Notes

- Malaria prophylaxis doesn't provide full protection against all subtypes of malarial parasites
- Two vaccines that HIV positive patients should not have (regardless of CD4 count) → ***BCG, Yellow fever***
- A vaccine shouldn't be given in HIV if above 5 years + CD4 **<200** or less than 1 year old + **<750** → ***MMR***
- In AIDS (Stage 3 HIV), give ALL except → ***Live attenuated vaccines***
- Post-exposure prophylaxis (PEP) to a person with HIV:
  - If viral load **<200** + antiretroviral therapy (ART) **for >6m** → ***REASSURE***
  - If **≥1000 copies** → Prophylaxis for 28 days → Test again in 2m, then 3m
  - If PEP is required → should be given **IMMEDIATELY** for **28 days**
  - DO NOT wait for serology (4th generation lab venous blood HIV test)
  - PEP → 1st line: **Truvada** and **Raltegravir**
  - PEP can be taken **up to 72h** post-exposure
- Tetanus vaccine:
  - Is it high-risk wound? If yes → give **IgG** (regardless of the immunization status), if not → no IgG required
  - What's his immunization status? Fully immunized? → nothing needed, if <u>incompletely</u> immunized or <u>can't remember</u> → **complete course** of the vaccine
  - As long as the patient is on schedule whether completed or not → discard the tetanus vaccine
  - High risk wound → contaminated with soil, compound fracturs, wound containing foreign bodies, wounds or burns with systematic sepsis
  - Schedule: 2m, 3m, 4m, 3-5y, 13-18y
  - Booster dose is given if they've completed their schedule and travelling to remote areas
  - If a healthy individual had a tetanus booster within last 5 years → NO further booster is required
- URTI + Cervical lymphadenopathy → ***Infectious mononucleosis***, until proven otherwise
- Bilateral/unilateral parotid enlargement with pain at the angle of the mouth→ ***Mumps***
- Human herpes virus 4 (HH4) / EBV → ***Infectious mononucleosis***
- Human herpes virus 8 (HH8) → ***Kaposi sarcoma***
- CD4 count in AIDS
  - 1500-700 → no infection
  - 500 – 200 → Hairy leukoplakia and Thrush herpes
  - 200-100 → P. jiroveci
  - <100 → Cryptococcus, Cryptosporidium, Toxoplasmosis
  - <50 → Leukoencephalitis CMV
- **Chicken pox** and **Mumps** are both self-limiting viral infections so NO need for antibiotics
- In chicken pox, antibiotics is ONLY used if there's <u>superimposed bacterial infection</u> with <u>vesicles</u> and <u>fever</u>
  - If there's fever → Oral antibiotics
  - If NO fever → Topical antibiotics
- Painful single ulcer + painful LNS → ***Chancroid***, caused by → ***Hemophilus Ducreyi*** *[you do cry with Ducreyi]*
- Painless single ulcer + painless LNs → ***Chancre***, caused by → ***1^{ry} Syphilis***
- Multiple painful ulcers → ***HSV***
- **Neutropenic sepsis**
  - Temperature **>38^{o}C** + Neutrophils **<0.5x10^{9}/L**
  - **Chemotherapy** is the most common cause, can also be a result of BM transplant or Hodgkin's lymphoma
  - **Antibiotics** must be administered immediately, DO NOT wait for WBCs
  - 1st line → **Piperacillin** + **Tazobactam** (Tazocin)
  - If still febrile after 48h → **Meropenem** +/- vancomycin
  - If still not responding after 4-6 days → Investigate for fungal infection, if positive → IV antifungal

- Active TB + productive cough → ***Statin for acid fast bacilli (AFB)***
- Active TB + NON-productive cough → ***Bronchoalveolar lavage bronchoscopy / Gastric lavage***
- Latent Tb or screening for contacts → ***Mantoux test***
- History of travel to Africa + Dark urine only → ***Schistosomiasis Haematobium***
- History of travel to Africa + Hepatomegaly only → ***Schistosomiasis Mansoni***
- History of travel to Africa + Dark urine + Hepatomegaly → ***Malaria***
- A drug for eradication of latent hypnozoites and prevent relapses in Malaria → ***Primaquine***
  - Screening for G6PD deficiency is essential before administering Primaquine because it can cause hemolysis in G6PD deficient individuals
  - It's contraindicated in pregnancy and breastfeeding
  - For Malaria prophylaxis in pregnancy → ***Mefloquine***
- **Chloroquine** and **proguanil** are safe in pregnancy
- High fever + relative bradycardia + severe headache + crouching position → ***Faget sign*** → ***Typhoid fever***
- Immunocompromised patients or patients on steroids with history of exposure to **HSV** should be tested for Varicella Zoster antibodies REGARDLESS of history of chickenpox
- A person with active shingles can spread the virus when the rash is in the blister phase, a person is not infectious before the blisters appear. Once the rash developed crusts, the person is no longer infectious
- Shingles is less contagious than chickenpox and the risk of a person with shingles spreading the virus is low if the rash is covered
- All human bites should be treated with a ***7-day*** course of ***Oral co-amoxiclav (PEP)***
- If the patient has a penicillin allergy → ***Metronidazole + Doxycycline/erythromycin/clarithromycin***
- Follow-up serology blood tests for Hep B, Hep C and HIV at **6 weeks**, **12 weeks** and **24 weeks** are required
- Tonsils with white exudates → ***Infectious mononucleosis***
- Tonsils with grey exudates → ***Diphtheria***
- Infectious mononucleosis = Glandular fever = Kissing disease
- Monospot test = Heterophile Antibody test = Paul Bunnell test
- An antidepressant that is safe while breastfeeding → ***Sertraline***
- **Hepatitis B**
  - HBsAg +ve → Infection (acute or chronic)
  - HBsAg +ve & HBeAg positive → Highly infectious
  - Anti-HBs +ve alone → Recent vaccination
  - Anti-HBc positive → Past infection
- John is infected with Hep B and he has started to ***Sag*** → ***HBsAg,*** the viruses are **eag**er to spread (HB**eAg**)
- **A**my is a **H**arvard **B**usiness **S**chool (**a**nti-**HBs**) graduate, knows better and had her vaccinations
- After a needle stick during an operation
  - For the patient → Test for HIV antibodies, HBsAg and Hep C antibodies
  - For the surgeon → Test for HBsAg
  - Surgeon should be offered a booster dose of Hep B if he can't remember when the last booster dose
  - If the patient is considered low-risk → No PEP needed
  - The surgeon should return in 6 weeks for a full set of serology which now includes Hep C and HIV antibodies → If this comes -ve and the patient's initial blood test was also -ve → Discharge with no further follow-up
  - If patient didn't provide samples → Test the surgeon immediately after the injury, at 6, 12, 24 weeks
- Rates of transmission following inoculation of blood through a hollow bore needle:
  - 0.3% if the donor is HIV +ve
  - 3% if the donor is Hepatitis C antibody +ve
  - 30% if the donor is HBsAg +ve

- The mother is encouraged to continue breast feeding with all conditions except with → ***Maternal HIV***
- Breastfeeding is encouraged with **Hepatitis C** unless mother has cracked or bleeding nipple
- Breastfeeding is encouraged with **TB** but infant should be immunized with BCG as soon as possible
- TB cannot spread from breast milk but can spread from respiratory droplets, however mothers are usually not infectious after 2 weeks of TB treatment
- Most common cause of laryngitis → ***Common cold***, overusing of vocal cords may also be the cause
- Edematous vocal cords lead to hoarseness of voice
- **Positive Hepatitis C** → HCV antibody reactive + HCV RNA detected
- Directly observed therapy (DOT) should be offered in patients with TB who:
  - Have not adhered to treatment before
  - Have a history of homelessness
  - Have a history of drug or alcohol misuse
  - Are currently in prison
  - Are in denial of their diagnosis
  - Have multidrug-resistant tuberculosis (MDR)
  - Request the service
  - Are too ill to administer the treatment themselves
- Patient with **Gastroenteritis** should not return to work/school until 48h have passed since the last episode of diarrhea or vomiting
- If bacterial meningitis is suspected, local health protection team should be notified for any case with potential public health implications, that's done prior to lab confirmation
- A boy with chicken pox can return to the nursery once the rash has crusted over and 5 days have passed from the onset of the rash
- **Ramsey-Hunt syndrome (herpes zoster oticus)**
  - **PURPLE** → **P**ain (ear, face, mouth), **U**nsteady (vertigo, dizziness), **R**ed **R**ash (vesicles on ear/mouth/hairline), **P**alsy (VII), **L**oss of hearing, **E**xception (there's not always a rash)
  - **RASH** → **R**apid **A**ntiviral **S**teroid, **H**ighlight (eye care)
- **Laryngeal tuberculosis**
  - Hoarseness of voice + Dysphagia
  - Features of TB (fever, weight loss, lethargy, lymphadenopathy)
- Investigations for syphilis

  At the GP's:
  - Serology for syphilis → **VDRL**, **TPHA** or treponemal antibody absorption
  - **PCR** → can only be carried out from a sample of the lesion or an infected LN

  At the GUM:
  - **Dark field microscopy** → can only be carried out from a sample of the lesion or an infected LN