Tuesday, 19 April 2016

Urinary Tract Infections (UTI)

- UTI's are one of the most common infection managed in primary and secondary care. They are the most common infection in acute and long term condition patients.
- UTI's can occur across all ages. The Health Protection Agency (2005) define UTI's as the presence and multiplication of bacteria in one or more structures in the urinary tract with associated tissue invasion.
- Urine is actually a poor place for bacteria to multiply and grow due to its acidity however if bacteria can attach to the mucosal lining of the urinary tract, then an inflammatory response is commenced and symptoms of a UTI arise.
- To detect a UTI, a urinalysis is carried out to detect the evidence of bacteria.
- 4 different types of UTI are;

• Asymptomatic. This is a UTI without symptoms and detection can only be done through urinalysis. This is common in pregnant women, older people and people with diabetes.

• Symptomatic. Is caused by the inflammatory response following infection. This produces the symptoms of urgency, frequency and dysuria. This occurs when the bacteria attaches to the urinary tract mucosa.

• Uncomplicated UTI. Is an infection of the bladder or kidney without structural or function obstruction to the urinary tract.

• Complicated UTI. Is an infection with the presence of one or more of the following: Urinary calculi (bladder stones), Cystic renal disease, Urinary obstruction in the kidney, ureter, bladder or prostate, Anatomical abnormalities such as vesico-ureteral reflux, Neurogenic bladder disfunction, Foreign body such as a catheter.

The body has a natural defence against UTI's. This is the urinary tract as it aims to flush the bacteria attached to the mucus away from more delicate areas such as the bladder.

Infection can only occur if the hydrokinetic flow is altered. For example if incomplete bladder emptying occurs or there is a reduction in frequency. Therefore it is important for frequent and complete bladder emptying occurs to minimise the chances of a UTI occurring.