

## GENITOURINARY SYSTEM

### Kidneys

**Thickening** of basement membrane in Bowman's capsule and impaired permeability.

**Degenerative** changes in tubules.

**Atrophy** and reduced number of nephrons.

**Vascular changes** affect vessels at all levels.

Renal efficiency in waste disposal impaired:

1. The number of nephrons is halved in an average lifespan
2. Renal blood flow is halved by 75 years
3. Glomerular filtration rate and maximum excretory capacity is reduced by the same proportion.

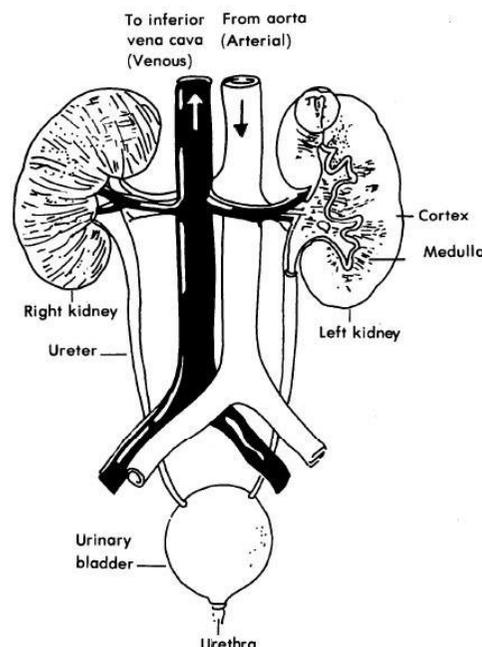
The ageing kidney can still maintain normal homeostatic mechanisms and waste disposal within limits, but is less efficient, needs more time, and its reserves may be minimal. Therefore, relatively minor degrees of dehydration, infection, or impaired cardiac output may precipitate failure.

**Prostatic atrophy** with focal areas of hyperplasia.

**Benign nodular hyperplasia** present in 75% males over 80 years.

Histological (latent) **prostatic carcinoma** demonstrable in most males over 90.

**Bladder** - increasing dysfunction including: age-related reduction in bladder capacity, uninhibited contractions and decreased urinary flow rate, so the person often experiences the need to empty the bladder more frequently.



Urinary tract infections are common infections seen in older people admitted to hospital with a fall or acute confusion. They are a cause of re-admission and can result in prolonged stays in hospital as an infections have a much more systemic (body-wide) affect on older people, e.g. fatigue and decreased mobility, with the patient reporting that they are simply 'off their legs'.

Try and ascertain if they were caused by the person self-dehydrating for fear of wetting themselves. This is more common if they know they are going out, or to minimise a night time need for the toilet (nocturia).

You may find that people with incontinence may not always participate fully in the session, especially if they are to go to unfamiliar environments and there may also be added complications of acute confusion or pain if they are dehydrated or have an infection.

This has implications of consent to treatment.

If they have a catheter, check that it is empty and secured to their leg (though not too tightly) and not to the chair. Maintain dignity throughout treatment, although this is not always possible if the person has a visible night bag. You may have to deal with issues of their embarrassment, and even depression because of their incontinence. Discussion about continence is part of our role, but if you are not comfortable or competent to do this, refers the person to an individual with such skills.

From a health and safety point of view, watch how you handle body waste, and try to keep a spare pair of rubber gloves in your uniform pocket. Each Trust has an Infection Control Policy to be adhered to.