Malaria Chemoprophylaxis Protocol in a Community Pharmacy Travel Immunization Clinic

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Disclosures
• Haley M. Klassing declares no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria.

Learning Objectives
• Review travel immunization protocol development
• Recommend appropriate immunizations and malaria chemoprophylaxis for patients

Which of the following is NOT true about atovaquone/proguanil?
A. Low resistance patterns
B. Can screen patients via consent form
C. Dosed 1-2 days before travel and 1 week after travel
D. Once weekly dosing
**Balls Food Stores**
- Hen House and Price Chopper
- 20 pharmacies
- Kansas City metropolitan area
- 3 community residency sites

**Programs/Services**
- Disease state management program
- Medication therapy management
- Health screenings
- Adherence tools:
  - Medication synchronization
  - Bubble packaging and multi-med dose packaging
- Immunizations

**Protocol**
- Resident initiative
  - 2010
- Collaborating physician with local university hospital
- Only patients ≥ 18 years old
- Local referrals for pediatric patients
- Protocol updated annually
  - Resident project to review, update, and expand services
  - Protocol signed annually by collaborating physician and all pharmacists on protocol
- All pharmacists on protocol required to complete a yellow fever continuing education program through the CDC

**Travel Immunizations Offered**
- Hepatitis A & B
- Herpes Zoster
- Human Papillomavirus
- Japanese Encephalitis
- Measles/Mumps/Rubella
- Meningococcal
- Poliovirus
- Rabies
- Tetanus/Diphtheria/Pertussis
- Tuberculosis
- Typhoid Fever (IM and Oral)
- Varicella
- Yellow Fever

**Patient Consultation**
- Destination
  - Urban
  - Rural
- Dates of travel
- Layovers or excursions
- Activities
  - Hiking, camping, etc.
  - Interaction with wildlife
  - Interaction with locals

**Our Process**
- Travel Immunization Resources
  - CDC Yellow Book
  - Immunization Action Coalition
- Consent forms used as screening tools
  - Safety and necessity
    - E.g., >60 years old needing yellow fever immunization
- Provide price quotes for needed agents
Malaria Chemoprophylaxis

- New to protocol in 2015
- 2 agents:
  - Atovaquone/Proguanil
  - Mefloquine
- Screen for safety and need with consent form
- Verify local resistance patterns will not affect agent selection
- Patient consultation for ideal agent

Agent Selection

Atovaquone/Proguanil
- Daily dosing
- Start 1-2 days prior, continue 1 week after
- Side effect profile
- Fewer contraindications
- No known resistance
- Higher cost

Mefloquine
- Once weekly dosing
- Start 1 week prior, continue 4 weeks after
- Side effect profile
- More contraindications
- Some known resistance
- Lower cost

Patient Counseling

- Review immunizations and indications
  - Immunizations schedules if needed
  - Directions, side effects if warranted
- Review non-travel immunizations indicated
- Review non-immunization travel needs
  - Sunscreen, bug spray
  - Water sanitization

Getting Started At Your Practice Site

- Review state immunization and collaborative practice laws
- Identify a protocol/collaborating physician
- Develop consent forms
- Contact state health department to discuss yellow fever vaccine certification requirements
- Market/advertise the travel clinic service
- Enhance your pharmacy’s clinical services portfolio!

Key Points

- Immunization resource within the community
- All immunizations screened for indication and safety
- Enhance services provided in protocol by adding malaria chemoprophylaxis agents

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