Influenza: To Treat or Not To Treat?


After the 2009 H1N1 pandemic, the predominant seasonal influenza A strain is H1N1.

### Antiviral agents:
- **Adamantanes class:** Amantadine, Rimantidine
  - Active only against influenza A
- **Neuroaminidase inhibitors class:** Oseltamivir (Tamiflu), Zanamivir (Relenza)
  - Active against influenza A and B

### Influenza patients at high risk for complications (eg. bacterial pneumonia):
- Age <5 years old (especially <2 years)
- Age ≤ 18 years old on long-term aspirin
- Age ≥ 65 years old
- American Indian or Alaska Native ethnicity
- Comorbidities
  - Chronic pulmonary disease
  - Cardiovascular disease (excluding hypertension)
  - Renal, hepatic, hematologic, metabolic disorders (including DM)
  - Neurologic and neurodevelopment conditions (including seizures)
- Immunosuppressed (HIV or on immunosuppressive meds)
- Morbid obesity (BMI ≥ 40 kg/m²)
- Pregnancy or within 2 weeks postpartum
- Residents of nursing homes or chronic-care facilities

### Recommendations:
1. Give antiviral tx ASAP for confirmed or suspected influenza who have severe, complicated, or progressive illness or who require hospitalization. *Observational study with >700 patients admitted with influenza showed that oseltamivir reduced mortality (hazard ratio=0.27) and earlier hospital discharge (hazard ratio=1.28)*

2. Give antiviral tx ASAP for outpatients with confirmed or suspected influenza who are at high risk for complications *(see list above)*. Use clinical judgment.

3. Give either oseltamivir or zanamivir because >99% influenza strains are sensitive. High levels of H1N1 resistance to amantadine and rimantidine.

4. Oseltamivir may be used for tx or chemoprophylaxis for infants <1 year old.

5. Consider giving antiviral tx for confirmed or suspected influenza WITHOUT risk factors for severe illness, if tx can be started ≤ 48 hours of illness onset. *Can reduce duration of uncomplicated influenza A and B illness by 1 day.*

6. Clinicians should monitor local antiviral resistance surveillance data because resistance patterns may change over time.

http://AcademicLifeInEM.blogspot.com