

For my first site evaluation, I decided to present my H&P on a Boxer's fracture case. This was a patient who was involved in an altercation and was assaulted, with his hand pushed against a wall, and arrived at the ED with significant hand pain. I was very interested in this case, since I have a strong interest in orthopedic cases, and this was the first time during my rotations that I saw a patient with a broken bone and needed splinting. Studying how a boxer's fracture presents, with pain at the 4th and 5th metacarpals, ecchymosis, and the mechanism of injury of a punch, this was a classic presentation of it, and I was curious about the workup. This patient had a boxer's fracture confirmed on x-ray, given analgesics, and placed in an ulnar-gutter splint. Hand injuries are very common in the emergency department. While cases appear straightforward in management, it is important to remember to safely manage patients by performing proper neurovascular checks, using splinting techniques, and disposition to outpatient orthopedics. Overall, this case really allowed me to express my interest in orthopedic cases while explaining differentials with fractures.

During my next site evaluation, I really wanted to challenge myself with a more complicated case that requires further extensive workup. This was on a female patient who presented with heavy vaginal bleeding and irregular menses for months; her symptoms progressively worsened, which prompted her to seek medical attention because she was developing palpitations and dizziness. While gathering history and performing a physical exam on this patient, it became apparent to me that this patient could potentially be anemic, which required her to receive a pelvic examination. Once labs were drawn, her hemoglobin was extremely low at 2.9g/dl, and from my prior knowledge in our emergency medicine class during didactic year, I understood that this patient required immediate transfusion. This upgraded her case to the trauma resuscitation area, with a consult to OB/GYN for abnormal uterine bleeding. I truly enjoyed this case and learned a lot from the PA because it touched upon every emergency medicine priority at once, including rapid recognition of severe and potentially life-threatening anemia, ensuring proper stabilization of the patient with blood transfusion, and multidisciplinary disposition. This really forced me to reflect on other potential differentials related to abnormal uterine bleeding, and while studying, I learned about the mnemonic PALM-COEIN, which helped me understand that this could be various causes for this patient's bleeding. From this case, I took away that while patients might look stable initially, there could be underlying alarming lab values.

Additionally, "The Anesthetic Effects of Lidocaine with Epinephrine in Digital Nerve Blocks: *A Systematic Review*" was the journal I also presented on. I was curious about the medications used during lacerations, and this is crucial when acting quickly in an emergency. This was a systematic review that concluded that lidocaine with epinephrine prolonged the effects of anesthesia, reducing bleeding, and had zero cases of digital ischemia. This data was collected with over 7,000 blocks performed. This challenged the debate over whether epinephrine can or cannot be used in digital blocks. This discussion reminded me that medicine is always changing, and rules can always be outdated, and to understand potential side effects.

Overall, I found the site evaluations valuable. My evaluator's questions and feedback deepened my understanding and reinforced the habit of first ruling out the most life-threatening diagnosis in every emergency scenario.