

8 Complications of Renal Failure

- **Hypocalcemia**
 - Kidneys transform 25-hydroxy-vitamin D into 1,25-dihydroxy-vitamin D (the more active form of Vitamin D)
 - Vitamin D is needed to absorb calcium from the GI system
- **Renal osteodystrophy**
 - due to secondary hyperparathyroidism (removes calcium from the bones)
- **Bleeding risk**
 - Platelets have difficulty degranulating in the presence of uremia
- **Hypertension**
- **Anemia**
 - Loss of erythropoietin production (normocytic normochromic anemia)
 - ACE inhibitors and hyperparathyroidism also block the effect of erythropoietin
- **Pruritis** - due to urea accumulation in the skin
- **Atherosclerosis**
 - WBCs don't function normally with uremia
 - WBCs help to prevent lipid accumulation in arteries
- **Infection**
 - neutrophils have difficulty degranulating in the presence of uremia