**renal transplantation**

There are different types of renal transplantations:

Usually, transplant matches require HLA and blood type matching
SAME TREATMENT regardless of type of transplant.

Treatment for renal transplant patients:

1. **Immunosuppression Induction Agent**
   - Basitiximab IV;
     - 20mg stat dose
     - Acts on CD4
     - Give on day 0 (day of transplant) and day 4

2. **Maintenance Immunosuppressive Agents** (x3 types)
   1. Calcineurin Inhibitor
      a. Cyclosporin
         i. Po bd
         ii. Dose depends on weight and level
      b. Tacrolimus
         i. Po bd
         ii. First choice as fewer episodes of rejection
         iii. Dose depends on body weight and level
      c. Have to give calcineurin inhibitors as taking Basitiximab
      d. Have to take levels as these are critical dose drugs: have to reach particular level within 0-6 months after renal transplant, and then second (lower level) after 6 months due to side effects
      e. Acts on T and B lymphocytes
   2. Adverse effects of calcineurin include:
      i. Hypotension
      ii. Nephrotoxic → Calcineurin Allograft Nephropathy (CAN)
         1. Biopsy proven
         2. Increased eGFR → stop calcineurin inhibitors and start m-TOR inhibitors
            a. Sirolimus
            b. Everolimus
   3. Anti-metabolites
      a. Azathioprine (no longer given)
      b. Mycophenolase mofetil
         i. Diarrhea as side effect so not first choice
         ii. Po 1g bd for any patient
      c. Mycophenolic acid
         i. Enteric coated (ec)
         ii. Po 720mg bd
   2. Corticosteroids
      a. Prednisolone e.c
         i. Po 40mg daily, reducing to 0mg