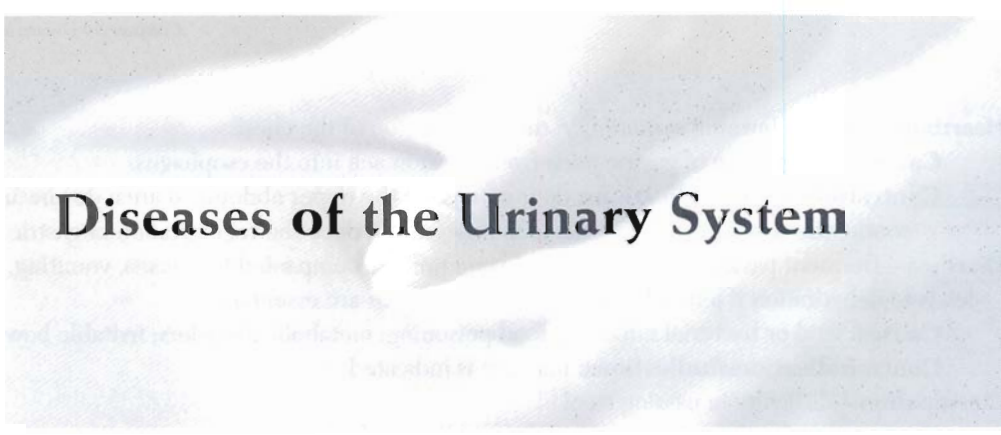


Diseases of the Urinary System



GENERAL TERMINOLOGY

Dialysis—artificial filtering of the blood using a semipermeable membrane and dialysis fluid (i.e., fluid that is isotonic to normal blood); used to filter out waste products from the blood of an individual with renal failure.

Contraindications/indications: obtain advice and approval of client's doctor before performing bodywork.

Hemodialysis—dialysis performed by a machine that removes arterial blood and cycles it through one side of a chamber separated by a semipermeable membrane from the other side, which is filled with dialysis fluid; waste products diffuse from the blood into the dialysis fluid, and any substances in which the blood is deficient diffuse from the dialysis fluid into the blood.

Peritoneal dialysis—a process that operates on the same principle as hemodialysis but uses the peritoneum (i.e., the membrane lining the abdominal cavity) as the semipermeable membrane; dialysis fluid is infused into the abdominal cavity through a catheter and allowed to remain there for 3 to 6 hours before being drained away; waste products diffuse from the mesenteric blood vessels, through the peritoneum, and into the dialysis fluid.

Although both hemodialysis and peritoneal dialysis are effective means of filtering blood for chronic or acute renal failure, each has advantages and disadvantages. Hemodialysis is quicker and safer, but it is expensive and requires the assistance of a trained technician to operate the machine. Peritoneal dialysis is cheaper, requires less equipment, and can be performed without assistance; however, it takes about six times longer and carries a high risk of subsequent infection (peritonitis).

DISORDERS

Nephritis—acute or chronic inflammation of the kidney.

Cause: bacterial or viral infection triggering an immune response.

Contraindications/indications: obtain advice and approval of client's doctor before performing bodywork; increased circulation could aggravate the condition.

Urethritis—inflammation of the urethra; usually impedes the outflow of urine.

Cause: bacterial or viral infection (sexually transmitted diseases).

Contraindications/indications: massage is indicated; avoid the lower abdomen.

Cystitis—inflammation of the urinary bladder and ureters; characterized by frequent, painful urination and blood in the urine; more common in females.

Cause: microbial infection.

Contraindications/indications: massage is indicated; avoid the lower abdomen.

Urolithiasis—a condition in which kidney stones (calculi) develop in the renal calyces or pelvis.

Cause: increased calcium in the blood.

Contraindications/indications: obtain advice and approval of client's doctor before performing bodywork; massage is generally indicated; use caution around the kidneys and lower abdomen.