

Clinical Problems
Curriculum Supplement

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Introduction:

These clinical problems translate the objectives and competencies of the curriculum into real life patient encounters which students can expect in a general pediatric clerkship. The brief clinical vignettes represent typical presenting complaints encountered in pediatric practice and parallel the content areas of the pediatric curriculum. These have been kept brief to serve as "triggers", giving only enough detail for further investigation or discussion. Most of the problems are designed to stimulate discussion of appropriate differential diagnoses and initial evaluation or management. Clerkship directors can supplement them with longer format cases, if needed.

This clinical problem set can be used in a variety of ways. A clerkship director may use only a few of these problems or the entire set. Faculty can use them to stimulate group discussion about specific curricular objectives. Selected problems or the entire set can be used when developing a program of student self-directed learning. The method of student self-directed learning can vary from a clinical problem-solving approach for the entire clerkship, to self-directed learning through the use of clinical cases from selected sections. The problems can also be used to supplement the student's clinical experience. Some programs may lack the clinical opportunities needed to teach certain curricular objectives.

The current format of clinical problems has not been developed for use in a final clerkship evaluation. In order to use these clinical problems for examination purposes the clerkship director will need to expand the clinical scenario, define the questions further and develop a key of acceptable answers for different grading levels.

Health Supervision

1. You are evaluating a two day old infant prior to discharge from the nursery. What advice would you give the parents regarding feeding, sleeping, and general care of their new baby? When should they expect to see you for "routine care"?
2. A healthy ten month old is starting to cruise and pull himself up on furniture. What advice would you give the parents to make the house safe?
3. A four month old infant develops A fever of 102 F and fussiness six hours following her second OPV, DTP and HIB immunization. Parents are concerned about whether this child should receive any further immunizations.
4. A fifteen month old is seen for "routine care". He is due to receive his MMR. On exam he is found to have a temperature of 99 F and a runny nose. Should he still receive his immunization? Explain your answer.
5. A six month old child is known to be immunosuppressed. How should her immunization schedule be modified?

6. A six month old infant develops fever and then a generalized seizure eight hours following DTP and HIB immunizations. What are the considerations for modifying future immunizations?
7. In the nursery, parents are informed that blood needs to be drawn from their newborn for "screening tests". Describe to the parents what these are.
8. A local health care agency asks you the most appropriate time to screen children for anemia. Please discuss your answer.
9. The parents of a one year old are considering whether to have their child attend a day care center. They would like to discuss the risks and benefits with you.
10. A five year old boy is seen in your clinic for a pre-kindergarten exam. What is involved in this evaluation? it. A four year old immigrant presents with no immunization record. How would you find his immunization record and what resources are available to you to help plan an immunization schedule?

Behavioral Problems

1. A three year old is to start nursery school but is not yet toilet trained. How would you counsel his parents?
2. A sixteen month old has had several episodes of breath-holding and cyanosis that leave him limp for a few seconds. They occur when he is angry or upset. What is your approach to this problem?
3. A one month old baby is not yet sleeping through the night. Parents are surprised at this. What would you tell them?
4. A five year old boy is still wetting the bed at night. Discuss your approach to this.
5. A two year old "refuses to eat". What is important in your evaluation?
6. A fifteen year old boy who had been an honor student is reported for truancy. He seems withdrawn from his parent and friends. He quits the soccer team after a fight with his

coach. Describe your approach.

7. The parents of a seven year old boy receive a call from the child's teacher because he is having difficulty following directions and behaving in class. She feels he has a short attention span. How should you proceed?
8. A fourteen year old girl runs away from home for two days after a fight with her parents. Discuss a reasonable initial approach. Who would you call for help?
9. A seven year old girl complains of a stomach ache several times a week, often keeping her home from school. It is not associated with vomiting, diarrhea, or fever. How would you approach this?
10. A ten month old who used to go contentedly to the baby-sitter now cries when her mother leaves. What would you tell her mother?
11. After being hospitalized for pneumonia a three year old girl begins to wet her pants, talk "baby talk", and ask for the bottle. Her parents are quite distressed and seek your advice. How would you counsel them?
12. The parents of a two year old ask how to control their son's temper tantrums. Describe how you would address this situation.

Nutrition

1. The mother of a newborn asks you if it's important for her to breast feed her baby. At twenty-four hours post delivery, she doesn't feel she's making enough milk. Discuss your advice to this mom including differences between formula and breast feeding.
2. The mother of a six month old needs to return to full-time work. She has enjoyed breast feeding, but is ready to switch to formula. She asks if this is okay for her baby. How would you counsel her?
3. A two month old infant is seen in your office for routine follow-up. Mom asks about the need for vitamin supplements. Discuss when and what supplements should be considered.
4. A four month old infant has been exclusively breast fed. The parents would like advice regarding when to proceed with solid foods. Explain your answer. What if the infant had been formula fed?

5. A two year old girl eats a limited variety of food. What is your advice to her parents?
6. A five year old boy has been seen in your office for a pre-kindergarten physical. Although previously at the 50th percentile for height and weight, he is now at the 95th percentile for weight and has remained at the 50th percentile for height. How would you counsel him and his family?
7. A thirteen year old female wants to "go on a diet" and asks your advice. How would you evaluate and counsel her?
8. A sixteen year old female is brought to your office by her mom because of a 25 pound weight loss over the last six months. Describe the important aspects of the history and physical exam and how these relate to your differential diagnosis.
9. The health conscious parents of a one year old child ask if they can switch her to nonfat milk as they are concerned about obesity and heart disease. How would you counsel them?
10. A two month old is not growing or gaining weight. The baby is taking four ounces of formula every three or four hours. How would you evaluate whether this intake is adequate?
11. A one year old child is still drinking formula. Parents ask if they can transfer from formula to cow's milk. How would you counsel them?
12. Discuss your approach to fluoride supplement in your community?

Issues Unique to the Newborn

1. A ten day old infant presents to your clinic because of 'yellow skin color. Pregnancy and neonatal course were uncomplicated. The baby was discharged to home on the first day of life. Describe your approach to this baby.
2. The mother of a four week old infant phones at 10:00 p.m. and says her baby has had a temperature all day and that the fever is now 103 F. Describe important points of history, physical exam, diagnostic considerations and basic management principles.

3. You are called to the nursery to see a two day old infant who has developed duskiness and tachypnea over the past four hours. Describe your initial approach and differential diagnostic considerations.
4. You are called to the nursery to evaluate a two hour old infant who has developed respiratory distress. Describe your approach and differential diagnostic considerations.
5. A full-term infant is noted to be jaundiced at 48 hours of age in the nursery. Total bilirubin is 13 mg/dl. What tests would be helpful to further evaluate this baby? What is your differential diagnosis?
6. A newborn infant is noted to be irritable and jittery, vomits, has diarrhea, and develops seizure activity. What would be of most concern to you?
7. The parents of a healthy newborn are distressed that he will be receiving a Vitamin K shot. They also request that nothing be put in his eyes. Describe your approach to this family's concerns.
8. A baby is found to have a clavicular fracture after birth. The exam reveals crepitus and irregularity over the fracture, movement of the arm is painful, and the moro reflex is absent on that side. Describe your explanation of the problem to the parents and your initial approach.
9. A baby has an APGAR score of 5 at one minute and 9 at five minutes. Describe what this means.
10. A full term 48 hour old baby is noted to have a generalized rash consisting of small yellow papules on an erythematous base, most prominent on the trunk. What is this and how should it be treated?
11. A 24 hour old infant has not passed a meconium stool. Discuss possible explanations.
12. A term newborn weighs 4800 grams. What complications might this infant experience?
13. A mother with no prenatal care and a history of known substance abuse has just delivered a baby. What special concerns do you have about caring for this infant?

14. A full term newborn weighs 2200 grams. What factors might have contributed to this infant's small size?
15. Describe how you would determine SGA or prematurity using a Dubowitz exam.
16. A baby presents at two months of age because the parents are concerned that he is "floppy". Describe your approach to this infant and discuss the differential diagnosis.

Growth and Development

1. A three month old full term infant has gained 15 ounces (420 gm) since birth. Her height velocity is normal. Her parents want to know if this is adequate. What would you tell them?
2. A fifteen month old has no recognizable words. Parents are concerned and wonder if he needs speech therapy. How would you respond?
3. An infant rolled over at four months and sat with assistance at six months, but at one year he is unable to stand or sit alone. His parents are quite concerned and ask if this is normal. Explain your answer.
4. The parents of a nine month old infant are concerned because she is not sitting. She has mildly increased tone and scissoring of her lower extremities. She can grasp a rattle, but does not reach for objects. She coos and has a social smile. What would you tell her parents?
5. A six month old has a head circumference in the 50th percentile, height in the fifth percentile, and weight in the fifth percentile (baby was at 50th percentile for all measurements at three months). Is further evaluation warranted at this time?
6. A fourteen month old ex-preemie is not walking. He sat alone at nine months and says two to three words. He can stand alone. Discuss your concerns.
7. The mother of a ten year old girl wants to know when she might start her periods. What would you tell her?
8. A twelve year old boy complains that he is the shortest person in his class. He is 54 inches. He wants to know if he should take a "growing medicine". How would you

respond to his question?

9. The parents-of an eight year old girl want to know how tall she will be. What will you tell them?
10. A nine month old boy is seen in your office who is to pull to a standing position, crawl, grasp objects with thumb and forefinger, and says --"Mama and "Dada". His parents are concerned that he's not as big as the nine month old next door. How will you respond to their concerns?

Issues Unique to the Adolescent

1. A fourteen year old female is seen in the clinic with her mother for acute onset of dysuria and urinary frequency. Describe your approach to this patient including appropriate interviewing techniques, physical exam, diagnostic studies, initial management, and advice to her parents.
2. A fifteen year old boy is brought to your clinic by his parents after he threatened to "take a bunch of pills". He seems depressed in affect, and on initial evaluation is clinically stable. Explain your approach to this young man, including important history, physical exam findings, diagnostic studies, management principles and advice to his parents.
3. A seventeen year old female sees you for a pre-college physical. Describe your approach to history, physical exam, and guidance/counseling.
4. A sixteen year old boy presents to your clinic with polyuria and weight loss over the past three weeks. Describe the important aspects of the history and physical exam, diagnostic considerations, differential diagnosis, and basic management principles.
5. The mother of a thirteen year old female expresses concern that her daughter has not yet had the onset of menses. How would you counsel her?
6. A sixteen year old male presents with fever, fatigue, and sore throat for four days. Discuss what aspects of physical exam and lab data will help establish a diagnosis.
7. A fourteen year old female well-known to your practice makes an appointment to see you alone regarding a desire for contraception. What advice would you give her? What are her rights to confidentiality? What are your responsibilities to inform her parents?

8. A seventeen year old female presents to Teen-OB clinic for prenatal care. What screening tests should be performed?
9. A fourteen year old male presents for a football sports physical. What are the important points to cover in the history and physical exam?
10. Late one Sunday night, a previously healthy fifteen year old male is brought to you by his parents after he returned home from a party confused and combative. Describe your approach to this clinical problem.

Medical Genetics/Congenital Malformations

1. A three year old girl presents for evaluation of recurrent pneumonia (five times in two years). As you proceed with the history, you learn she has also had chronic diarrhea. She is at the fifth percentile for height and weight. Develop a differential diagnoses based upon history and physical exam findings. What particular genetic disease must be considered? Construct a family pedigree if her aunt (mother's sister) and cousin (mother's brother's child) have the same condition.
2. A newborn infant of a family you have known for years is noted to have prominent epicanthal folds, small ears, hypotonia, short, broad hands and feet, brachycephaly, and a heart murmur. Mom notes that the baby "looks different" from the other three siblings at birth. Explain your approach investigating this baby's medical condition. How would you discuss this problem with the parents?
3. The parents of a two year old boy with developmental delay report a history of mental retardation in several male members of their family. What diagnosis needs to be considered and what diagnostic screening would you use?
4. A newborn female is noted to have redundant neck skin and puffy hands. What diagnostic test would you perform and what additional abnormalities would you screen for?
5. The mother of a newborn tells you she has taken phenytoin throughout her pregnancy and wants to know what effect this may have on her baby. Discuss your answer.
6. You are asked to evaluate a baby in the nursery who is small for gestational age and

microcephalic. What questions would be important to ask the mother?

7. You are meeting with parents expecting their first child. They reveal that the mother's first cousin has cystic fibrosis and wonder if their child might be affected. What advice would you give them?
8. A mother of a two year old child with sickle cell disease is pregnant and wants to know about the risk of future children having the disease. How would you counsel her?
9. The mother of one of your patients calls to say she is pregnant. Prenatal ultrasound reveals a child who appears to be affected with spina bifida. She wants to know the implications of the disease. How would you counsel her? What precautions need to be taken at the time of delivery and neonatal period?

Common Illnesses

Cough

1. A twelve year old child presents with a three day history of cough, chest pain and fever of 101o F. Exam reveals bilateral crackles. Chest radiograph shows diffuse interstitial markings. Cold agglutinins are pending. Discuss your differential diagnosis. Explain the most likely etiology, and basic management.
2. A six week old afebrile infant presents with conjunctivitis, staccato cough, and tachypnea. Exam reveals bilateral crackles and wheezes, and mild reactions. Chest radiograph shows patchy densities and hyperinflation. What is the likely diagnosis? Explain the most etiology and basic management.
3. A six month old former 28 week preemie presents with URI symptoms, increasing cough, wheezing, and tachypnea. Exam reveals increased work of breathing with retractions, poor air exchange, wheezing on auscultation, and baby has perioral cyanosis. Chest radiograph reveals bilateral perihilar streakiness and hyperinflation. Discuss most likely cause and basic management.
4. A four year old presents with cough for 3-4 days following a URI and fever to 104o F for twenty four hours. Exam reveals crackles on the right. What would you expect the chest radiograph to show? If the child is unimmunized, what is the most likely cause of this illness? If immunized, how would you initially manage this child?

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?
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. The baby is afebrile. Exam of the chest is normal between paroxysms. Her WBC is 28,000 with 14S, 86L. Chest radiograph is normal. What is the likely etiology of her problem and what would be your initial approach?
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 is your assessment of this child, and what would be your basic management of the problem?
8. An eleven year old presents with frequent episodes of cough, worse with colds, and then associated with some shortness of breath. She had previously taken medication for this which gave her a headache and made her feel "hyper". She requests better therapy. What is the most likely diagnosis and how would you proceed?
9. A sixteen year old presents with cough and shortness of breath following exertion. This is affecting his ability to play soccer. How would you proceed?

Fever

1. A two week old presents with fever of 104o F . Her exam is unremarkable. What are your concerns? Discuss appropriate basic management.
2. A seven month old girl presents with a fever to 103o F, mild irritability, and poor feeding. How would you proceed?
3. A seven month old presents with fever to 103o F , mild irritability, and poor feeding. Your differential diagnosis includes urinary tract infection; how would you proceed if this is the case?
4. An eight year old presents with fever of 102o F and headache. Exam is remarkable for nuchal rigidity. Describe your concerns, appropriate work-up and basic management.

5. 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 maculo-papular rash and his fever rapidly declines. What illness does this child have? How would you treat him?
6. A seven year old girl presents with cough, coryza, conjunctivitis and fever of 103o F for twenty four hours. She then begins to break out in a macular rash which starts on her head and spreads to the rest of her body. Her exam is also remarkable for gray-white, tiny dots seen on her buccal mucosa. What disease is this? How should it be treated? Is there preventive therapy available?
7. A 4 year old boy presents with a five day history of fever and rash. He has received acetaminophen and amoxicillin without improvement. On exam he is irritable with a temperature of 103.6o F, bilateral conjunctivitis, enlarged cervical nodes, puffy hands, and a maculo-papular rash. Discuss the differential diagnosis and outline a plan for evaluating the patient.

Sore Throat

1. A six year old presents with high fever, headache, sore throat, and a sandpaper rough, red rash which began in the axillae and neck and has become generalized. Exam is remarkable for pharyngitis, anterior cervical adenopathy, circumoral pallor and the rash. What is this child's diagnosis and what is the etiological agent? How should this be treated?
2. A nine year old presents with a sore throat and fever of 101o F. Exam reveals slight anterior cervical adenopathy and very red throat (no exudate). What is your differential diagnosis and how would you proceed?
3. A fourteen year old female presents with malaise, fever, headache and sore throat. Exam reveals enlarged tonsils with exudate, pharyngeal petechiae, posterior cervical adenopathy, and splenomegaly. A colleague found her to have strep throat and gave her ampicillin three days ago; she now has a diffuse, erythematous rash. Discuss differential diagnosis and initial management.

Otitis/Ear Pain

1. An eighteen month old male presents with fever and irritability (pulling at his ear) after four days of URI symptoms without fever. What is the most likely cause of the fever? What might you expect on physical exam? How should he be initially managed?

2. A two year old has had six episodes of otitis media (which you have diagnosed and treated) over the past five months. Parents ask about the treatment options at this point. What factors need to be considered?
3. A fifteen month old was diagnosed with otitis media three weeks ago. Today on exam his tympanic membrane looks dull, gray, and has poor movement. What are your recommendations?

URI

1. A three year old presents with runny nose, nasal congestion, mild irritability, and fever of 99o F over the past forty-eight hours. What is the most likely diagnosis and how would you treat this?
2. An eleven year old has spring time nasal congestion and itchy eyes which have become more of a problem over the last three years. Suggest diagnosis and considerations for initial management.
3. A sixteen month old presents with swollen eyes and a fever of 103o F. Exam is remarkable for an ill appearing toddler with periorbital edema and erythema. Discuss you diagnosis and describe initial management.

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. He has become lethargic and mildly febrile. What would you include in the differential diagnosis? Describe how would you proceed.
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 onset of severe abdominal pain six hours ago. He then developed fever and has vomited three times. He has had no diarrhea. Pain is now right-sided. Discuss your approach to this patient. What additional considerations do you have if the patient were female?
4. An eight year old female presents with several abdominal pain, pruritic lesions on the buttocks and lower extremities, and joint swelling. Discuss your differential diagnosis.

5. The mother of a fourteen month old baby's feels an abdominal mass when washing the baby's stomach during a bath. What concerns do you have? What would you tell the mother?
6. A six year old presents with fever and abdominal pain, bloody diarrhea and a few scattered petechiae. Discuss the differential diagnosis and initial approach to this patient.

Diarrhea

1. A one year old presents with vomiting and diarrhea for three to four days. Discuss appropriate evaluation and treatment.
2. A three year old presents with a three day history of watery, foul-smelling stools, flatulence and anorexia. At least two other children who attend the same daycare have had similar symptoms in the past month. What etiologic agents need to be considered in the differential diagnosis?

Constipation

1. A six year old presents with chronic abdominal pain of six weeks duration. Discuss your initial approach to this patient.

Skin Problems

1. A four year old female presents to your clinic with an itchy rash over her trunk and extremities. Exam reveals raised, erythematous lesions with serpiginous borders and blanched centers. The lesions are evanescent and vary in size. What is appropriate diagnosis and treatment?
2. A four year old presents with a dry, erythematous, itchy rash involving the antecubital and popliteal fossae, wrists and ankles. Discuss the diagnosis and appropriate therapy.
3. An eighteen month old presents with many golden-yellow, crusted-weeping lesions 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 with a dog-bite to the cheek. How would you care for this?

5. An eight year old presents with a painful, swollen, erythematous, indurated forearm. Exam also reveals axillary adenopathy on the same side. What is the likely diagnosis? How should this be managed?

Limb/joint pain

1. A 15 year old girl injured her ankle while playing basketball. What advice would you give for acute care?
2. An athletic 12 year old boy complains of knee pain when running and playing soccer. Discuss the possible causes and an approach to problem.
3. A 14 month old girl presents with acute onset of fever and refusal to walk. Discuss your initial evaluation of this child.
4. A five year old presents with a swollen, red knee. Discuss diagnostic considerations and describe your approach to this child.
5. A four year old presents with a one week history of multiple joint pain and swelling. Discuss your differential diagnosis.

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?

Heart murmur

1. On routine physical exam, a five year old girl is found to have a heart murmur. The murmur is systolic and best heard along the left sternal border. It does not radiate. Discuss your approach to the patient. How would you distinguish between an innocent and a pathologic murmur?

Lymphadenopathy

1. A ten month old girl is evaluated because of recurrent pneumonia and failure to thrive. She has completed a course of amoxicillin without improvement. On physical exam, she has oral thrush, diaper dermatitis, cough, and axillary and inguinal nodes. Describe your approach to the evaluation of this patient. What types of disease are you most concerned about?
2. A six year old, previously healthy, female presents with a 3 by 5 cm, tender anterior cervical lymph node. Discuss the differential diagnosis and basic management principles.

Splenomegaly

1. A ten month old boy is seen for his first pediatric visit. On exam he is fussy with a low grade fever and has a spleen palpable 6 cm below the costal margin. Discuss your approach to the evaluation of this patient.
2. A ten year old boy with known sickle cell disease is noted to have significant splenomegaly. Discuss your concerns and approach to this patient.

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.

Impaired vision

1. The parents of a four month old are concerned because she has "crossed eyes". How will 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. A two year old boy has had 4 episodes of otitis in the past year. His parents complain that he doesn't talk. Discuss your concerns. What would you tell his parents?

Hematologic

1. A two year old presents with a nosebleed and petechiae on her extremities. She

is afebrile and the exam is otherwise normal. She recently recovered from a URI. Discuss the differential diagnosis and basic management of this child.

2. A four year old boy presents with fever, irritability, and pallor of several days duration. On examination he has petechiae and a palpable liver and spleen. Discuss your differential diagnosis and initial assessment of this patient.
3. On a routine health supervision visit, a 1 year old boy is found to have Hgb 8.8, Hct 27 with MCV 68. Discuss your approach to the diagnosis and treatment of this child.

Hematuria

1. A ten year old boy complains of "dark urine" and a headache. Urinalysis demonstrates proteinuria. Discuss your diagnostic approach to this patient.
2. A four year old boy is brought to the pediatrician because of "puffy eyes". He is afebrile. He recently recovered from a "cold". Discuss your evaluation and differential diagnosis
3. A two year old girl being evaluated for a febrile illness is found to have 1+ ketones and 1+ protein in her urine. Assuming the remainder of the urinalysis is normal, discuss your assessment.

Therapeutics

1. A three year old has right otitis media and a fever of 101.8o F. Discuss your initial approach to this child.
2. An eighteen month old has conjunctivitis. She is afebrile and has no eyelid erythema. Discuss your treatment.
3. A four year old girl has her first urinary tract infection. Urinalysis shows "many" WBCs and numerous motile, rod shaped bacteria on an unspun specimen. Describe your initial management of this child.
4. A six month old will receive her third set of immunizations, including DPT, OPV, and HIB vaccines. Mother reports that the child had fever and irritability for 24 hours after the previous set of immunizations. What would you do?

5. A six year old boy has been coughing for 3 days. His cough is especially prominent at night. His activity level has decreased and he seems more tired. He is afebrile and has diffuse wheezes on examination of the lungs. Discuss your initial assessment and treatment.
6. A thirteen year old has had a cough and chest discomfort for one week. He had a low grade fever at the onset of the illness. He has no past history of respiratory problems. Describe the basic management of this problem.
7. A ten year old complains of nasal congestion, sore throat and headache. She notes that this has been a problem every fall for the past 3 years, but this year her symptoms are worse than before. Describe your initial management and treatment plan.
8. A two year old has been scratching his arms and legs for several weeks. He has patches of erythema with obvious excoriations on the extensor surfaces of his arms and legs and also in the antecubital fossae. How would you treat this?
9. A four year old has had a runny nose for one week. He now has a golden yellow, crusting, slightly oozing rash in his nostrils and on his face. What is your diagnosis and basic management?
10. An eleven year old has a sore throat and a positive rapid streptococcal test. Discuss your assessment and initial management.
11. A fifteen year old has had a sore throat, swollen anterior and posterior lymph nodes and splenomegaly. She also has had a positive rapid streptococcal test. Explain your treatment plan.
12. A known asthmatic complains of worsening cough and wheezing, unresponsive to inhaled albuterol. How would you proceed?
13. A six year old started swimming lessons at the city pool one week ago. He now complains of earache. He is afebrile. He complains of pain when his right ear is touched. His right external ear canal is filled with a purulent discharge. Discuss your diagnosis and initial treatment plan.
14. A mother brings her child in for her eighteen month maintenance visit. The family plans to go camping in the Rocky Mountains in July and the mother asks questions about insect

repellent and sunblock. What advice would you give her?

15. A thirteen year old expresses concern about acne. She has used Noxema in the past at her mother's recommendation, but thinks her acne is getting worse. She has mild to moderate comedonal and pustular acne in her face and shoulders. How would you counsel her?

Fluid and Electrolyte Management

1. A six year old girl is admitted for elective surgery and is NPO. She weighs 28 kg. Write an order for her IV fluids prior to surgery.
2. A two year old has sustained a severe closed head injury and is comatose. He weighs 14 kg. What factors need to be considered in writing his daily fluid orders?
3. A seven month old infant has had fever, vomiting, and diarrhea for the past 24 hours. How would you determine whether to admit the patient to the hospital for IV fluids or treat as an outpatient?
4. An infant weighing 8 kg is estimated to be 12% dehydrated. What is the calculated deficit and how should it be replaced? What IV solution(s) should be used? What laboratory tests should be ordered?
5. A two month old infant is brought to the Emergency room because of seizures. History reveals that he has had diarrhea for five days and has been fed only water and apple juice. What might be the cause of the seizures and how should they be treated?
6. A nine month old infant has diarrhea and signs of moderate dehydration. His electrolytes reveal Na⁺ 162, K⁺ 5.6, Cl⁻ 122, Bicarb 12. During IV rehydration the patient has a generalized seizure. What is the probable cause of the seizure? How should it be treated?
7. A nine month old infant has vomiting and diarrhea. He has dry mucous membranes and decreased tearing and urination. He is taking fluids well. You decide to treat him as an outpatient. What type of fluid would you use and what instructions would you give to the parents?
8. A nine year old child with diabetic ketoacidosis has the following electrolytes: Na⁺ 132, K⁺ 5.4, Cl⁻ 103, Bicarb 4. As the fluid deficit is corrected, what is likely to happen to the serum K⁺? How should this be treated?

Poisoning/Prevention and Treatment

1. An eighteen month old boy is found in the garage coughing and choking. A jar of paint thinner is spilled on the floor and on his clothing. What advice would you give to the parents over the phone? Should they give Ipecac? What is the most serious toxicity of this ingestion/exposure?
2. A two year old boy is brought to the Emergency room in a coma after his mother returned from next door and found him unsupervised and unresponsive in his room. What questions would you want to ask the mother? How would you evaluate the patient?
3. You receive a phone call from the mother of a 2 1/2 year old child who was found eating Mom's prenatal vitamins. She thinks he may have swallowed 16 tablets. What is the toxic component of prenatal vitamins? What advice would you give the mother?
4. After a fight with her boyfriend, a sixteen year old girl takes 30 acetaminophen tablets. She reports this to her mother six hours later when she is feeling nauseated. What is the appropriate management of this adolescent?
5. A three year old is brought to the Emergency room because of weakness, diarrhea, and drooling. He had been playing unsupervised in the garage. He is found to have pinpoint pupils and bradycardia. What is the most likely cause of these symptoms and how should the patient be treated?
6. A four year old girl with juvenile rheumatoid arthritis develops fever, deep, labored breathing, vomiting, and diarrhea. She complains of ringing in her ears. Discuss the probable cause of these symptoms.
7. A three year old child is evaluated in clinic because of irritability, decreased appetite and intermittent abdominal pain. In your assessment, you detect delayed development, particularly of language, and a mild anemia. How would you further evaluate this child?
8. Discuss the anticipatory guidance given to the parents of a one year old during a health supervision visit.
9. A child comes to the Emergency room after ingesting an unknown quantity and type of her grandmother's pills. What findings in the physical exam will help to identify the type of pills?

Pediatric Emergencies

1. A three year old child presents to the Emergency room with acute onset of stridor and tachypnea. Discuss your approach to this patient, including important aspects of the history and physical exam, the differential diagnosis, and management principles.
2. A four month old baby presents to the Emergency room with a fever of 104o F and petechiae. Discuss important areas of the history and physical exam. Discuss your differential diagnosis.
3. A three year old boy presents to the Emergency room with a 48 hour history of cough, increasing wheezing and shortness of breath for the past two hours. Discuss differential diagnosis and describe general management principles.
4. A fourteen month old presents to the Emergency room with a history of symmetric convulsive activity that lasted 2-3 minutes.
 - A. The child was sleepy initially but is now awake and alert. She has a temperature of 104o F and has no nuchal rigidity. She has been a previously well child. Immunizations are up to date. List other important points to check in the history and physical exam, detail appropriate diagnostic tests and outline treatment. Provide an explanation for the parents.
 - B. What if this child was still somewhat somnolent and the exam did reveal nuchal rigidity? Describe how this presentation alters differential diagnosis and basic management.
5. A four year old boy presents with brief loss of consciousness and vomiting after falling off a six foot slide. How would you evaluate him and what are your concerns?
6. The mother of an 18 month old calls to say her child has pulled a just-poured hot cup of coffee down from the table which splattered across his face and chest. What are your recommendations?
7. A four year old girl is brought to the Emergency room for acute onset of tachypnea, dyspnea and cough which began while she was attending a friend's birthday party. The children were eating cake and ice cream when her symptoms began. There were peanuts and small candies on the table. Explain your initial concerns and describe a reasonable

approach to her evaluation and management.

8. A six year old presents with dog bites to the face and upper arm. Discuss your concerns and basic management principles.

Child Abuse (Physical and Sexual)

1. A four year old male is being seen because of a sore throat. On exam you find bruises on his face and back in various stages of healing. Explain your concerns and approach.
2. A two year old presents to the emergency room after breaking her arm during a fall. The child was seen six months ago with a broken leg. What are your concerns? What evaluation should occur next?
3. A seven year old female patient presents with vaginal discharge. How would you approach the history and physical exam?
4. An eight year old male has a urethral culture return positive for *Neisseria gonorrhoeae*. Discuss your approach.
5. A two month old baby presents with lethargy and is poorly responsive. He has retinal hemorrhages on exam. Parents report that he "may have rolled off the couch". How would you proceed?
6. A sixteen month old child is brought to the Emergency room because she "refuses to walk". Parents report that she fell out of her high chair two days ago. Discuss the differential diagnosis and appropriate evaluation of this patient.
7. An eighteen month old infant presents with scald burns to the buttocks and legs. Parents report the child "turned on the hot water tap while playing in the bathtub". Describe your evaluation and discuss management.

Child Advocacy

1. A child is seen in the pediatric clinic for vomiting. On further questioning you find that the family is homeless and living in a car. Describe how you would approach helping the family. Discuss how you would treat the child's acute and ongoing medical needs.

2. Certain neighborhoods in the city are noted to have high infant mortality rates. If you were the health officer how would you go about addressing this problem?
3. Severe head injuries and death are associated with bicycle riding. How would you go about promoting helmet use by children?
4. Describe how you would intervene with the school for a child you see in clinic with school failure.
5. You live in a small town and note that many children have dental caries. You find out that the water supply is not fluoridated. How would you proceed?
6. You are working in the Emergency room and note that over a month rotation three infants have been injured in baby walkers. What would you do?
7. The clinic in which you work has a very low immunization rate among the patients. How would you approach increasing these rates?