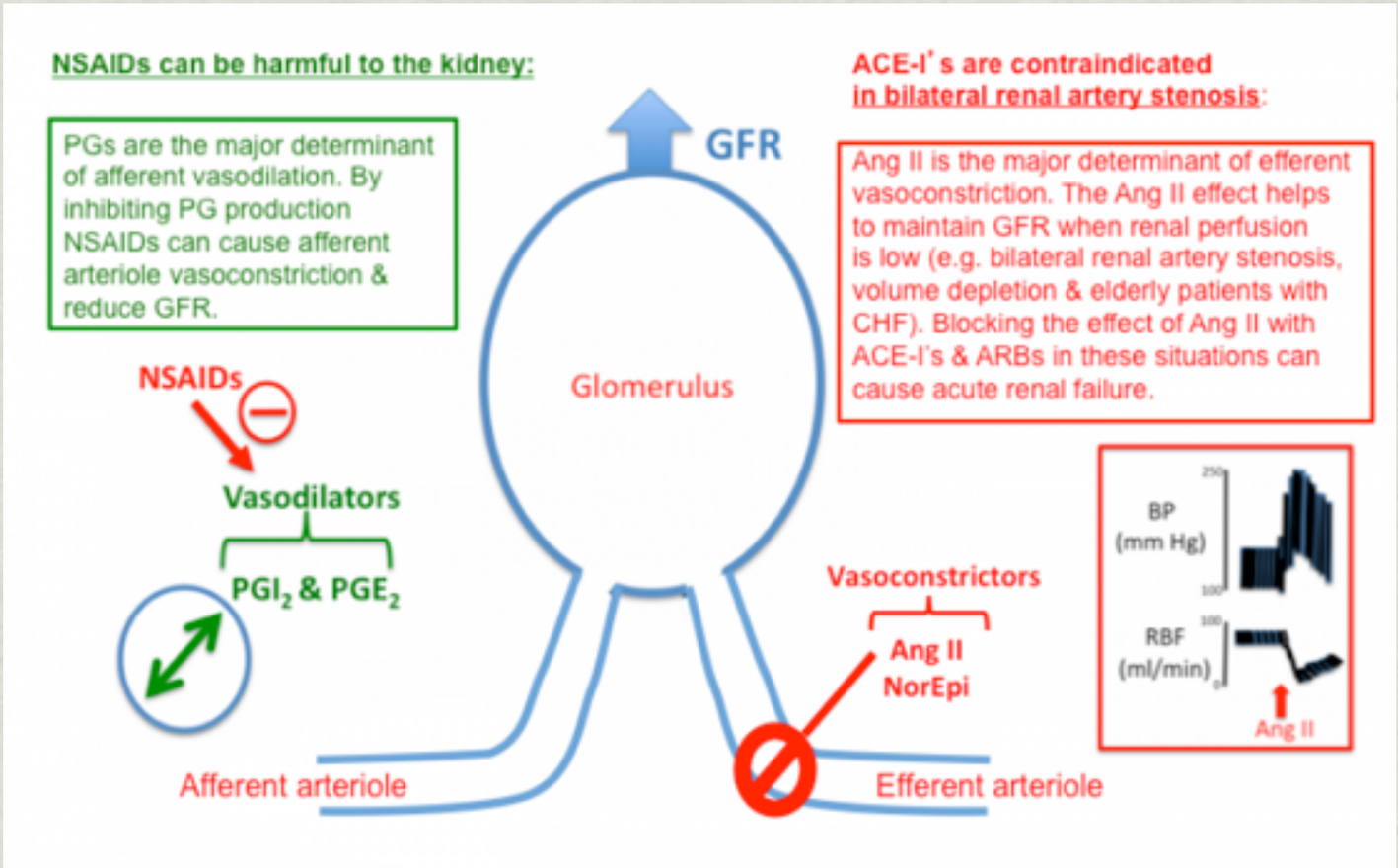
NSAIDs and ACEIs/ARBs in renal function



http://tmedweb.tulane.edu/pharmwiki/doku.php/ace_inhibitor_pharmacology

- NSAIDs produce ↓GFR (both non-selective and COX2 selective) by inhibiting vasodilator action of PGE2 and PGI2 on the afferent arteriole.
- At renal level, ANG II constricts the efferent arteriole more than the afferent resulting an increased perfusion pressure (↑GFR). ANG II also stimulates PG E2 and I2 which dilates afferent arteriole and also ↓GFR.
- ACEIs/ARBs blocks ANG II effect --->> ↓ GFR. So pay attention when ↓GFR like : bilateral renal stenosis, volume depletion or elderly patients (GFR ↓ since only 1/3 of the nephrons are functional) since it may cause acute renal failure.