Preventive Medicine Update

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What we will talk about....

• Understand post-exposure prophylaxis for bacterial, viral, and common blood borne pathogens
• Understand the latest USPSTF recommendations—4 B recommendations now qualify for first-dollar insurance coverage
  – 5 D recommendations recommend against these interventions

What we will talk about

• Understand the new cervical screening Guidelines from ACOG
• Understand Immunization update
  • Adults with chronic disease

Modes of transmission

airborne

• Measles, TB, Varicella Zoster (Both varicella and herpes Zoster)

Modes of transmission

Bites

• Rabies
• Tetanus

Modes of transmission

Blood borne

• Hep. B
• Hep. C
• HIV
Contact

- Varicella zoster (herpes zoster)

Droplet

- Anthrax
- Diphtheria
- Influenza
- Invasive group A streptococcal disease
- Invasive meningococcal disease
- Pertussis
- Plague

Fecal-oral

- Hep A

Post-exposure prophylaxis regimens

Bacterial

- Tetanus—tetanus prone injury
  - With complete immunization greater than or equal to 10 years
  - Minor clean wound
  - Greater than or equal to 5 years for puncture wounds or dirty wounds
  - Tetanus toxoid containing vaccine (Td, Tdap, TT)
  - Single dose tetanus immune globulin (250 units IM)

HEP B

- SOURCE PATIENT HEP B SURFACE ANTIGEN +
  - UNVACCINATED—SINGLE DOSE Hep B 0.06 ml/kg IM w/in 24 hours then vaccinate
  - Vaccinated inadequate response
    - SINGLE DOSE Hep B 0.06 ml/kg IM w/in 24 hours then vaccinate
    - Adequate vaccination ----none
### Hep. C
- Source: Anti-HEP C + w/detectable Hep C virus
  - None

### HIV
- Source: + HIV antibodies by Immunosorbent assay confirmed by western blot
  - Low risk—w/in 72 hours for 4 weeks
    - Tenofovir (300mg qd) with emtricitabine (Emtriva 200mg qd)
    - Combo (Truvada 300/200mg qd)
  - Or
    - Zidovudine (Retrovir 300mg BID) w/ Lamivudine (Epivir 150mg BID)
    - Combo Combivir (300/150mg BID)

### HIV- High risk
- w/in 72 hrs. of exposure for 4 weeks
  - Tenofovir (300mg qd) with emtricitabine (200mg qd)
  - Or
    - Zidovudine (300mg BID) w/ Lamivudine (150mg BID) plus Lopinavir/ritonavir (Kaletra 400/100mg BID)
    - Or
    - Atazanavir (Reyataz 400mg qd)

### Invasive group A Strep ds.
- Infectious from source from 7 days before onset to 24 hours after antibiotics
- HH contacts should be treated
- Cipro 500mg 1 dose orally
- Azithromycin 1 dose 500mg orally
- Rocephin 250mg 1 dose IM
- Rifampin 600mg orally BID for 2 days
- *** Treat ASAP but win 14 days of exposure

### Pertussis
- Source infectious w/in 21 days onset cough
- Treat ALL close contacts regardless of vaccine
- Azithromycin 500mg day 1 then 250mg daily for 4 days
- Biaxin 500mg orally BID for 10 days
- Erythromycin 500mg QID for 14 days
- Bactrim DS 160/800mg orally BID 7-14 days

### USPSTF 4 B RECOMMENDATIONS
- ENCOURAGE VIT D SUPPLEMENTATION & REGULAR EXERCISE TO PREVENT FALLS IN ELDERLY
- SCREEN FOR OBESITY, OFFER INTENSIVE BEHAVIORAL INTERVENTIONS BMI OVER 30
- COUNSEL FAIRSKINNED PATIENTS LIMIT SUN EXPOSURE
- SCREEN FOR INTIMATE PARTNER VIOLENCE
USPSTF HEP C SCREENING

• One time screening for baby boomers (born between 1945-1965) for Hepatitis C
• Blood not universally screened before 1992
• Baby Boomers have prevalence of infection 3-4%

USPSTF RECOMMEND AGAINST

• Screening for ovarian or prostate CA
• HRT in postmenopausal women to prevent chronic conditions
• Screening with resting or exercise EKG for prediction of CAD in Asymptomatic adults

ACOG cervical screening guidelines

• Don’t start screening till age 21****
• Women 21-29 Cytology ONLY every 3 years
• At 30-65 co-test every 5yrs both Cytology + HPV
• After age 65– previous tests negative-no screenings
• Women history CIN2, 3, adenocarcinoma continue screening at 65yrs.

ACOG HYSTERECTOMY

• CERVIX REMOVED no HX CIN2 or higher-no testing
• High grade lesions before Hysterectomy – continue testing

Immunization update: Adults with chronic disease

• Influenza vaccine is universally recommended
• For those with HEART DISEASE, PULMONARY DISEASE AND DIABETES
  – INACTIVATED ONLY- 1 dose 0.5ml IM or 0.1ml ID

Pneumococcal

• All adults greater than or = 65yrs
• Adults< 65yrs with Heart ds., pulmonary ds. Or Diabetes.
  – 1 dose at < 65 yrs., 1 additional dose at >65 or 5 yrs. from first dose
  – Dose 0.5 ml IM or SQ
Hep B
- All adults ≤ 60 years of age with Diabetes
- Consider > 60 years with diabetes
  - 3 doses 1ml 0.1.6 months

Tetanus
- Td/Tdap
  - All adults
  - Td every 10 years w/ 1 dose of Tdap regardless of interval since last Td
  - Dose 0.5 ml IM

Zoster
- All adults >= 60 yrs. of age
- FDA approved at 50 yrs. of age
- Dose 1 lifetime dose 0.65 ml SQ

References

References

Thank you
- ELIZABETH PENICK CLARK, D.O., MPH & TM
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