The department of urology has comprehensive diagnostic and therapeutic facilities for urological cancers, kidney ureter and bladder stones, prostatic enlargement and prostatic diseases, urinary symptoms, infertility & impotence, female urology, congenital urological diseases and other urinary problems. Complete evaluation and the necessary procedures if needed are carried out in state of the art facilities available in the institution.

Overview of the common urological diseases

Urinary Symptoms
Problems like pain and burning during urination, increased urination, urgency, urinary leak, poor flow of urine are troublesome and may be due to stones, infection, prostatic enlargement, urethral strictures or infection and cancers.

Prostatic diseases
Prostatic enlargement [Prostatomegaly / Benign Prostatic Hypertrophy], prostatic tumors are mostly seen in the men over the age group of 50 years. Prostatic infections [Prostatitis] are seen in young men. The symptoms due to these prostatic diseases vary widely from minimal lower urinary tract symptoms to severe bothersome urinary symptoms, blood in urine and urinary retention. Advanced prostatic tumors can lead to severe bony pain, severe low back ache and may also lead to weakness of the lower limbs, slowly progressing to paralysis. Sometimes prostatic cancer can be silent without any symptoms and can be identified only on evaluation - scientifically called as “Screening for prostate cancer [Digital rectal examination, PSA testing, Ultrasound guided Prostatic biopsy]. Management depends on the disease and the stage of the disease identified. Most commonly cystoscopy and a transurethral resection of the prostate [TURP] is what is needed for a benign prostatic enlargement.

Stone disease
Kidney stones and ureteric stones can be one of the most painful surgical disorders. Small sized stones pass out of the body without any intervention. Stones that
cause lasting symptoms or other complications may be treated by various techniques, most of which do not involve major surgery. They usually present as severe pain in the back and side in the area of the kidney or in the lower abdomen. They also can have nausea and vomiting and lower urinary tract symptoms. The type of treatment depends on symptoms, size, position and composition of the stone. Endourological removal of ureteric/renal calculi is the most common treatment option. Extracorporeal shockwave lithotripsy (ESWL), flexible and rigid ureteroscopy (RIRS + URS), percutaneous nephrolithotomy (PCNL), LASER, in situ pneumatic fragmentations of the stones are few of the commonly used methods used to remove the stones.

Urological Cancers
Cancer can affect the kidneys, bladder, prostate, penis and testicles - together these are known as urological cancers. Many factors have been identified as potential causes of urological cancers. Cigarette smoking, obesity, exposure to certain industrial chemicals, is few of the causes. Most kidney and prostate cancers are found "accidentally" when being investigated for other complaints. However, symptoms like flank pain, flank mass, abnormalities in the external genitalia, blood in urine, other lower urinary tract symptoms, weight loss, weakness, bony pains need to be investigated. If a cancer is identified it is staged and the appropriate management is planned. Surgery will be the gold standard of treatment if identified early and chemotherapy and radiotherapy has a role in the management of urological cancers.

Erectile Dysfunction
Erectile dysfunction (ED) is the inability of a man to achieve or maintain an erection sufficient for his sexual needs or the needs of his partner. Most men experience this at some point in their lives and are not psychologically affected by it. Erectile dysfunction has many causes, most of which are treatable, and is not an inevitable consequence of aging. There are many underlying physical and psychological causes of erectile dysfunction. Often there may be several factors present at the same time. Vascular diseases, diabetes, hypertension, renal diseases, neurological disease, smoking, alcohol are few of the causes. After evaluation, treatment options can be oral medications, self-injections, vacuum devices or penile implants depending on the response to treatment.

Female Sexual Dysfunction
Lack of sexual arousal, decrease in libido, painful intercourse, and delayed orgasm are few of the common presentations in married women.

Infertility
Infertility is currently a problem in one out of five couples trying to have children. If after a year of trying to conceive a couple is not successful, a basic infertility evaluation may be started. A wide range of physical and emotional factors can cause infertility. Infertility may be due to problems in the woman, man, or both. Infertility testing involves a complete medical history and physical examination of both partners. Blood tests including hormonal evaluation and radiological investigations are needed to identify the cause. Semen evaluation and rarely testicular biopsy may be needed in men. Treatment depends on the cause of infertility. Education, counselling, medications to treat infections and to improve ovulation, along with fertility treatments such as assisted reproductive techniques [IUI, IVF, ICSI].

Female Urology
The subspecialty of female urology deals with the diagnosis and treatment of those urinary tract disorders most prevalent in females. These include leakage of urine while coughing or straining, pelvic floor prolapse, urinary frequency, urgency, nocturia, painful urination and/or incomplete bladder emptying, pain in the lower abdomen and/or perineum, recurrent urinary tract infection. Urinary symptoms after a gynaecological procedure are also included in female urology. Radiological studies and additional bladder studies such as Urodynamics and cystoscopy may be required. Surgical management for SUI is available - TVT, TVTO, sling operations. Surgical treatment for pelvic organ prolapse [pelvic floor repair] is also available.
**Pediatric Urology**

Pediatric urology is a sub-specialty of urology that deals with the surgical diseases of the genito-urinary tract [kidneys, ureters, bladder, sexual and reproductive organs] in children. We assist in creating awareness among people and help parents to understand the diseases that their children might be suffering from. Some of the urological problems that children encounter include bedwetting and urinary incontinence, undescended testes, hypospadias, stones in the kidney, ureter and bladder, chordee, phimosis, vesicoureteric reflux [VUR], bladder outflow obstruction [BOO], Neurogenic bladder, tumors of the kidney, ureter and bladder, genito-urinary trauma, genitourinary malformations and birth defects including prune belly syndrome, cloacal extrophy, bladder extrophy, epispadias, ambiguous genitalia and intersex conditions.

Renal Transplantation:

Renal or kidney transplantation is the organ transplant of a kidney with end stage renal disease. Renal transplantation is classified as deceased-donor [formerly known as cadaveric] or living-donor transplantation depending on the source of the donor organ. The renal transplantation program at CMCH started in Aug-1991 and we have been doing both adult and pediatric renal transplants with living related donors. Punjab’s first successful deceased-donor [cadaveric-donor] renal transplantation was done in Jan-1997. CMCH has a team of transplant surgeons and physicians committed to the work-up and post-renal transplant care. With the newer immunosuppressant medications and enhanced surgical skills, the long term results of renal transplantation have significantly improved, offering the best option for patients with end-stage renal disease.

Men’s Health:

Andropause or male menopause is a term that has been given to menopause like condition in the aging men. This relates to decrease in sexual libido due to hormonal imbalances. Men also experience symptoms due to enlargement of the prostate causing urinary symptoms and sexual inadequacies. Men are also apprehensive of prostate cancer and its early diagnosis and prompt treatment determines better long term outcome and survival. The increased life-span of men has spread the awareness of better sexual health and other related life-style diseases.

**Services offered by the department**

Percutaneous renal operations:

- Percutaneous Nephrolithotomy [PCNL].
- Percutaneous Cystolithotomy.
- Percutaneous Endopyelotomy.

Endourology: [Upper Tract]:

- RIRS + LASER Lithotripsy.
- Endopyelotomy & Endopyeloplasty.

Endourology: [Lower Tract]:

- Cystourethroscopy, TURP, TUIP, TURBT, VIU.

Reconstructive urology:

- Pyeloplasty, Urethral stricture surgery, VVF repair, Hypospadias repair, Bladder reconstruction.

Surgeries for Urological Cancers:

- Radical Nephrectomy.
- Radical Cystectomy and Orthotopic bladder & urinary diversion.
- Radical Prostatectomy.
- Retroperitoneal Lymph node dissection [RPLND].
- Total penectomy with perineal urethrostomy.
- Ilioinguinal lymph nodal block dissection.

Operations for Congenital malformations:

- Renal Transplantation.
- Laparoscopic Urological Procedures.
- Male & Female Sexual Dysfunction.
- Male Infertility.
- Stress Urinary Incontinence [TVT, TVTO, Slings].
- Surgery for Pelvic Organ Prolapse.
- Urodynamic Study.
- Pediatric Urology.
Urology OPDs:
Monday, Wednesday & Friday.
Time: 0800-1500.
Emergency: 24 x 7.

City Center Consultations:
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Consultants:

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