| MALIGNANCY AND INFECTION |

POST-TRANSPLANT MALIGNANCY

- Increased risk of malignancy secondary to chronic immunosuppression
  - ***20% of renal transplant patients will have a malignancy at 10 years***
- Most common: ***squamous cell carcinoma*** (skin cancer) and ***post-transplant lymphoproliferative disorder***
  - Others Kaposi's sarcoma, non-Hodgkin's lymphoma
- Approximately 1 in 13 post-renal transplant deaths are due to malignancy
- ***Post-transplant Lymphoproliferative Disorder (PTLD)***
  - Majority occur within one year of transplant (relative risk 1-2%)
  - Likely related to ***Epstein-Barr Virus*** that results in ***uncontrolled B cell proliferation*** (non-Hodgkin's lymphoma)
  - Increased risk with Tacrolimus (CNI)
  - Tx: (1) ***withdraw/decrease immunosuppression*** (2) Ganciclovir (3) Rituximab (anti CD-20) and CHOP [Cyclophosphamide, Hydroxydaunorubicin (doxorubicin), Oncovin® (vincristine), and Prednisone] (4) nephrectomy

INFECTIONS

- ***Cytomegalovirus (CMV)***
  - "42-day fever" - occurs approximately 6 weeks after transplant.
  - Prophylaxis: antiviral (Ganciclovir)
- ***BK virus***
  - Non-enveloped double-stranded DNA Papovaviridae
  - Up to 30% will acquire virus, which may lead to BK nephropathy
  - Tx: cidofovir, fluoroquinolones are being investigated for prophylaxis