Renal Transplant

Examination

- See renal exam
- Look for:
    1. Aetiology: fingertip capillary glucose monitoring marks (diabetes), flank masses (PKD), butterfly rash (SLE), haerinag aid (Alports), collapsed nasal bridge (Wegners), sternotomy (renovascular disease)
    2. Previous renal replacement therapy: AV fistula, central line and peritoneal dialysis scars
    3. Graft functionality: active marks in AV fistula, fluid retention, anaemia, uraemia
    4. Immunosuppression side effects: tremor (calcineurin inhibitor), Cushings/bruising (steroids), skin lesions/excisions (immunosuppression)

Indications

- End stage renal failure (GFR <10ml/min)
- Commonest cases: diabetes mellitus, polycystic kidney disease, hypertension, autoimmune glomerulonephritis

Contraindications

- Cardiac/pulmonary insufficiency
- Hepatic disease
- Cancer
- Active infection

Procedure

- Pre-operative
    - Recipient: ABO, HLA, cross-match
    - Donor: ABO, HLA, cross-match, infection screen (HIV, hep B, hep C, CMV, HTLV-1, syphilis)
    - Imaging
- Remove donor kidney (LOIN SCAR)
- Anastamose in recipient's iliac fossa (RUTHERFORD-MORRISON SCAR)
    - Renal vein to **external** iliac vein
    - Renal artery to **external** iliac artery

Post-operative immunosupression (for life)

- Steroids
- Azathioprine
- Ciclosporin (or tacrolimus)

Complications

- Rejection
    - Hyper-acute rejection
    - Acute rejection (3-6 months): flu symptoms and graft tenderness
    - Chronic rejection (>6 months): gradual renal failure
- Immunosupression complications
    - Opportunistic Infections and sepsis
    - EBV-mediated post-transplant lymphoproliferative disorder
- Other
    - UTI's
    - Kidney thrombosis

Prognosis

- Lasts 10-15 years and patient lives 10-15 years longer than if on dialysis
- Affected by:
    - Cold time (time out of donor/ recipient body)
    - Type of donor (live/ cavaderic)
    - Donor age