

i-Human: Case Player H emma ryan v4 - Bing order to auscultate bowel s https://ih2.i-human.com/attempts/339153/play

Emma Ryan V4 PC -K (Basic DDx)

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Key Findings

Evaluated

MSAP: Persistent, Intermittent Fever yesterday. Home 101. Tylenol. Given right before they came
Related: 2 day Runny nose. Nasal congestion.
Related: Not been eating well. 18 OZ milk. Decreased appetite
Related: Consistent Moderate Cough waken at night x 2 days
Unknown: Second hand smoke, dog at home.

DDx

History Physical Exam Assessment Tests Diagnosis Plan Summary

Expert Feedback

Questions Asked: (click here to show detailed list of questions you asked)

You asked 50 questions. 10 (20%) were key questions suggested by the expert case author. You asked an additional 40 questions (80%).

Missing

Ops. You didn't ask all important questions suggested by the expert author for this case. You missed asking 5 of the 15 key questions. (Note: Sometimes there is more than one way to get similar information from your patient. Eliciting information in more than one way when interviewing a patient can be useful.)

Missing questions are:

Associated Sx/Sx Characteristics:

- ▶ Have you noticed your child pulling on her ear? (Mother)
- ▶ Does she have a rash? (Mother)
- ▶ Does she have discharge or bleeding from her ears? (Mother)

Risk Factors:

PMH:

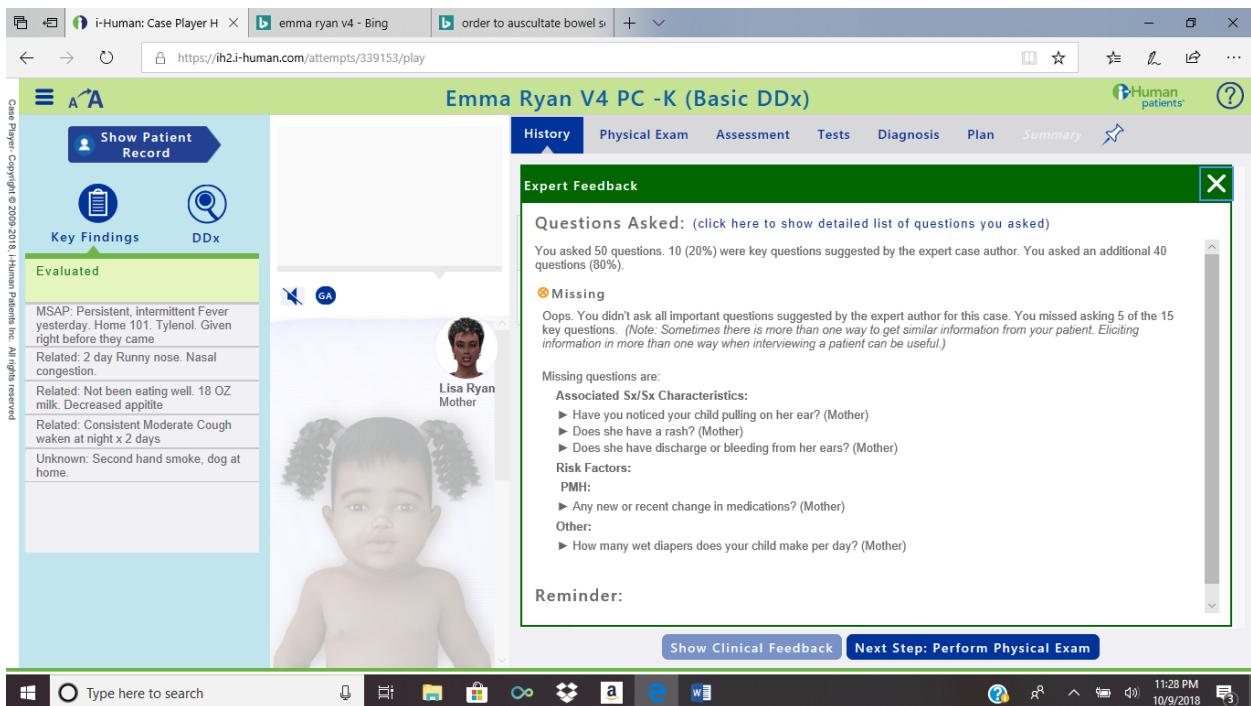
- ▶ Any new or recent change in medications? (Mother)

Other:

- ▶ How many wet diapers does your child make per day? (Mother)

Reminder:

Show Clinical Feedback Next Step: Perform Physical Exam



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Key Findings

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DDx

Expert Feedback

Vitals Documentation:

- Pulse: Good, all correct. (FYI actual rate: 85)
- Respiration: Good, all correct.
- BP: Good, all correct. (FYI actual BP: 95/60)
- ✗ Mental Status: Incorrect mental status, correct is Verbal.

Exam Documentation:

- Lung Auscultation: Good, all correct.
- Cardiac Auscultation: Good, all correct.

Exams Performed:

● Correct

Good, you performed 9 key exams for this case:

1. Vitals: Skin
2. Vitals: Temperature
3. Vitals: Respiration
4. Vitals: Pulse
5. Chest Wall & Lungs: auscultate lungs
6. Heart: auscultate heart
7. Skin, Hair, Nails: inspect skin overall
8. HEENT: look in ears with otoscope
9. HEENT: inspect mouth/pharynx

Show Clinical Feedback Next Step: Develop Assessment



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Expert Feedback

You also performed additional exams that were not required, but are never inappropriate.

1. *Vitals: SpO₂*
2. *Vitals: SpO₂*
3. *Vitals: eTCO₂*
4. *Vitals: BP*

Missing

Oops. You missed 3 key exams. They are:

1. *HEENT: inspect ears*
Any child with non-specific symptoms such as fever and upper respiratory symptoms must have a thorough examination of the lungs, ears, nose, and throat. These are the components that are a part of the respiratory system.
2. *HEENT: inspect eyes*
Any child with non-specific symptoms such as fever and upper respiratory symptoms must have a thorough examination of the eyes to rule out conjunctivitis as it can frequently accompany upper respiratory infections.
3. *Chest Wall & Lungs: visual inspection - anterior & posterior chest*
Any child with non-specific symptoms such as fever and upper respiratory symptoms must have a thorough examination of the lungs, ears, nose, throat and eyes. These are the components that are a part of the respiratory system.

Since this child has had a cough for a few days, we must inspect the chest wall for signs of labored breathing which includes the use of accessory muscles or abnormal chest wall retractions.

Incorrect

You performed 7 exams not required by expert.

Show Clinical Feedback Next Step: Develop Assessment

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Expert Feedback

chest wall retractions.

Incorrect

You performed 7 exams not required by expert.

1. *Vitals: Mental Status*
2. *Abdomen: auscultate abdomen*
3. *HEENT: look in eyes with ophthalmoscope*
4. *HEENT: inspect nose*
5. *HEENT: look up nostrils*
6. *Neck: palpate neck*
7. *Lymphatic: palpate all lymph nodes*

Exam Performance:

Incorrect

You made 2 errors performing some exams:

1. Did not count at least 2 beats on a required location - missing locations: l radial.
2. Did not auscultate the anterior in the correct order.

Reminder:

Be sure to fill out appropriate portions of the Patient Record before proceeding.

Show Clinical Feedback Next Step: Develop Assessment

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Assessment

Organize Key Findings

Organize your key findings below. First choose one finding to be the Most Significant Active Problem (MSAP). Then choose how each of the other findings relates to the MSAP. When you are done, you may arrange the list by relationship by clicking the sort list button below.

NOTE: You may make any final edits to your findings using the key findings panel on the left.

Write Problem Statement

Sort List

Key Finding	Relation to MSAP
Persistent, intermittent Fever yesterday. Home 101. Tylenol. Given right before they came	MSAP
Related: 2 day Runny nose. Nasal congestion.	Related
Related: Not been eating well. 18 OZ milk. Decreased appetite	Related
Related: Consistent Moderate Cough waken at night x 2 days	Related
Unknown: Second hand smoke, dog at home.	Unknown

Expert Feedback

Key Finding	MSAP Relation
Fever	MSAP
Cough	RELATED
Rhinorrhea	RELATED
Erythema and bulging of bilateral tympanic membranes	RELATED
Erythema of pharynx	RELATED
Sick contacts in daycare	RELATED
Did not get flu vaccine	UNKNOWN
Decreased appetite	UNKNOWN
Exposure to second hand smoke	UNKNOWN

The medical problem list you have compiled should be a list that

Next Step: Write Problem Statement

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Assessment

Organize Key Findings

Write your problem statement in the space below.
You have used 72 of a maximum of 120 allowed for this case

Patient presents with persistent intermediate fever for one day, highest temp 101. Alleviated by Tylenol. Running nose and nasal congestion for 2 days. decreased solid food appetite. Consistent moderate cough for 2 days, wakening patient up at night. Did not receive flu vaccine. Erythema in bulging of bilateral tympanic membranes. Erythema of pharynx. Rhinorrhea. Patient goes to daycare where there are other sick children. Exposed to secondhand smoke and dog at home.

Expert Feedback

E.R. is a 2 year old otherwise healthy female on day 3 of runny nose and cough, and day 2 of fever. She is drinking liquids well, has a reduced appetite but normal number of wet diapers and normal stools. Physical exam is notable for tympanic temperature of 101.1 F, bilateral severe bulging of her tympanic membranes and erythema and exudates of her pharynx. Risks include lack of flu vaccine this season, exposure to other sick children at daycare and second hand smoke at home.

Next Step: Select Problem Categories

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Assessment

Select the body system(s) that are most likely to be the source of the patient's primary pathology.

Expert Problem Statement

E.R. is a 2 year old otherwise healthy female on day 3 of runny nose and cough, and day 2 of fever. She is drinking liquids well, has a reduced appetite but normal number of wet diapers and normal stools. Physical exam is notable for tympanic temperature of 101.1 F, bilateral severe bulging of her tympanic membranes and erythema and exudates of her pharynx. Risks include lack of flu vaccine this season, exposure to other sick children at daycare and second hand smoke at home.

Selected Problem Categories

- Cardiovascular
- Endocrine
- Gastrointestinal
- Genitourinary/Renal
- Hematologic
- Immune**
- Integumentary
- Lymphatic
- Musculoskeletal
- Neurological
- Psychologic
- Respiratory**
- Sexual/Reproductive

Expert Feedback

Selected Problem Categories

- Correct**
 - Respiratory
- Incorrect**
 - Immune

Discussion:

Respiratory: the presence of cough and rhinorrhea, erythema of the oropharynx and bulging tympanic membranes falls in the respiratory system category.

Next Step: Select Differential Diagnoses

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Assessment

Complete your differential diagnosis selection. Select diagnoses from categories below and add to differential on right.

Student Differential Diagnoses

- bronchiolitis
- respiratory syncytial virus (RSV)
- common cold
- influenza**
- pharyngitis**
- otitis media**
- upper respiratory infection (URI)

Expert Feedback

Missing

You were missing 4 diseases that were specified by the case author:

- influenza**
- pharyngitis**
- otitis media**
- upper respiratory infection (URI)**

1. influenza
This differential diagnosis should be included because:
The symptoms of fever, rhinorrhea, cough and fussiness along with the fact that the child has not gotten the flu vaccine, puts this diagnosis on our list.

2. pharyngitis
This differential diagnosis should be included because:
The child had erythema and exudates of the pharynx on physical exam. Viral pharyngitis is a common cause of sore throat in children. The physical exam can be notable for inflammation of the oral mucosa and pharynx and sometimes vesicles seen in the posterior pharynx.

3. otitis media
This differential diagnosis should be included because:
The presence of bilateral severe bulging tympanic membranes makes this diagnosis important to consider.

4. upper respiratory infection (URI)
This differential diagnosis should be included because:

Next Step: Rank Differential Diagnoses

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Assessment

Complete your differential diagnosis selection. Select diagnoses from categories below and add to differential on right.

Student Differential Diagnoses

- bronchiolitis
- respiratory syncytial virus (RSV)
- common cold
- influenza
- pharyngitis
- otitis media
- upper respiratory infection (URI)

Expert Feedback

4. upper respiratory infection (URI)
This differential diagnosis should be included because:
The child has fever, cough and rhinorrhea. An upper respiratory infection should be on our list of diagnoses as a URI presents with non-specific symptoms and fever.

Incorrect

- respiratory syncytial virus (RSV)
- common cold
- bronchiolitis

Discussion:

Other diagnoses:
Croup is a respiratory illness that is characterized by a barking cough, inspiratory stridor and hoarseness. It usually occurs in children six months to three years of age and viral croup can start with a mild cough, fever or runny nose. Emma has not been noted to have a barking cough, inspiratory stridor or hoarseness therefore this diagnosis is not included on the differential at this time.

Pertussis, also known as 'whooping cough' is a highly contagious respiratory illness caused by Bordetella pertussis. It manifests as a prolonged cough illness along with an inspiratory 'whoop', paroxysmal cough and posttussive emesis. Early in the disease process, it can start with cold like symptoms such as a mild cough, runny nose and fever. Due to vaccination, the incidence of pertussis had decreased but with more parents declining vaccinations for their children, the incidence of pertussis has started increasing again. Pertussis infection in infants and young children can be severe with increased rates of hospitalizations and complications. However, Emma is up to date on her vaccines per her mother and the duration of her cough is only two days so we are not including it on the differential at this time.

Next Step: Rank Differential Diagnoses

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Assessment

Complete your differential diagnosis selection. Select diagnoses from categories below and add to differential on right.

Student Differential Diagnoses

- bronchiolitis
- respiratory syncytial virus (RSV)
- common cold
- influenza
- pharyngitis
- otitis media
- upper respiratory infection (URI)

Expert Feedback

- bronchiolitis

Discussion:

Other diagnoses:
Croup is a respiratory illness that is characterized by a barking cough, inspiratory stridor and hoarseness. It usually occurs in children six months to three years of age and viral croup can start with a mild cough, fever or runny nose. Emma has not been noted to have a barking cough, inspiratory stridor or hoarseness therefore this diagnosis is not included on the differential at this time.

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Next Step: Rank Differential Diagnoses

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History Physical Exam Assessment Tests Diagnosis Plan Summary

Show Patient Record

Key Findings DDx

Evaluated

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Related: 2 day Runny nose. Nasal congestion.
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Unknown: Second hand smoke, dog at home.

influenza pharyngitis otitis media upper respiratory infection (URI)

Sort By Rank

Differential Diagnosis Lead or Alt | MnM

Expert Feedback

Diagnosis Ranking:

- Correct
 - influenza
 - pharyngitis
 - otitis media
- Incorrect
 - upper respiratory infection (URI)

Diagnosis Must-not-Miss:

- Correct

Below are differential diagnoses that ARE 'must-not-miss' and you correctly noted as such.

 - influenza
- Incorrect
 - otitis media
 - upper respiratory infection (URI)

Next Step: Select Tests

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History Physical Exam Assessment Tests Diagnosis Plan Summary

Show Patient Record

Key Findings DDx

Evaluated

Correct Incorrect Missing

influenza pharyngitis otitis media upper respiratory infection

Lead Alt MnM

Test/Diagnosis Association

Association of test with diagnosis:
● Correct ✗ Incorrect ▢ Missing

Other Tests

influenza

- influenza PCR (nasal swab)
- rapid influenza diagnostic test (RIDT)

pharyngitis

otitis media

- complete blood count (CBC)

upper respiratory infection (URI)

- complete blood count (CBC)

Expert Feedback

Tests Ordered

- Correct
 - influenza PCR (nasal swab)
- Missing
 - rapid influenza diagnostic test (RIDT)
- Incorrect
 - complete blood count (CBC)

Test Associations:

Please note some tests may be correct to order, but may not be associated with all and only the correct differential diagnoses.

For more details, look at the symbols next to the test under each differential diagnosis in the test ordering list. The symbol will indicate

Next Step: Review Test Results

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Show Patient Record Key Findings DDx

Evaluations

- Correct Incorrect Missing
- Influenza
 - Lead Alt MnM
- Pharyngitis
 - Lead Alt MnM
- Otitis media
 - Lead Alt MnM
- Upper respiratory infection

Select test to show results and interpretations.

Correct Missing

rapid influenza diagnostic test (RIDT)
influenza PCR (nasal swab)

Results

Name	Result
Influenza PCR (nasal swab)	Negative

Next Step: Make Diagnosis

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Show Patient Record Key Findings DDx

Evaluations

- Correct Incorrect Missing
- Influenza
 - Lead Alt MnM
- Pharyngitis
 - Lead Alt MnM
- Otitis media
 - Lead Alt MnM
- Upper respiratory infection (URI)

What is the correct diagnosis for this patient? (Choose all that could apply.)

- influenza
- otitis media
- pharyngitis
- upper respiratory infection (URI)

Scoring: Your score will be scaled downward for incorrect selections you make.

Incorrect
Score: 67% (100% of correct items selected - deductions made for 1 incorrect selection.)

Details:

Correct

- otitis media
- upper respiratory infection (URI)

Incorrect

- pharyngitis

Discussion:
The correct diagnosis would be otitis media due to the severe bilateral bulging tympanic membranes seen on physical exam. More specifically, the child has bilateral otitis media.
The pathogenesis of acute otitis media usually involves the child having a viral upper respiratory infection which results in edema and obstruction of the eustachian tube. This leads to viruses and bacteria entering the ...

Next Step: Write Plan

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History Physical Exam Assessment Tests Diagnosis Plan Summary

Please enter your assessment/management plan or SOAP note below.

Key Findings

Evaluated

- Correct Incorrect Missing
- Influenza
- Lead Alt MnM
- Pharyngitis
- Lead Alt MnM
- Otitis media
- Lead Alt MnM
- Upper respiratory infection

DDx

Expert's Plan

The American Academy of Pediatrics recommends high-dose amoxicillin (80-90 mg/kg/day in 2 divided doses) for 5-10 days as the treatment of choice in children. For those with severe symptoms, a standard 10 day course is recommended.

Since Emma has severe bilateral otitis media, we would prescribe her high dose amoxicillin for a 10 day course. Her mother would also be advised to make sure that Emma keeps drinking plenty of fluids and she can give her Tylenol as needed for fevers up to every 4 hours. We would advise Emma's mother to bring Emma back to clinic if her fevers and symptoms persist for more than five days or if her child is not tolerating any liquids by mouth.

The American Academy of Pediatrics does not recommend over the counter cough and cold medicine for children under four years of age. Many of these medications have more than one ingredient increasing the chances of an accidental overdose if combined with another product. Furthermore, research has shown that these medications offer little benefit to young children.

We would advise Emma's mother that the best way to treat Emma's cough would be a cool mist vaporizer to help loosen congestion and a bulb syringe and saline nasal spray to help clear a stuffy nose.

Next Step: Submit and Review Case Summary

11:36 PM 10/9/2018