

THE URINARY SYSTEM

The human's urinary system consists of two kidneys, two **ureters**, a **urinary bladder** and a **urethra**. Its function is to secrete and excrete the urine, and it is connected with the renal tract.

Urinary Disorders

The section of medicine that deals with the urinary disorders is called **urology**.

A term used to describe the elimination of urine from the blood is the **urinary output**. Any change in amount or type of output can indicate a **disorder of the urinary system** as:

- a) Anuria-no urine is produced,
- b) Uraemia - suppressed urine production, waste products remain in circulating blood,
- c) Polyuria - excessive secretion of urine,
- d) Nocturia - elimination of urine several times during the night,
- e) Incontinence - inability to control urination,
- f) Retention of urine - failure to eliminate urine from the bladder.

Urinary disorders can be diagnosed by tests on urine, blood chemistry, radiological examinations, e.g. **cystoscopy**, (which is an insertion of a light scope into the urethra and bladder to allow direct visualisation under a local or general anaesthetic and is used to identify stones, tumours or strictures) or a **renal biopsy** (removal of renal tissue for microscopic study, a surgical procedure done by a nephrologist), ultrasound and tomography.

Cystitis is an inflammation of the bladder lining caused by bacteria or by injury. Bacteria can enter the bladder through the urethra and pathogens grow in urine that is retained in the bladder for a long period. Cystitis is more common in females than in males because their urethra is shorter and pathogens from the vulva and anus can gain entrance more easily. The symptoms are the frequent desire to void and elimination of a small amount of urine, a burning sensation that accompanies urination and blood-tinged urine. Bacteria in the bladder can travel upward in the tract and cause the infection of the ureter (ureteritis) or the kidney. Also the recurrence rate of cystitis is common so it must be treated long and carefully with antibacterial medications of the sulphonamide group or urinary antiseptics.

VOCABULARY

adrenal glands [æ'dri:nl glænds]	nadledvinky
albumin [æ'lbu:min]	bílkovina
bladder [blædə]	močový měchýř
Bowman's capsule [bəu'mæns kæpsju:l]	Bowmanovo pouzdro
cast [ka:st]	močový válec (<i>mikroskop.</i>)
cloud [klaud]	zákal
cortex [ko:teks]	kůra
creatinine [kri'æti:ni:n]	kreatinin
cystitis [sis'taitis]	zánět močového měchýře
dilatation [dailei'teišn]	rozšíření
drainage [dreinidž]	drenáž
encapsulated [in'kæpsjuleitid]	opouzdrěný
excrete [eks'kri:t]	vyměšovat
filtrate [filtreit]	filtrát, filtrovat
focal [fəukl]	ložiskový
frequency [fri:kwensi]	četnost, frekvence
glomerulus [glo'meruləs]	klubíčko, glomerul
granular [grænjulə]	zrnitý
haematuria [hi:mə'tjuəriə]	krev v moči
leak [li:k]	téci
leakage [li:keidž]	unikání, ztráta
medulla [mə'dalə]	dřeň, mícha
nephritis [ne'fraitis]	zánět ledvin
output [autput]	výdej
pass water [pa:s wo:tə]	zde: močit
pituitary gland [pi'tjuitari glænd]	podvěsek mozkový, hypofýza
prostate gland [prosteit]	předstojná žláza, prostata
pubis [pju:bis]	kost stydká
reabsorbtion [ri:əb'so:pšn]	zpětné vstřebávání
release [ri'li:s]	uvolnit, vypustit
renal [ri:nl]	ledvinový
renal pelvis [pelvis]	ledvinná pánvička
secretion [si'kri:šn]	vylučování
sediment [sedimənt]	usazenina
stones [stəunz]	kameny

stricture [stri:kčə]	zúžení
symphysis pubis [simfisis pju:bis]	spona stydká
tubule [tju:bju:l]	kanálek
urea [juəriə]	močovina
urine [juərin]	moč
vena cava [vi:nə'keivə]	dutá žíla
void [void]	vyprázdnit, prázdný