctor, by David Werner which is used by the Peace Corp and The Survival Medicine Handbook by Alton. I have not had a chance yet to read either.

Stay safe. We will keep you updated and do our best to keep you healthy and safe. As always, feel free to send topics and questions, etc.

Best,

Jeannette and Dave

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