

# ~~pyelonephritis~~ PYELONEPHRITIS

bacterial infection of **UPPER URINARY TRACT** that usually develops from UTI (common bacteria esp *E. coli*)

- infection of kidneys after UTI that climbs up ureter → kidneys

## Pathophysiology

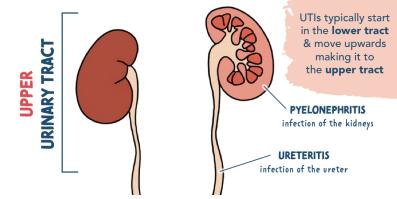
- often a result of reflux of urine from inadequate closure of **Uterovesical junction during voiding (urine retention)**
- effect of inflammation

### acute:

- high fever - **systemic**
- chills
- nausea/vomiting
- dysuria/pyuria
- flank pain: severe or constant dull ache  
occurs in **flank area - systemic**  
**extends toward umbilicus**

### treatment

- follow-up urine culture → must be obtained to determine if infection has resolved!
  - nephrectomy
  - antibiotics - **CULTURE first before starting antibiotics**
- treatment necessary if pt progresses to renal atrophy or end stage renal disease (**dialysis or transplant**)
- goal:** prevent damage



### Chronic:

- usually occurs by long-standing UTIs with relapses & reinfections, may lead to **chronic renal failure**
- bladder irritation
- chronic fatigue
- aching in one or both kidneys

## nursing management

- ↑ fluid intake (2000 ml/day)
- Cranberry supplements (acidify urine)
- no caffeine/alcohol
- meds
- limit physical activity