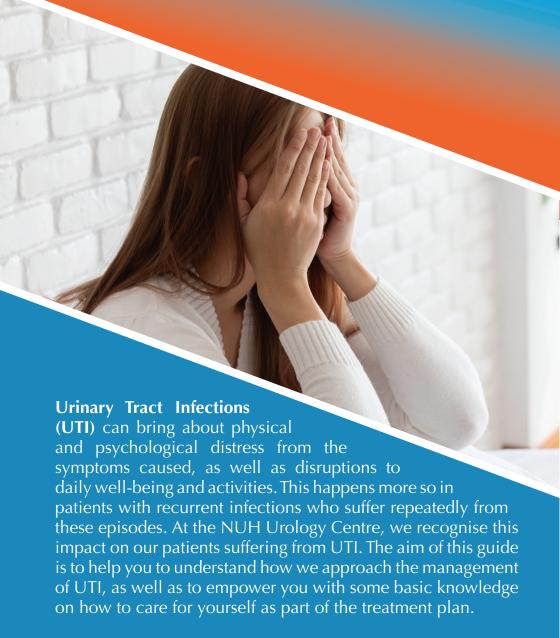




# Your Urinary Tract Infection (UTI) Guide

Working together, U and I



Every patient with UTI is different, and hence the management plan will be tailored for you so that we can do our best to help care for you.

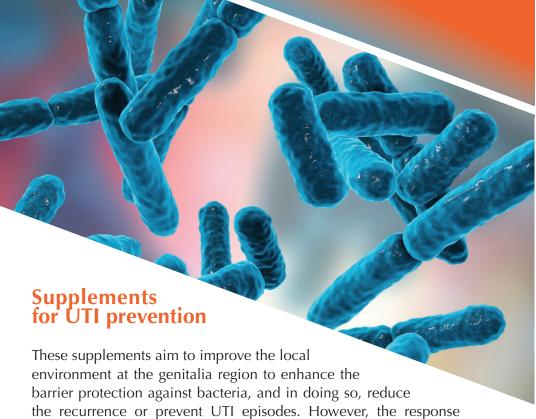
# **Investigations**

During the clinic visit, the doctor will understand more about your UTI episodes through a consult and physical examination. Subsequently, your doctor may require you to undergo some investigations to exclude any undiagnosed urinary causes that may be contributing to your UTI episodes. These investigations can include radiological scans such as X-ray, ultrasound or Computed Tomography (CT) scans, as well as diagnostic investigations such as a scope of the bladder.

### General advice on hygiene and habits

- Ensure good hydration, at least urine output of 2L/day
- Avoid bad habits such as holding your urine for more than 3 hours (on a normal fluid intake)
- Use of clean underwear and towels
- Change sanitary pads or pantyliners regularly if stained (for women)
- Avoid use of strong cleansing products that can cause irritation or abrasions (e.g. disinfectant)
- Avoid constipation
- Urinate before and after sexual intercourse
- Maintain a good and healthy diet with essential minerals and vitamins such as vitamin C

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that every patient has to these supplements is different and hence a discussion with your doctor on what is suitable should be held.

#### **Probiotics**

- There are many different strains of probiotics, with a few strains showing better effects for the urogenital tract
- There are also combinations of probiotics with cranberry extracts available
- Please speak with your doctor to find out more about the available types of probiotics

### Cranberry

- Cranberry has been shown in studies to have an effect on some bacterial strains that commonly cause UTI, in particular E.coli
- However, the results from these studies have to be interpreted carefully and cautiously

• Please speak with your doctor to find out more about the available types of cranberry supplements (e.g. tablets, capsules, in combination with other supplements)



### **Topical** estrogen therapy (for post-menopausal women)

- Topical estrogen therapy in the form of creams or vaginal inserts have been associated with an improvement in the skin and state of the genital tract in post-menopausal women, thereby leading to an improvement in the reduction of UTI episodes
- This therapy is well-tolerated with minimal side effects, and the theoretical risk of leading to breast or gynaecological cancers is low
- This therapy is not suitable for women with a personal history of breast or gynaecological cancers, who have not been evaluated fully for any ongoing breast or gynaecological issues (such as a breast lump that has not been reviewed), or women who have a very strong family history of breast or gynaecological cancers

#### **D-mannose**

- This is a form of simple sugar (glucose) that has been tried in the prevention of UTI episodes as it has an association with reducing UTI episodes
- However this therapy is not suitable in patients who are diabetics or pre-diabetics as this may increase the glucose level in the body

### Agents that help in urinary symptoms such as pain during urination

- Such agents commonly prescribed include painkillers, citravescent sachets, sodium bicarbonate, phenazopyridine etc.
- However they should not be used as a substitute for proper treatment should the infection episode persist or symptoms worsen

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- This has remained the most common form of treatment given by doctors in the primary care and hospitals in the management of bacterial urinary tract infections
- The increasing use of antibiotics for repeated or longer durations however has led to an increased number of infections with bacteria that are becoming more resistant to the routine oral antibiotics available
- As such, some infections now require stronger antibiotics or intravenous antibiotics if oral options are not available
- Your doctor will also discuss with you certain antibiotic regimes depending on your type and frequency of UTI episodes

# **Alternative Therapies**

- At NUH, the use of intravesical instillation of hyaluronic acid as a non-antibacterial option for the treatment and prevention of recurrent urinary tract infections has been ongoing
- This treatment option is well-tolerated with minimal or no side effects or toxicities

- Your doctor will be happy to discuss this treatment option in detail during the consult
- The NUH Urology Department, in close partnership with other specialties such as the Infectious Disease Department, continues to strive as an academic institution to find new treatment options that can benefit patients with recurrent UTI episodes

# Things to take note of

- The symptoms of recurrent urinary tract infections may mimic some other common or more serious bladder conditions, hence an evaluation by a specialist should be undertaken to ensure that the diagnosis is correct
- For patients with recurrent infections, when visiting the primary care doctor (e.g. GP or polyclinic) or self-starting antibiotics, it is always advisable and a good practice to request for a urine culture (test to detect bacteria in urine) to be done before starting on any antibiotic therapy
- The benefit of doing a urine culture enables us to isolate the type of bacteria (if any) and the antibiotics that the bacteria is sensitive to, which helps in the treatment plan. Routine and quick urine investigations done more commonly such as dipsticks or microscopy do not give the same detailed information that a urine culture can offer
- The use of antibiotics should also be reserved only for bacterial infections and hence getting proper diagnosis and documentation is important to prevent the misuse of antibiotics
- Patients are advised to bring these results along for their next review with the specialist

The journey in the treatment of recurrent UTIs may require time and effort as we take steps to control and manage the condition. A major aim of treatment would be to reduce the frequency of UTI episodes so that it reduces the distress and disruption caused to you. Let us work together to manage and improve your condition.

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