FACTS AND STATISTICS:

HIV can be tracked back as far as 1979 when there was increased numbers of cases of *P. Jiroveci* (treated with Trimethoprim-sulfamethoxazole)

Organisms that can cross from and animal to human is known as ***zoonotic***

Most common method of transmission is sexual contact with an HIV infected partner

The only sexual option to prevent becoming infected is ***abstinence***

Condoms do not provide 100% protection but reduce risk if used correctly and consistently

Counsel high risk patients about:

* Sexual history
* Risk reduction measures
* Routine testing for HIV

10-12 weeks is the time it takes after exposure to HIV to develop antibodies (called ***seroconversion***)

HIV can remain dormant for several years but the patient is still ***contagious***!

The only people that need to know HIV status are care providers and sexual partners

8-10 years is the average time for an HIV+ patient to develop AIDS but this can vary and be much longer with treatment.

Progression is in this order:

* Acute retroviral syndrome
* Early infection
* Early symptomatic disease
* AIDS

It is safe to care for HIV/AIDS patient by using standard precautions.

Hispanics have the highest prevalence of HIV/AIDS

The fastest growing population with AIDS is women and children

5-10% of TOTAL AIDS cases are in ages 55+

10-15% are considered ***rapid progressors***

CHILDREN with HIV can be contracted by:

* In utero with an HIV + mother
* During birth from and HIV + mother
* Breast feeding from an HIV+ mother
* HIV contaminated blood transfusion

Although infants of HIV infected mothers may test positive for antibodies not all infants are infected

Activated macrophages and monocytes produce neopterin in the presence of inflammation.

Anergic is the term used to describe an immunosuppressed inability to react to a skin test.

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| HIV | AIDS |
| First test is ***ELISA***  If + then another ***ELISA***  If + the a ***Western Blot***  (If patient does not want to be tested or wants to test anonymously, they can use a home test called ***OraQuick***) | +HIV antibody test |
| During seroconversion the viral count is low with a short term drop in CD4 lymphocytes | Increased viral load |
| ***Reverse transcriptase*** allows the RNA of the retrovirus to be changed to DNA and incorporated into the patients own genetic material | CD4 lymphocyte count below 200 |
| EARLY signs of HIV   * Weight loss * Sore throat * Dyspnea | History of opportunistic disease *(P. Jirovici)* |
| HIV2 compared to HIV1…HIV2:   * Lower mortality risk in older adult * Less virulent * Immunodeficiency is slower * May be a long term ***nonprogressor*** | Kaposi’s sarcoma (reddish purplish lesions on the skin) |
|  | AIDS Wasting Syndrome   * Loss of 10% body mass * Diarrhea for 30 days or more |

NUTRITION:

* Refer to dietitian (multidisciplinary approach is best)
* GOAL is to maintain weight
* High protein high calorie diet
* Nutritional drink supplements
* Eat several small meals during the day
* Resistant weight training and testosterone to increase lean body mass
* Potassium to support weight gain
* Bananas, cooked fruits and vegetable and fruit nectars for those with diarrhea

Good nutrition, exercise and stress reduction improve immune function! If a patient shows signs of depression for 2 weeks encourage them to get mental health treatment.

MEDICATIONS:

* ART (Anti-Retroviral Therapy) even when asymptomatic is essential to successful treatment
* Medication cocktails are not as successful and one single strong ART medication
* Medications are the most expensive part of HIV/AIDS treatment and over the course of the HIV + persons life care can cost millions.