**Study Guide for Common Infectious Conditions treated in Outpatient Primary Care Setting**

**NURS 6306 Pharmacology for Advanced Nursing Practice**

**Learner Objectives:**

1. **Recognize the signs and symptoms of key infectious diseases**
2. **Identify goals of therapy for these infectious diseases**
3. **Develop empiric treatment for treating infectious disease**
4. **Identify diagnostic testing to help guide the clinician’s differential diagnosis**
5. **Identify the first line pharmacological agents to treat infection**
6. **Differentiate the lifespan considerations when prescribing medications**
7. **Develop patient education plan for pts with infection**
8. **Discuss the implications for vaccinations and infection.**
9. **Identify the patient who has viral infection vs bacterial infection**
10. **Identify the diagnostic testing (laboratory and imaging) tests that should be performed to assist in both diagnosis and management of patient with infection.**
11. **Identify pain as it applies to different infections and how NP can manage it.**
12. **Identify any black box (BB) warnings with anti infectives prescribed**
13. **13. Practice correct method to write out prescriptions for adult and for pediatric patient.**

Use your pharmacology textbooks (Woo) and clinical guidelines (Cash) to complete the following table. Use first line drugs. Use drugs for outpatient family clinic setting. There will be occasional IM drugs but they will be the exception. Note there are plenty of other dx per system, but these are most common *infectious* conditions. This is one way to learn your meds per infectious process. Practice writing out prescriptions in the practice script provided. Use one for adult and one for pediatric patient. Use different ages/weights for pediatric prescriptions.

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| Infectious Disease | S/S typical clinical presentation | Causative  Organism | Diagnostic Testing | Anti-Infective  Prescribed | Pediatric  Considerations | Geriatric Considerations | Pregnancy Considerations | Patient Education | Vaccination  Considerations | BB |
| HEENT DX |  |  |  |  |  |  |  |  |  |  |
| Acute OM | Otalgia irritability, decreased hearing, anorexia, vomiting, fever | Streptococcus pneumonia, Haemophilus influenzae,  Moraxella catarrhails | Otoscopy, pneumatic otoscopy, tympanometry, acoustic reflectometry, bacterial culture | Amoxicillin or amoxicillin/clavulanate | Immediate pain control as ear pain is cardinal to children | Antibiotic caution if renal and hepatic impairment | May use during pregnancy and while breastfeeding | Most important aspects of treatment is pain control with Tylenol or ibuprofen | None | None |
| Allergic Rhinnitis | Nasal congestion, puritus,rhinorrhea, sneezing, itchy nose/palate/eyes, eye redness, puffiness, watery discharge, fatigue, irritability | Environmental allergens (e.g. dander, dust mite, mold, potten, and tobacco smoke) | Therapeutic trial of antihistamine or internasal corticosteroid, allergen skin-prick testing, in vitro specific IgE determination |  |  |  |  | Allergen avoidance |  |  |
| URI – cold | Runny/blocked nose, sneezing, sore throat, cough, headache, malaise, fever, sore throat, rhinitis, pleuritic pain, otalgia, sinusitis, altered consciousness, photophobia, hypotonia, neck stiffness, seizures, tachycarida |  |  |  |  |  |  |  |  |  |
| Epiglottis | Rapidly progressing sore throat with dysphagia, drooling, difficulty in breathing, markedly decreased oral intake, and difficulty in controlling secretions |  | Laryngoscopy, lateral neck radiograph “thumbprint sign”, endoscopic, CBC may show leukocytosis with left shift, blood and epiglottis cultures to identify agent. |  |  |  |  |  |  |  |
| Infectious MONO | Fever, fatigure, malaise, pharyngitis, cervical or gereralized lymphadenophathy, fever |  |  |  |  |  |  |  |  |  |
| Influenza |  |  |  |  |  |  |  |  |  |  |
| Otitis Externa | Ear pain, itching, fullness, with or without decreased hearing, tenderness over tragus, pinna, or both, ear canal manipulation is painful, auditory canal has variable degrees of diffuse edema, cervical lymphadenopathy may be present |  | Pneumatic otoscopy, tympanometry, ear culture, microsopy of exudate/ debris from ear canal, CT scan of the temporal bone with IV contrast, MRI of the brain and internal auditory canals (with and without gadolinium) |  |  |  |  |  |  |  |
| Peritonsilar Abcess |  |  |  |  |  |  |  |  |  |  |
| Tonsillitis | Pain on swallowing, fever, tonsillar exudate, sudden onset of sore throat, headache, abdominal pain, nausea and vomiting, presencse of cough or runny nose, tonsillar erythema, tonsillary enlargement, enlarged anterior cervical lymph nodes |  | Thoat culture, rapid streptococcal antigen test, serologic testing for streptococci, WBC count and differential, heterophile antibodies, vaginal and cervical, or penile, and rectal cultures, HIV viral load assay, lateral cervical view x-ray, exposed for soft tissue |  |  |  |  |  |  |  |
| Strep Pharyngitis |  |  |  |  |  |  |  |  |  |  |
| Pharyngitis | Sore throat, fever, headache, nausea, vomiting, abdominal pain (children), rhinorrhea, nasal congestion, cough in viral and absent in bacterial pharyngitis |  |  |  |  |  |  |  |  |  |
| Sinusitis |  |  |  |  |  |  |  |  |  |  |
| Blepharitis |  |  |  |  |  |  |  |  |  |  |
| Chalzion |  |  |  |  |  |  |  |  |  |  |
| Viral Conjunctivitis |  |  |  |  |  |  |  |  |  |  |
| Allergic Conjunctivitis |  |  |  |  |  |  |  |  |  |  |
| Bacterial Conjunctivitis |  |  |  |  |  |  |  |  |  |  |
| Corneal Abrasion |  |  |  |  |  |  |  |  |  |  |
| Dacryostenosis |  |  |  |  |  |  |  |  |  |  |
| Neonatal conjunctivitis |  |  |  |  |  |  |  |  |  |  |
| Respiratory DX |  |  |  |  |  |  |  |  |  |  |
| Bronchitis |  |  |  |  |  |  |  |  |  |  |
| Asthma (mild) |  |  |  |  |  |  |  |  |  |  |
| Bronchiolitis |  |  |  |  |  |  |  |  |  |  |
| Croup |  |  |  |  |  |  |  |  |  |  |
| Pertusis |  |  |  |  |  |  |  |  |  |  |
| COPD |  |  |  |  |  |  |  |  |  |  |
| Pnuemonia - bacterial |  |  |  |  |  |  |  |  |  |  |
| Community A. Pnuemonia |  |  |  |  |  |  |  |  |  |  |
| Cough |  |  |  |  |  |  |  |  |  |  |
| Tuberculosis |  |  |  |  |  |  |  |  |  |  |
| Cardiac DX |  |  |  |  |  |  |  |  |  |  |
| Kawasaki Syndrome |  |  |  |  |  |  |  |  |  |  |
| Rheumatic Fever |  |  |  |  |  |  |  |  |  |  |
| GI DX |  |  |  |  |  |  |  |  |  |  |
| AGE |  |  |  |  |  |  |  |  |  |  |
| H Pylori infection |  |  |  |  |  |  |  |  |  |  |
| Peptic Ulcer Dz |  |  |  |  |  |  |  |  |  |  |
| Pinworms |  |  |  |  |  |  |  |  |  |  |
| Clostridium Diff |  |  |  |  |  |  |  |  |  |  |
| Travelers Diarrhea |  |  |  |  |  |  |  |  |  |  |
| GU DX |  |  |  |  |  |  |  |  |  |  |
| UTI - uncomplicated |  |  |  |  |  |  |  |  |  |  |
| Complicated UTI |  |  |  |  |  |  |  |  |  |  |
| Pylonephritis |  |  |  |  |  |  |  |  |  |  |
| Prostatitis |  |  |  |  |  |  |  |  |  |  |
| Post streptococcal glomerulonephritis |  |  |  |  |  |  |  |  |  |  |
| Urethritis |  |  |  |  |  |  |  |  |  |  |
| STI’s / Gyn |  |  |  |  |  |  |  |  |  |  |
| Bacterial vaginosis |  |  |  |  |  |  |  |  |  |  |
| Chlamydia |  |  |  |  |  |  |  |  |  |  |
| Genital Herpes |  |  |  |  |  |  |  |  |  |  |
| Gonorrhea |  |  |  |  |  |  |  |  |  |  |
| HPV |  |  |  |  |  |  |  |  |  |  |
| PID |  |  |  |  |  |  |  |  |  |  |
| Syphillis |  |  |  |  |  |  |  |  |  |  |
| Trichomoniasis |  |  |  |  |  |  |  |  |  |  |
| Vaginitis (candiasis) |  |  |  |  |  |  |  |  |  |  |
| Bartholin Cyst/abcess |  |  |  |  |  |  |  |  |  |  |
| Cervicitis |  |  |  |  |  |  |  |  |  |  |
| Dermatology |  |  |  |  |  |  |  |  |  |  |
| Cellulitis |  |  |  |  |  |  |  |  |  |  |
| Boils/staph infec |  |  |  |  |  |  |  |  |  |  |
| Diabetic foot infec |  |  |  |  |  |  |  |  |  |  |
| Scabies |  |  |  |  |  |  |  |  |  |  |
| Nits/Lice/Pediculosis |  |  |  |  |  |  |  |  |  |  |
| Acne |  |  |  |  |  |  |  |  |  |  |
| Burns |  |  |  |  |  |  |  |  |  |  |
| Cat scratch fever |  |  |  |  |  |  |  |  |  |  |
| Diaper dermatitis |  |  |  |  |  |  |  |  |  |  |
| Hand/foot/mouth |  |  |  |  |  |  |  |  |  |  |
| Bites - cat |  |  |  |  |  |  |  |  |  |  |
| Bite - dog |  |  |  |  |  |  |  |  |  |  |
| Bite - human |  |  |  |  |  |  |  |  |  |  |
| Herpes Simplex |  |  |  |  |  |  |  |  |  |  |
| Herpes Zoster |  |  |  |  |  |  |  |  |  |  |
| Dermatophytosis |  |  |  |  |  |  |  |  |  |  |
| Impetigo |  |  |  |  |  |  |  |  |  |  |
| Lyme Dz |  |  |  |  |  |  |  |  |  |  |
| Rocky Mountain Spotted Fever |  |  |  |  |  |  |  |  |  |  |
| Tinea Capitus |  |  |  |  |  |  |  |  |  |  |
| Tinea Alba/Versicolor |  |  |  |  |  |  |  |  |  |  |
| Tinea Corporis |  |  |  |  |  |  |  |  |  |  |
| Tinea Pedis |  |  |  |  |  |  |  |  |  |  |
| Onycomycosis |  |  |  |  |  |  |  |  |  |  |
| Tinea cruris |  |  |  |  |  |  |  |  |  |  |
| Paronychia |  |  |  |  |  |  |  |  |  |  |
| Roseola |  |  |  |  |  |  |  |  |  |  |
| Insect Bites |  |  |  |  |  |  |  |  |  |  |
| RMSF |  |  |  |  |  |  |  |  |  |  |
| Systemic Infections |  |  |  |  |  |  |  |  |  |  |
| Bacterial Meningitis |  |  |  |  |  |  |  |  |  |  |
| Mumps |  |  |  |  |  |  |  |  |  |  |
| Varicella |  |  |  |  |  |  |  |  |  |  |
| Scarlet Fever |  |  |  |  |  |  |  |  |  |  |
| Fifth Dz |  |  |  |  |  |  |  |  |  |  |
| Roseola |  |  |  |  |  |  |  |  |  |  |
| Rubeola |  |  |  |  |  |  |  |  |  |  |
| West Nile Virus |  |  |  |  |  |  |  |  |  |  |
| Zika Virus Infection |  |  |  |  |  |  |  |  |  |  |