

CYSTITIS: ACUTE OR CHRONIC INFECTION OF THE BLADDER

Bladder Infections

Consider These:

- Women are more susceptible to urinary tract infections arising from organism traveling from the perineal area to the vagina and urethra. Because women have a shorter urethra than men, there is greater opportunity for bacteria to reach the bladder and establish a colony.
- Bladder infections tend to recur if predisposing factors are not identified and resolved.
- There is growing concern that antibiotic use may contribute to recurring bladder infections.
- Recurring bladder infections signify floral imbalances. Supplementing with *Lactobacilli rhamnosus* and *reuteri (fermentum)*⁽⁴⁾ can help repopulate the vagina and urinary tract with beneficial bacteria and prevent reinfection.
- Pure cranberry juice and Uva Ursi are helpful in preventing bladder infections by making it difficult for bacteria to become established on the walls of the bladder.
- Always be sure to follow up with your physician for a urinalysis to make sure the infection has been eradicated. Bacteria can persist without symptoms and still cause harm.

Approximately 85% of bladder infections are associated with a bacteria normally found in the digestive tract, E. coli. The bladder is suppose to be relatively free of bacteria. Urine is sterile and antiseptic, flushing bacteria out of the bladder and urethra. When bacteria does enter the bladder, it will attempt to penetrate the mucosal lining in the bladder. Once through, E. coli will produce little "roots" called fimbriae to anchor themselves to the bladder wall and each other forming a mat and the beginning of a colony. This tendency is what make recurring bladder infections so difficult to eradicate. Once below the mucosa the bacteria is relatively protected from antibiotic therapy and from the body's natural defenses in animal studies and the same may be true for humans.

The presence and activity of the bacteria causes tissue damage, inflammation and swelling. When urine comes into contact with the irritated bladder wall it causes pain and urgency to urinate as capacity is reduced due to swelling and inflammation of the bladder epithelial cells.

Many factors can increase the risk of bladder infection occurring, and in the absence of addressing the root of the problem, infection is likely to reoccur.

- Incontinence with incomplete emptying of the bladder. Urine retention or obstruction of flow.
- Pregnancy, Menopause, Sexual activity.
- Depressed immunity (Diabetes, HIV, autoimmune disease, etc).
- Direct contamination through poor hygiene or fecal incontinence.
- Poor diet. Flora imbalances.
- Structural issues, scar tissue.
- Kidney stones.



Symptoms include a strong urge to urinate, often with scanty flow, accompanied by burning and/or pain. The urine may dark, cloudy, tinged with blood, contain puss

and/or have a strong odor. Lower back pain may be present and a fever could develop, these symptoms may signal kidney infection and you should visit your doctor.

The best treatment is prevention, these may also be implemented during active infection.

- Drink plenty of water to keep the kidneys and bladder flushed. Eliminate bladder irritants such as coffee, black tea, chocolate and alcohol.
- Empty the bladder when you feel the urge. Waiting too long to urinate can stretch the bladder, weakening the muscles, increasing the risk of urine retention; a risk factor for UTIs.
- Wear cotton underwear. Avoid use of tampons. Discontinue use of hormonal contraception, diaphragms, spermicides and use of chemicals and soaps in the vaginal/urinary area.
- Urinate before and after intercourse. Women who tend to have recurring UTIs associated with intercourse could try a position which causes less friction on the urethra during intercourse.
- Take steps to promote the growth of Lactobacilli in the digestive tract and vagina which helps to reduce proliferation of other bacterial species.

In a bladder infection, also called cystitis or urinary tract infection (UTI), the bladder wall and urethra are inflamed, red, swollen and sometimes ulcerated due to bacterial invasion.

Herbal Tea for Cystitis

1 part each of nettle, dandelion greens, pipsissewa. 2 parts each of corn silk and uva ursi.

Mix the dried herbs together in an appropriately sized glass jar with a lid. Use 4-6 tsp of the mixture per quart of water. Boil water first, then pour over herbs, steep for 15-25 minutes and strain. Drink 1/4 cup every half hour throughout the day. (4)

Tincture for Cystitis

Corn Silk: 2 parts

Uva-ursi: 2 parts

Buchu: 1 part

5 ml of tincture 3x/day. If available, consume an infusion made from fresh yarrow frequently throughout the day.(3)

Practical Tip: Tinctures are herbal extracts which you can find at your local health food store, herb shop or online. If you cannot find the above mix, you can always purchase 1 ounce bottles and combine them in a larger container. This mix can also be used as prevention for recurring bladder infections 1-2x/day.

Cell Salts (5)

(Cell salts are somewhat similar to homeopathic remedies.)

For help with the constant urge to urinate when standing or walking try the cell salt: *Mag Phos*.

For help with gravel and deposits in the urine try the cell salt: *Nat Sulfa*.

For More Information:

- (1) Encyclopedia of Natural Medicine. By Michael Murray, ND. Course materials
- (2) Medical Herbalism. By David Hoffmann pg 379-381
- (3) Herbal Healing for Women. By Rosemary Gladstar.pg 190
- (4) Women's Encyclopedia of Natural Medicine. By Tori Hudson, ND.pg 68
- (5) ACHS. Nat 308.Mod 5. Cystitis.
- (6) WUSTL. Biofilms

In an Active Infection:

- Drink 1/2 your body weight in ounces of water each day or more. Flush the kidneys.
- Avoid sugar and simple carbohydrates, pure fruit juices, coffee, soda, alcohol and food allergens. Sugar depresses the immune system and feeds the infection.
- 16 ounces of unsweetened cranberry juice per day.
- Use Uva ursi and other herbs to help kill bacteria, soothe inflammation, tone the urinary tract and prevent recurrence.
- Try a short fast on watermelon juice or a mixture of cucumber, carrot, beet, parsley and garlic juice.

Supplementation During Infection: (Use lesser amounts for 1-2 months following infection to help prevent recurrence.)

- Vitamin C—500 mg every 2 hours. (Sensitive individuals may need to use calcium ascorbate to obtain vitamin C if other forms irritate.)
- Bioflavonoids—1000 mg/day
- Beta-Carotene—200,000 IU/day
- Zinc: 30 mg/day
- Probiotics (Oral & Vaginal)
- Vitamin E—400 to 600 IU/day
- D-Mannose Powder: 1/2 to 1 tsp. one to three times per day.

Herbal Allies:

- **Cranberry** is a well-known remedy for bladder infections, and science has confirmed numerous benefits against UTIs. The proanthocyanidins found in cranberries, interfere with E. coli's ability to attach to the walls of the urethra and bladder. D-Mannose, a naturally occurring simple sugar found in cranberries is thought to play a role in promoting healthy urinary mucosa. It also appears to be able to inhibit bacteria's ability to adhere to the bladder epithelium thus further reducing the risk of infection. Choose pure unsweetened juice or a high quality extract.
- **Uva ursi** (*Arctostaphylos uva-ursi*) has been used historically for bladder infections, urinary ulceration and gravel in the bladder and kidneys. Research is validating it's use and has shown it's use can reduce the risk of reoccurrence of cystitis and is particularly effective at killing E. coli. Components within the plant reduce bacteria numbers, tone and heal urinary tissues and increase urine flow helping to flush bacteria away. 1 tsp of tincture used three times per day can be used. Excessive amounts may result in toxicity symptoms. Not for use during pregnancy.
- **Buchu** (*Barosma betulina*) is a urinary tonic useful in strengthening the lining of the bladder. Especially helpful for those with recurring UTIs. Those with kidney disease may want to avoid Buchu due to the concern that some of the essential oils found within the plant may cause kidney irritation.
- **Oregon Grape Root** (*Berberis aquifolium*) contains **Berberine**, an effective antimicrobial against E. coli, Klebsiella sp. Staphylococcus, & Pseudomonas sp. Like cranberry, it also prevents the bacteria from adhering to the bladder epithelial cells.
- **Corn silk** (*Zea mays*) is a soothing and cooling diuretic, specific for the urinary system. To make an infusion: 1 cup of boiled water over 2 to 4 tsp of dried herb, steep for 10 to 15 min. strain and consume 3x/day.
- **Marshmallow root** (*Althea officinalis*) is a demulcent herb, wonderful for soothing an irritated and inflamed urinary tract and can be added to any herbal blend.
- **Other urinary tract friendly herbs for brewing infusions:** Burdock (*Arctium lappa*), Cleavers (*Galium aparine*), Dandelion (*Taraxacum officinale*), Horsetail (*Equisetum arvense*), Nettle (*Urtica dioica*), parsley (*Petroselinum crispum*), Pipsissewa (*Chimaphila umbellata*).

When to see your Doctor:

- If you suspect a urinary tract infection, have it diagnosed even if you plan on treating it holistically. Follow up with your doctor in 14 days for a urinalysis.
- Call your doctor if there are any significant changes for the worse; development of a fever, lower back pain, or an increase in pain during urination.
- While most urinary tract infections respond well to holistic measures, there are times when antibiotic use is appropriate and may be necessary. Bladder infections which ascend to the kidneys may damage the kidney tissue.
- Men who experience UTIs should visit their physician for a prostate exam.

If antibiotics are used to treat a bladder infection, supplement with probiotics to help replace beneficial bacteria and B Complex vitamins.

If there is a tendency towards recurring bladder infections or vaginal infections, consider utilizing vaginal probiotic implants 4-5 times a week to establish healthy Lactobacilli colonies.