Common Acute Pediatric Illnesses

SYMPTOMS

Cough

1. A twelve-year-old child presents with a three-day history of cough, chest pain and fever of 101°F. Exam reveals diffuse bilateral crackles. A CXR shows diffuse interstitial markings. Discuss your differential diagnosis. How would you evaluate and manage this patient?

2. A six-week-old afebrile infant with a history of conjunctivitis presents with a staccato cough and tachypnea. Exam reveals bilateral crackles and mild reactions. A CXR shows patchy densities and hyperinflation. Discuss your differential diagnosis. How would you evaluate and manage this patient?

3. A six-month-old former 28-week premature infant presents with URI symptoms, cough, and poor oral intake. She is tachypneic with retractions and diffuse crackles and wheezes. A CXR shows bilateral perihilar streakiness and hyperinflation. Discuss your differential diagnosis. How would you evaluate and manage this patient?

4. A four-year-old presents with a cough for 3-4 days following a URI and fever to 104°F for twenty-four hours. Exam reveals crackles on the right. What would you expect the CXR to show? Discuss your differential diagnosis. How would you evaluate and manage this patient?

5. A two-year-old child presents with abrupt onset of cough, wheeze and tachypnea. He is afebrile. Exam reveals diminished air exchange and wheezing on the right. What is the most likely cause of this patient’s findings?

6. A one-month-old infant with a one-week history of cough and congestion now presents with paroxysms of cough associated with blue spells. He is afebrile with a normal examination between paroxysms of coughing. A CXR is normal. Discuss your differential diagnosis. How would you evaluate and manage this patient?

7. A seven-year-old presents with two weeks of cough and nasal congestion following a URI. The cough is worse at night and frequently awakens him. His mother says he has also developed "bad breath". What are your differential diagnoses and how would you manage this patient?

8. An eleven-year-old presents with frequent episodes of a coughing illnesses often triggered by colds. What is the most likely diagnosis? How would you manage this patient?

9. A sixteen year old presents with cough and shortness of breath following exertion. This is affecting his ability to play soccer. What is the most likely diagnosis? How would you manage this patient?

10. A previously healthy fully immunized two-year old boy presents to the emergency room at midnight following the sudden onset of a barky cough and increased work of breathing. What is the most likely diagnosis? How would you manage this patient?
Fever

1. A two-week-old presents with a fever of 101°F. Her exam is unremarkable. What are your concerns? How would you evaluate and manage this patient?

2. A seven-month-old girl presents with a fever to 103°F, mild irritability, and poor feeding. What are your concerns? How would you evaluate and manage this patient?

3. An eight-year-old presents with fevers of 102°F and headache. He has nuchal rigidity. What are your concerns? How would you evaluate and manage this patient?

4. A six-month-old has had a high fever for three days and an otherwise normal exam. On day four he breaks out in an erythematous macular-papular rash shortly after his fever resolves. What is the most likely diagnosis? How would you manage this patient?

5. A seven-year-old girl presents with a history of cough, coryza, conjunctivitis and fever to 103°F now has a macular rash that starts on her face and neck that is spreading to the rest of her body. What are your concerns? How would you evaluate and manage this patient?

6. A 4-year-old boy presents with a five-day history of fever and rash. He has received acetaminophen and amoxicillin without improvement. He is very irritable with a temperature of 103.6°F, bilateral non-purulent conjunctivitis, enlarged cervical nodes, puffy hands, and a maculopapular rash. How would you evaluate and manage this patient?

Sore Throat

1. A six-year-old presents with fever, headache, sore throat, and raised, rough, red rash in his axillae and groin. What is the most likely diagnosis? How would you evaluate and manage this patient?

2. A nine-year-old presents with a sore throat and fever of 101°F. He has small minimally tender anterior cervical lymph nodes and a red pharynx. What is your differential diagnosis? How would you evaluate and manage this patient?

3. A fourteen-year-old female presents with fever, headache and sore throat. She has exudative pharyngitis, enlarged posterior cervical lymph nodes, and splenomegaly. What is your differential diagnosis? How would you evaluate and manage this patient?

Otalgia

1. An eighteen-month-old male with a four-day history of URI symptoms presents with fever, irritability, and pulling at his left ear for the past 24 hours. What is your differential diagnosis? How would you evaluate and manage this patient?
2. A two-year-old has had six episodes of otitis media (which you have diagnosed and treated) over the past seven months. What are the risk factors for recurrent otitis media? What treatment options are available?

3. A fifteen-month-old was treated for acute otitis media three weeks ago. Today his tympanic membrane looks dull, gray, and has poor movement. How would you manage this patient?

**Nasal discharge**

1. A three-year-old presents with runny nose, mild irritability, with temperatures of 99°F over the past forty-eight hours. Other than clear nasal discharge, his examination is unremarkable. How would you evaluate and manage this child?

2. An eleven-year-old has springtime nasal congestion and itchy eyes which have become more of a problem over the last three years. What is your differential diagnosis? How would you evaluate and manage this child?

3. A sixteen-month-old presents with a history of nasal discharge for the past week presents with a swollen, red eye and fevers to 103°F. What are you most concerned about? How would you evaluate this patient?

**Abdominal Pain**

1. A ten-month-old presents with bouts of irritability during which he draws up his legs and appears to be in pain. His stools are bloody and he appears lethargic. What is your differential diagnosis? How would you evaluate this patient?

2. A three-year-old has had forty-eight hours of fever, vomiting, and diarrhea. Describe your approach to the differential diagnosis. Discuss management principles based on diagnosis and physical exam findings.

3. A fourteen-year-old male presents with six hours of severe abdominal pain that is now more right sided. He has had no diarrhea. How would you evaluate this patient? How would your approach differ if the patient were a girl?

4. An eight-year-old female presents with abdominal pain, pruritic lesions on the buttocks and lower extremities, and joint swelling. What is your differential diagnosis? How would you evaluate this patient?

5. The mother of a fourteen-month-old baby's feels an abdominal mass while giving her son a bath. What concerns do you have? How would you evaluate this child?

6. The parents of a four-month old boy feel that he is constipated because he squirms and cries while passing stools. How would you evaluate the patient and counsel the parents?

**Diarrhea**
1. A one-year-old presents with vomiting and diarrhea for three to four days. How would you evaluate and manage this patient?

2. Several children in a daycare center have presented with watery, foul-smelling stools, flatulence and anorexia. How would you evaluate and manage this situation?

3. A six-year-old boy presents with pallor and irritability following a week of abdominal pain and blood tinged diarrheal stools. What would you be most concerned about? How would you evaluate and manage this patient?

**Constipation**

1. A six-year-old presents with chronic abdominal pain of six weeks’ duration and episodic fecal soiling of his underwear. How would you evaluate this patient?

**Rashes**

1. A four-year-old girl presents to your clinic with a diffuse pruritic rash. She has numerous evanescent raised, erythematous lesions with serpiginous borders and blanched centers. What is the appropriate diagnosis and treatment of this condition?

2. A four-year-old presents with a dry, erythematous, itchy rash in the antecubital and popliteal fossae. Discuss the differential diagnosis and appropriate therapy.

3. An eighteen-month-old presents with many golden-yellow, crusted-weeping lesions around the nose which seem to be spreading according to the child's parents. Discuss the likely diagnosis and management considerations.

4. A five-year-old boy presents following a dog bite on the hand. How would you care for this patient?

5. A fifteen-year old boy is concerned that his acne is worsening. He has multiple open and closed comedones scattered over his face. How would you counsel and treat this patient?

**Limb/joint pain**

1. A 15-year-old girl badly twisted her ankle while playing basketball earlier in the day. What advice would you give her?

2. An athletic 12-year-old boy complains of pain just below the knee when running and playing soccer. Discuss the possible causes and an approach to the problem.

3. A 14-month-old girl presents with the sudden onset of fever and refusal to walk. Discuss your differential diagnosis and evaluation of this child.

4. A five-year-old presents with a swollen, red knee. Discuss your differential diagnosis and evaluation of this child.
5. A four-year-old presents with a one-week history of multiple joint pain and swelling. Discuss your differential diagnosis and evaluation of this child.

**CNS problems**

1. A fourteen-year-old girl presents to the ER with a right-sided headache, which she describes as "the worst headache I've ever had." She reports seeing "flashing lights" prior to the onset of the headache. Discuss your initial assessment and treatment of this patient.

2. A nine-year-old boy is sent to the school nurse several times a week for headaches. His mother brings him to the pediatrician for evaluation. Discuss your assessment of this child.

3. A sixteen year old with a history of seizures wants to know if he can get a driver's license. What advice would you give him?

**PHYSICAL FINDINGS**

**Heart murmur**

1. On routine physical exam, a five-year-old girl is found to have a heart murmur. How would you distinguish between an innocent and a pathologic murmur?

**Lymphadenopathy**

1. A ten-month-old girl presents with recurrent pneumonia and failure to thrive. She has thrush and numerous axillary and inguinal nodes. How would you evaluate this patient?

2. A six-year-old, previously healthy, girl presents with a 3 by 5 cm, tender anterior cervical lymph node. What historical and physical examination information is essential to develop an appropriate differential diagnosis?

**Splenomegaly**

1. A four-year-old boy presents with fevers and malaise for a week. He has petechiae, palpable axillary lymph nodes and his spleen is palpated 3 cm below the left cost margin. What is your differential diagnosis? How would you evaluate this patient?

2. A ten-year-old boy with sickle cell disease presents with the sudden onset of pallor and has an enlarged spleen. What would you be most concerned about?

**Hepatomegaly**

1. A four-year-old child presents with nausea, vomiting, fever and fatigue. On physical exam he has scleral icterus and a tender liver edge palpable 3 cm below the costal margin. Discuss your plan for evaluating this patient.
Possible impaired vision

1. The parents of a four month old are concerned because her eyes cross. What are your concerns? How would you evaluate this patient?

2. You are unable to see a red reflex when examining the eyes of a newborn. Discuss the causes and your approach to the patient.

Impaired hearing

1. The parents of a two-year-old boy are concerned that he is not talking. How would you evaluate the patient and counsel the parents?

Bleeding

1. A previously healthy two-year-old presents with persistent nosebleeds over the past two days and petechiae on her extremities. What is your differential diagnosis? How would you evaluate this patient?

2. On a routine health supervision visit, a 1-year-old boy is found to have an Hgb 8.8, HCT 27%, and a MCV of 68. How would you manage this patient?

Hematuria/Proteinuria

1. A ten-year-old boy complains of "dark urine" and a headache. Discuss your diagnostic approach to this patient.

2. A four-year-old boy is brought to the pediatrician because of "puffy eyes" and sudden weight gain. What is your differential diagnosis and how would you evaluate this patient?

3. A two-year-old girl evaluated for a febrile illness has 1+ ketones and 1+ protein in her urine. Assuming that the remainder of the urinalysis is normal, discuss your assessment.