

EMERGENCY MEDICINE PATIENT PRESENTATIONS: A "How-To" Guide For Medical Students (Kerry B Broderick, MD; David E Manthey, MD; Wendy Coates, MD)

Patient presentation is an art. This art form is taught from the day the student does his or her first patient history and physical and presents to the physician preceptor. It continues to be molded and re-formatted throughout medical school and residency. Each medical specialty has different nuances of patient presentations. For instance, within the OB/GYN specialty, there is a more detailed and structured presentation of the patients OB/GYN history. In pediatrics, the gestational and birth history, immunization status, as well as height and weight statistics take on more importance when presenting that patient. Surgical patient histories focus on the perioperative period, while medical patient histories are typically detailed and complex. Emergency medicine (EM) has its own nuances for patient presentations that manifest themselves in several ways. First, different types of patients (e.g., trauma, pediatric, cardiac, and psychiatric) all have particular information that should be offered earlier in the presentation. This is similar to the data and pattern requested by the specific specialties. Second, there are dynamic nuances that depend on the overall activity level of department. For instance, when the emergency department is not exceedingly busy, a more detailed history on patients may be possible. When the department is busy, the student needs to include only the most important parts of the history including the pertinent negatives, having extraneous data available if requested. Third, the severity of the medical condition of the patient will dictate the type of presentation. A stable patient may allow for a complete presentation, while a patient who becomes unstable may require that the student answer specific and directed questions. Finally, the patient's presentation may occur in two or more parts. The first includes the presentation of symptoms and exam findings with development of an evaluation plan. This may be followed by the formulation of a disposition plan that takes into account all information derived from the initial evaluation.

GENERAL

There are several general principles to remember when presenting a history and physical to the EM attending (faculty).

1. **Acuity Level** - Convey how sick the patient is to the preceptor immediately. If you feel the patient is seriously ill, mention this at the start so that the presentation can occur in conjunction with patient management. If you feel certain aspects need immediate treatment (hypoxia, hypotension), present this first. For example, "Dr. Preceptor, as I present Mr. Blue to you, I believe we should immediately treat his hypoxia and wheezing. Mr. Blue is a 63 year old COPD patient who..." This is guaranteed to get their attention and moving toward the care of the patient. Although students often get the most stable patients, it is not unusual for a patient's status to change.

2. **Relevance** - Present only the pertinent data. Try to decide whether or not the data you are about to present will make a difference in the differential diagnosis, evaluation or treatment of a patient. For example, a patient's history of high cholesterol is not important in treating a trauma patient, but their tetanus status is. Remember that negative data such as no history of medication allergies or no history of bleeding disorders are also important. You may collect much more data than you eventually present. This information may or may not be requested as your attending reviews your presentation. A reasonable way to discern what information is important for a given presenting complaint is to ask yourself if you needed the data in your

clinical reasoning process. As you gain more experience with clinical reasoning for various presenting complaints, your presentations will improve.

3. Differential Diagnosis - Prepare and present a differential diagnosis. You may present this either based on the most emergent or the most likely. Make sure all emergent conditions that would fit with the disease process are included. You may rule them out by the history and physical without further tests, but they should still be mentioned (and then summarily excluded). Include diseases that are common even though they are not emergent. While emergency physicians are viewed as the experts in the evaluation and management of critically ill patients, they often act as primary care physicians. Do not present zebra diagnoses unless you think they are realistic possibilities.

4. Assessment and Plan - Many students make the mistake of omitting their own assessment and plan and wait to be asked. Prepare and present your approach to the evaluation and treatment of the patient. As a medical student, you may have many questions about what to do. However, by presenting what your thought process is, the attending will be able to gauge your level of knowledge and experience as well as tailor their teaching to your level. In addition, by taking a "chance" to give your ideas, you will better understand what to do that next time you see a similar patient.

5. Interpretation of Data - During the second presentation to the preceptor, you will have gathered all or a portion of the information gathered after the first presentation. At this time, you should do several things. Interpret the laboratory, radiographic, and additional history and exam findings. In many cases, this involves the consultation of a textbook or on-line reference. Learning the basics prior to your presentation enables the attending to teach you at a more sophisticated level. When presenting your thoughts, use causal reasoning to explain the patient's symptom complex and laboratory findings into a cohesive diagnosis. This will require a refinement of the previous list of differential diagnosis based on the results of studies ordered.

6. Disposition - Prepare a plan for the patient's disposition, which includes reasons for admission and/or discharge as well as treatment and follow-up. Include this with your final presentation. When completing the chart, be sure to include discharge instructions to the patient advising them of reasons to return to the ED and outline your plan for their follow-up.

7. Questions - Feel free to ask questions. Many procedural questions can be answered by residents, nurses, or other students. Management or evidence based questions can be asked to the attending at any time during the patient work-up, but should generally be reserved for a time when the patient is stable. One author suggests keeping them until the end. At that time, you can present and ask about those areas that you were unsure of whether or how to present or evaluate. Another author suggests asking questions as they arise. That way, you can use your new information to complete the work-up of the patient. By asking questions, the attending can evaluate your level of understanding and teach you what you need to know at that moment. By doing this, you increase your knowledge of the condition so that you can begin at a higher level the next time you have a patient with similar complaints. This can help mold your next presentation.

8. Evaluation - Recall that the purpose of the patient presentation is three fold. One is to impart data to the attending for the purpose of caring for the patient. The second is to allow the attending to evaluate you. Most evaluations include your ability to perform a directed history and physical, interpret that data, develop a differential diagnosis list, design an evaluation and

treatment plan, present a patient, as well as your overall knowledge level on different presenting complaints and specific disease processes. Third, it is often during the presentation that the attending physician addresses critical teaching points.

SPECIALTY AREAS

Remember that each medical specialty has developed its own particular issues and information that are important based on their relevance to the patients with these complaints. Learning what these are helps you to make an appropriately focused presentation to your preceptor and consultant.

1. **Trauma** - The majority of trauma patients seen by the student will be minor trauma. All trauma patient history and physical examinations require specific information. The history of the traumatic event includes information such as when it occurred, mechanism of injury, time since injury, as well what treatment has been done so far. A quick assessment of allergies, medications, past medical history, and time since the last meal are important for determining management. Pertinent examples may include: the patient is a hemophiliac or on an anti-coagulant drug, patient is a diabetic, or pregnant, or on prednisone. Even with minor trauma, it is important to ask briefly about medical history to prevent missing an important factor that may impact treatment or follow-up care.

a. **MVA** - For motor vehicular trauma, restraint device use, impact of vehicle or patient, vehicular damage (i.e. amount of passenger space intrusion, steering wheel or windshield damage), ejection of patients or other occupants, as well as other occupant death are all important issues used to calculate a pre-test probability for injury. Extrication issues such as, prolonged extrication with a depressed level of consciousness versus self-extrication and ambulatory at the scene allow for evaluation of risk. Time from accident to treatment, documented loss of consciousness at the scene or en route to the hospital also help in deciding severity of illness.

2. **OB/Gyn** - A female with abdominal pain needs to have a brief ob/gyn history obtained and presented. The conciseness and cohesiveness of the presentation can be very different as illustrated by the following examples; Example 1: A 17 year old female presents with 2 days of abdominal pain; without vaginal bleeding, no fever, chills, slight nausea, no diarrhea, no urinary symptoms, no trauma. Her vital signs are.... Example 2: A 17 year old female G1P0 with LMP 6 weeks ago, history of GC and chlamydia one year ago, presents today with lower abdominal pain, worse on the left, non-radiating, without vaginal bleeding or discharge, with no associated urinary symptoms, no fever, chills, nausea, vomiting or trauma. The pain is constant and increasing, worse with movement. Her vital signs are..... A more detailed ob/gyn history up front helps the preceptor to organize the patient's risk stratification up front.

3. **Pediatric** - The younger the child the more unique the history will be, such as, prenatal, birth, and neonatal history. These may all be very relevant to the child's presentation to the ED. As the child gets older and further away from their birth, these factors become less important. Immunizations, developmental and family history are always important factors in assessing and presenting a child. Adolescents should be assessed for risky behaviors and depression as part of their evaluation.

4. **Medical** - Adults frequently present to the ED with an exacerbation of a chronic problem (some of these can be critical) or with a completely unrelated complaint.

- a. For young, healthy adults with a focused problem, a pertinent history that addresses their chief complaint is usually enough. A simple query such as, "Do you have any medical conditions or take any medications?" is often sufficient.
- b. A person with a chronic condition with a simple problem should be asked first about their presenting complaint. Then, an inventory of their medical history can be assessed. In some cases (e.g., a dirty foot laceration with a foreign body in a diabetic), the underlying condition will figure prominently in their treatment and should be discussed as a major part of the presentation. In other cases (e.g., the same laceration in a patient who has asthma), the underlying condition may be superfluous. It may be mentioned as part of the past medical history during your presentation.
- c. The patient with an underlying condition who presents with an exacerbation should have a full history of the problem explored (e.g., A patient with known coronary artery disease who presents with accelerating chest pain). Information about their disease may include prior events, diagnostic studies (e.g., catheterization), medical management, etc.

SUMMARY

Patient presentations are an art and as EM encompasses such a wide variety of medical specialties and patients, this 'art' is especially fun to learn and develop in the ED.

- * Convey the patient's medical urgency immediately to the preceptor.
- * Present only the pertinent data; Be concise and thoughtful.
- * Be sensitive to the department's activity status overall and be tolerant of modifications that you may need to make in your presentations accordingly.
- * Prepare and present your own differential diagnosis and an approach to the evaluation of the patient.
- * Present the patient's completed evaluation and an updated differential diagnosis.
- * Organize a disposition plan for your patient to discuss with your attending.
- * Ask intelligent questions.
- * Have fun!