Foundations of Emergency Medicine
Foundations III: Guided Small Group Experience

Session 29: "Emergency Care of Transgender Patients"
Unit: Special Populations

- **Agenda and Learning Objectives**
  - Case Part I – Overview of terminology and Introduction to Transgender Medicine (10 min)
    - Define basic terminology including biological sex, gender identity, gender expression, transgender man, transgender woman, gender non-conforming, and gender affirming therapy
    - Discuss techniques for sensitive and effective history taking and physical examination in the transgender population
  - Case Part II – Silicone Emboli Syndrome (10 min)
    - Discuss VTE in the setting of estrogen supplementation for gender-affirmation
    - Learn the pathophysiology, presentation and treatment of silicone emboli syndrome
    - Discuss best practices for admitting transgendered patients to gendered rooms/floors
  - Case Part III – Chest Binding (20 min)
    - Learn the reasons for, complications of and counseling surrounding chest binding
    - Discuss other gender-affirming modifications you may encounter including medications, surgeries and other non-surgical modifications
  - Case Concludes (10 min)
    - Review Session Teaching Points

- **Note to Facilitators**

This session focuses on the care of transgender patients in the emergency department setting. It sets a background for the discussion by defining terminology and then explores best practices in caring for transgender patients in the unique ED environment. It is a large group discussion and requires no additional preparation or materials to conduct.

- **Case Begins – Topic 1 (10 min)**

31-year old presents to ED complaining of lower abdominal pain and fever.

Vital Signs: T100.2F HR105 RR16 BP137/76 O2 98% RA

Before entering the room, you notice the sex marker in the chart is female and that the patient's name is listed as "Joshua." Upon entering the room, you notice a patient with a masculine gender expression (i.e., masculine clothing, short haircut, facial hair). The patient describes constant, lower abdominal pain that has worsened over the past 48 hours. The

patient endorses associated subjective fevers and loss of appetite. The patient denies urinary symptoms, vomiting, or diarrhea.

- **Discussion Questions with Teaching Points**
  - **What is meant by sex versus gender? How are those things different? What is genderqueer?**
    - Sex is the anatomical determination of an individual at birth → male/female or difference of sex development (previously intersex)
    - Gender is one's own sense of being male or female → historically has been conceptualized as binary but now conceptualized more as a spectrum
    - Terms such as genderqueer, gender non-binary being used for those not fitting in traditional binary male/female gender structure
    - Those identifying as genderqueer may prefer they/their or other nontraditional pronouns

  - **What is meant by transgender? By cis-gender? When someone says gender transition what do they mean?**
    - Transgender refers to individuals whose gender is not congruent with their biological sex
    - Cisgender refers to individuals whose gender is congruent with their biological sex (i.e., birth assigned male who identifies as a man)
    - Gender transition refers to the process of shifting one's gender expression (the way we present our gender outwardly) towards something more masculine/feminine or androgynous

  - **In this scenario, the patient does not readily disclose his transgender identity during your history. Discuss how you could sensitively inquire about his sex / gender to determine if there was a simple registration mistake or if he is a transgender man.**
    - Some transgender patients will be forthcoming about being transgender whereas others may not → in the latter case, the patient may perceive a safety risk in divulging this information or may not appreciate that it is relevant to their medical complaint
    - Be mindful of your tendency to gender your patients
      - ***Gendering*** is an automatic, subconscious habit whereby we make an assumption about the gender of every person we meet (i.e., man / woman) – oftentimes we may form this assumption based on the biological sex listed in the electronic health record and ignore the gender expression of the patient in front of us. This assumption informs the gendered words we use with the patient like sir / ma'am / he / she / Mr. / Ms.
      - ***Misgendering*** (using the wrong gendered words) is a distressing experience for transgender people
    - Ask the patient what name / pronouns to use, preferably at the start of the encounter → this allows you to respectfully address the patient during the encounter and

demonstrates that you are open to the patient being transgender / gender nonconforming

- *"I want to make sure you feel comfortable and respected in the emergency department today. By what name would you like me to call you? And what pronouns should I use when I'm speaking about your health … he / she / they?"*

- Then, take your history and if it is relevant to the case, use two-step gender and sex questions to further elicit transgender history
  - *"What gender do you identify with … as a man? As a woman? Somewhere in between or non-binary? What sex were you assigned at birth … Were you assigned male? Female? Was there some difference in sex development?"*
- Resist the tendency to dismiss the sex marker as a simple registration mistake → this could lead to a cascade of assumptions that undermine your ability to achieve rapport with the patient as well as your ability to diagnose the presenting medical condition.

- **Describe strategies for making the patient feel comfortable when asking relevant history that involves natal female anatomy.**
  - Transgender patients may be uncomfortable talking about their natal anatomy using the standard medical terms (e.g., a transman may feel uncomfortable if you ask about his vagina)
  - You can use broad, unisex terms like "chest" or "lower" / "lower genital" to ask about symptoms in those areas
  - You can also ask the directly patient what words he uses for his anatomical parts and then use those
  - Another strategy is to uncouple gender and anatomy.
    - Rather than saying *"women need to get regular pap smears*," you can say: *"People with cervixes need regular pap smears."*

- **Demonstrate how you might sensitively inquire about the patient's sexual history.**
  - It is important to be able to ask sexual history without making assumptions → even asking a patient if they have sex with "men, women or both" reinforces a binary concept of gender
  - The following questions recommended by the Fenway Institute can guide you for how to ask sexual history questions without making assumptions:
    - Are you having sex? How many sex partners have you had in the past [year]?
    - Who are you having sex with?
    - What types of sex are you having? What parts of your body do you use for sex?
    - How do you protect yourself from STIs?

- **If a pelvic exam needs to be done, discuss techniques for optimizing this experience for Joshua.**

- Physical exams can generally be traumatic and anxiety inducing for transgender patients – this is particularly true for chest and genital exams
- Transgender men using testosterone can experience atrophic vaginal tissues, adding physical discomfort to the already psychologically stressful nature of a pelvic exam
- Given that many trans people perceive they have received unnecessary exams by curious providers, it is essential to explain the purpose of any invasive exam and assure the patient's express consent
- Allow a support person to stay in room
- Use the patient's preferred terms for body parts
- Consider using an anxiolytic for those with severe anxiety

❖ **Case Part II – Silicone Pulmonary Embolism Syndrome (20 min)**

31-year old transwoman with HIV brought in by EMS for abrupt onset of dyspnea.

Vital Signs: Temp 99.2F HR127 RR24 BP107/56 O2 94% RA

On primary survey, patient appears mildly air hungry and anxious. Lung exam demonstrates good air movement, scattered crackles and bilateral wheezes. Oxygen saturations improve to upper 90s on nasal cannula O2. Auscultation of heart sounds reveals regular tachycardia with no murmur, rubs or gallops. EKG consistent with sinus tachycardia and no ischemic changes.

Patient reports being in her usual state of health all day until she experienced abrupt onset of shortness of breath at 10PM while watching TV. Endorses associated pleuritic chest pain and dry cough. No prior similar episodes. No history of DVT/PE.

She endorses faithfully taking her HIV meds with last CD4 of 180. For gender affirming therapy, she reports taking estrogen and spironolactone. No history of surgeries.

On secondary survey, patient has normal distal pulses in all extremities, no JVD, and no swelling to the lower extremities. She has a feminized chest wall (e.g., breast growth from exogenous estrogen).

As you are about to leave the room, the patient says, "Doc, I need to tell you one more thing." She tells you that she had just gotten silicone injections in her buttocks and thighs a few hours before the onset of her symptoms and the person doing the injection thought they "might have hit a vein." She shows you symmetrical warm tender areas over buttocks and thighs at the site of injections.

❖ **Discussion Questions with Teaching Points**

- **List your initial differential diagnosis and highlight any diagnoses that are related to the patient being transgender / gender affirming therapy.**

Pulmonary embolism (related to exogenous estrogen use)
Silicone Embolism (nonmedical, free silicone injections)
Pneumothorax +/- PCP pneumonia (higher risk due to HIV/HAART)
Acute coronary syndrome (higher risk due to HIV/HAART)
Aortic dissection
Community Acquired Pneumonia
Esophageal rupture

- **What questions might you ask this patient about the estrogen she takes as it relates to VTE risk?**
  - What type of estrogen?
    - The primary estrogen prescribed for feminizing therapy is 17-beta estradiol, which is the "bioidentical" hormone
    - The risk of VTE is higher with other preparations such as ethinyl estradiol, which can be found in certain contraceptives
  - What route of estrogen?
    - The risk of VTE is higher with injectable estrogen compared to oral and transdermal preparations
  - Who prescribes the estrogen and are you taking it differently than prescribed?
    - The risk of VTE is higher if patients are getting estrogen "off the street" or overdosing (it can be tempting to take extra hormone in hopes of speeding up one's gender transition)

- **Chest xray shows diffuse patchy infiltrates and CT PE shows multifocal, bilateral, predominantly peripheral airspace opacities. You discuss the case with the radiologist and agree that this is most likely silicone pulmonary emboli syndrome. Describe silicone pulmonary emboli syndrome: pathophysiology, treatment, and clinical course.**
  - Nonmedical free silicone injections are a means of immediate relief of body dysphoria symptoms for transwomen in contrast to gender-affirming hormones, which are slow to act with physical changes happening over months to years
  - Free silicone injections may also be appealing for transwoman who are unable to access gender-affirming hormones / surgeries for medical or financial reasons
  - Symptoms occur when silicone enters the vasculature and embolizes (similar to fat or amniotic fluid emboli syndromes)
  - Silicone pulmonary embolism can lead to dyspnea, chest pain, hemoptysis, alveolar hemorrhage, ARDS, and devastating neurologic sequelae
  - Care is supportive

- **You admit the patient to a medical service and notice it is taking a very long time to get a bed assignment. When you call bed management, they inform you that they are waiting for a private room to become available for the patient. Discuss best practice for room assignments for transgender patients.**

- Lambda Legal and Human Rights Campaign co-authored a landmark publication to guide best practice hospital policy called *Creating equal access to quality health care for transgender patients: Transgender Affirming Hospital Policies* (shown below)
- According to this resource patients should be roomed according to their gender identity
- Further, complaints from other patients do not constitute grounds for an exception to this room assignment policy, as would be the case for other patients protected by nondiscrimination policies such as those protecting race
- Teaching points for guided discussion

> "Where room assignments are gender-based, transgender patients will be assigned to rooms based on their self-identified gender, regardless of whether this self-identified gender accords with their physical appearance, surgical history, genitalia, legal sex, sex assigned at birth, or name and sex as it appears in hospital records. That a transgender patient's physical appearance or genitalia differ from other patients who share the same self-identified gender is not a bar to assigning the patient to a room in accordance with his or her gender identity. Sufficient privacy can be ensured by, for example, the use of curtains or accommodation in a single side-room adjacent to a gender-appropriate ward."

> "Furthermore, complaints from another patient related to a roommate's gender identity or expression do not constitute grounds for an exception to this room assignment policy, as would be the case for other patients protected by nondiscrimination policy, standards and/or law."

❖ **Case Part III –** Binding Practices **(10 min)**

24 YOF patient presenting with progressive chest pain and dyspnea over the past 3 months.

Vitals: Temp 98.2F HR85 RR15 BP120/86 O2 98% RA

You notice a masculine appearing patient upon entering the room. Patient states they go by the name "Riley" and use they/them pronouns.

They describe three months of progressive dyspnea that seems worse with exertion. They also endorse chest pain with breathing during this same period. They deny any past medical history and there is no family history of VTE or early ACS. They endorse occasionally buying "T" off the street but otherwise are not taking prescription medications.

On exam, patient is very well appearing and comfortable. You notice a tight wrap of duct tape encircling their chest wall. Heart and lungs are normal to auscultation. You enquire about the wrap and the patient states they have been "binding" for six months, day and night. They note

that the chest pain and shortness of breath seems to be best when they remove the binder briefly to shower. The remainder of the physical exam is normal.

CXR is clear and without any acute findings. EKG shows normal sinus rhythm.

- **Discussion Questions with Teaching Points**
  - **Describe chest binding practices: Why do people bind? How do they bind? What are some complications of binding?**
    - Binding describes the process of tightly compressing the breast tissue against the chest wall to create a masculine contour of the chest
    - For transmasculine people (i.e., birth-assigned females that identify as a man / gender non-binary), binding mitigates the gender dysphoria associated with having breasts
    - Binding can be accomplished using a variety of materials including doubling sports bras, ace wrap, commercial binders, plastic wrap, and duct tape
    - Binding too tightly can result in chest pain, dyspnea, broken ribs, skin breakdown and ptotic breasts

  - **Demonstrate how you might counsel this patient about binding**
    - While your first inclination might be to tell the patient to stop binding, your job in this situation is risk reduction counseling
    - Here are some safer binding practices you might recommend to this patient:
      - Recommend using sports bras or commercial binder
      - Assure that binder is a proper size and not too small
      - Limit daily use to less than eight hours
      - Recommend no nighttime wear
      - Suggest taking occasional "Off days"

  - **How should you document your encounter with this patient in the medical record?**
    - Document using the pronouns that the patient told you to use. In this case, you might document like the following:
      - "24 yo genderqueer patient (birth-assigned female; uses pronouns they / their) who presents with gradual onset chest pain and dyspnea. They report near continuous chest binding for past six months using duct tape with relief of symptoms when they remove binder."
  - **Describe the typical gender-affirming hormones, surgeries and non-surgical body modifications you may encounter while treating the transgender population**
    - Gender affirming hormones:
      - Transmen: testosterone; often referred to as "T"; common side effects include polycythemia, acne, baldness
      - Transwomen:
        - Estrogen: increased risk of venous thromboembolic disease

        - Spironolactone: spironolactone functions as an anti-androgen; risk of hyperkalemia
  - Gender affirming surgeries
    - Top Surgery / Breast surgery
      - Transwomen: breast augmentation
      - Transmen: mastectomy with chest reconstruction
    - Bottom Surgery / Genital surgery
      - Transwomen: orchiectomy, penectomy, vaginoplasty
      - Transmen: hysterectomy/oophorectomy, metoidioplasty (procedure to elongate clitoris), phalloplasty
  - Non-surgical body modifications
    - Packing: prosthetic used by transmen to simulate masculine appearance of groin
    - Tucking: technique used by some transwomen to create feminine contour to the groin by pushing testicles into inguinal canals and wrapping penis between legs
    - Binding: flattening breasts to create masculine appearance to chest

- **Case Teaching Points Summary**
  - Introduction to Transgender Medicine
    - Sex is biological while gender is one's understanding of being male, female or genderqueer (previously intersex)
    - Cisgender describes concordance between sex and gender while transgender describes discordance biological sex and gender
    - Many transgender patients report negative experiences with the health care system and some even avoid seeking medical care because of these experiences
    - Be sensitive to pronoun use and automatic gendering → ask patient what pronouns they prefer and what gender they identify with versus biological sex they were born with
    - Be aware that sensitive exams may be difficult and ensure you are explaining why you need to do an exam and making it as comfortable for the patient as possible

  - Silicone Emboli Syndrome
    - Transgender women (sex male, gender female) can take gender affirming medications such as estrogens and spironolactone → estrogens increase the risk of VTE depending on type, route and if the patient is taking is as prescribed
    - Silicone Emboli Syndrome occurs when nonmedical free silicone injections enter the vasculature
    - Presentation is similar to that of fat or amniotic fluid emboli syndromes causing dyspnea, chest pain, alveolar hemorrhage, ARDS and neurologic symptoms
    - Care is supportive
    - Transgender patients should be roomed based on their identified gender and should be protected from discrimination similar to other protected groups (such as race)

- Chest Binding and other gender-affirming modifications
  - Chest binding is done by transgender men to relieve dysphoria from breast tissue
  - Can cause chest pain, shortness of breath, skin breakdown among other symptoms
  - Counseling should include using commercial products (or sports bras) rather than things like duct tape, limit to 8 hours a day, no binding at night and to take rest days
  - Other gender-affirming modifications you may see are hormones (testosterone in transmen, estrogens/spironolactone in transwomen), surgeries (top including either breast augmentation or mastectomy with reconstruction; bottom including orchiectomy/penectomy/vaginoplasty or hysterectomy/oopherectomy/metoidioplasty/phalloplasy) or other non-surgical body modifications including packing, tucking or binding
  - Document the history you obtain including sex, gender and preferred pronouns to help future providers provide more sensitive care to these patients

❖ **Facilitator Background Information**

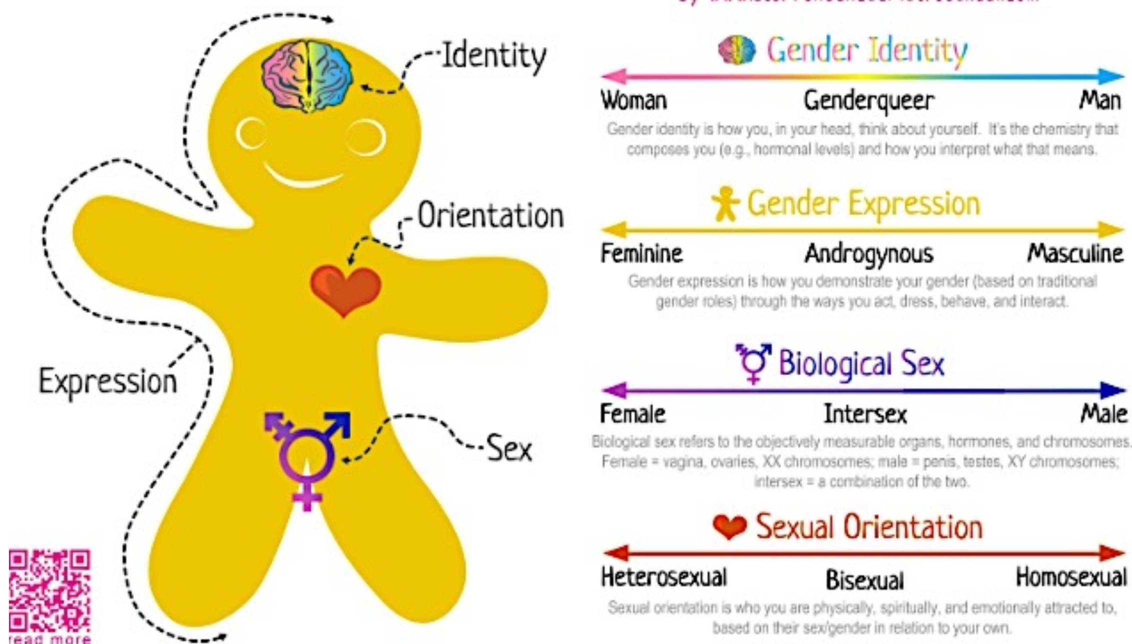
Gender diversity is one of the many natural ways the human species is diverse. Gender minorities – a term I will use interchangeably with transgender – are people who have a gender identity that does not match their biological sex (e.g., a birth-assigned male that identifies as gender non-binary or as a woman). Like with other minority populations, gender minorities face ongoing stigma and discrimination. The 2015 US Transgender Survey, which had 27,000 transgender respondents from

across the nation, found that gender minorities experience disproportionate levels of poverty, unemployment, violence, addiction and suicidality. And the disparities faced by transgender people also exist within the healthcare system. One-third of respondents who had interfaced with the healthcare system in the past year reported a negative experience because of their transgender identity and almost a quarter who had a healthcare need in the past year avoided seeking medical attention for fear of discrimination they might face as a transgender person.

Recently, states across the U.S. have been scrambling to legislate which bathrooms transgender people should use, which is ironic given that bathrooms are a place of exceptional vulnerability and risk to personal safety for transgender people. These bathroom bills are a symptom of ongoing fear, bias, and stigma toward transgender people. The *New England Journal of Medicine* published a strong response to the bathroom bills. The first powerful line of this essay compels the reader to view gender in a diversity framework: *One might have to go back to the era of racial desegregation of U.S. bathrooms to find a time when toilets received so much attention.*

Provision of sensitive and effective care for transgender patients is a basic cultural competency for all physicians, including emergency physicians. Yet, physicians receive little formal training on care of transgender patients in undergraduate or graduate medical education unless they specifically seek it out. Mounting evidence shows that this training gap perpetuates healthcare disparities faced by this vulnerable population in emergency departments. A brief national survey of emergency physicians published in *Annals of Emergency Medicine* by Chisolm-Straker et al demonstrated a lack of knowledge about basic gender-affirming medications and surgeries. A study published in *Annals of Emergency Medicine* by Bauer demonstrated that transgender patients specifically avoid emergency departments and that over half of transgender ED utilizers have had a negative experience. A qualitative study published in *Annals of Emergency Medicine* by Samuels et al describes discriminatory behavior, inadequate electronic health records, and uninformed providers that transgender individuals self-reported from emergency department experiences.

With a necessary, collective understanding of the background and import of this topic, we can begin to delve into the essentials of transgender health from an emergency physician perspective. The language around gender is both rapidly evolving and absolutely crucial for meaningful discourse. The Genderbread Person brilliantly illustrates the terms that you need to understand.



Biological sex development:

- Anatomic / gonadal / genetic determinants; assigned at birth
- Male / female or difference of sex development (previously called intersex)

Gender identity:

- One's own sense of being male / female; influenced by both internal and external factors; can evolve over time
- Historically, in our society, has been conceptualized as binary (e.g., man / woman) but there has been a shift toward viewing gender on a spectrum. Many people are now defying the historical binary and using words like gender fluid, gender non-binary, gender non-conforming, genderqueer, or gender variant to describe their felt gender. Of note, people who identify outside of the gender binary may not use traditional he / she pronouns. They may prefer they / their or some other nontraditional pronouns.

What's the relationship between sex and gender?

The vast majority of people identify as *cis-gender*, which means they have a congruent sex and gender identity (e.g., a male that identifies as a man), whereas transgender individuals have a gender identity that does not match their assigned sex (e.g., a birth-assigned female that identifies as a man / genderqueer). A transgender man is someone who identifies as a man and was assigned female at birth; a transgender woman is someone who identifies as a woman and was assigned male at birth.

Gender expression:

- The way we present our gender outwardly (e.g., clothes, haircut, jewelry, speech patterns, etc)
  - As physicians, attuning to our patient's gender expression can give us important clues about someone's gender identity.

[Gender] Transition:

Process of shifting one's gender expression toward something more feminine / masculine / androgynous. This might involve changing hair / clothes / speech patterns and could also include physical changes from gender affirming hormones / surgeries.

Sexual orientation:

- Identity around who we love / are attracted to; can evolve over time
- Important point: sexual orientation and gender identity are INDEPENDENT

❖ **References**

- **Author:** Dr. Adrian Daul, MPH FACEP
- **Editors:** Dr. Natasha Wheaton
- **References:**

- Schuster MA, Reisner SL, Onorato SE. Beyond Bathrooms — Meeting the Health Needs of Transgender People. *New England Journal of Medicine*. 2016;375(2):101-103. doi:10.1056/NEJMp1605912.
- James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality.
- Bauer GR, Scheim AI, Deutsch MB, Massarella C. Reported Emergency Department Avoidance, Use, and Experiences of Transgender Persons in Ontario, Canada: Results From a Respondent-Driven Sampling Survey. *Annals of Emergency Medicine*. 2014;63(6):713-720.e1. doi:10.1016/j.annemergmed.2013.09.027.
- Chisolm-Straker M, Willging C, Daul AD, et al. Transgender and Gender-Nonconforming Patients in the Emergency Department: What Physicians Know, Think, and Do. *Annals of Emergency Medicine*. 2018;71(2):183-188.e1. doi:10.1016/j.annemergmed.2017.09.042
- Center of Excellence for Transgender Health, Department of Family and Community Medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People; 2nd edition. Deutsch MB, ed. June 2016.
- Sarah Peitzmeier, Ivy Gardner, Jamie Weinand, Alexandra Corbet & Kimberlynn Acevedo (2016): Health impact of chest binding among transgender adults: a community-engaged, cross-sectional study, Culture, Health & Sexuality, DOI:10.1080/13691058.2016.1191675
- Lambda Legal, HRC, Hogan Lovells, New York City Bar. Creating equal access to quality health care for transgender patients: Transgender Affirming Hospital Policies. May 2016. Available at: http://www.lambdalegal.org/sites/default/files/publications/downloads/fs_20160522_transgender-affirming-hospital-policies.pdf
- Samuels EA, Tape C, Garber N, Bowman S, Choo EK. "Sometimes You Feel Like the Freak Show": A Qualitative Assessment of Emergency Care Experiences Among Transgender and Gender-Nonconforming Patients. *Annals of Emergency Medicine*. 2018;71(2):170-182.e1. doi:10.1016/j.annemergmed.2017.05.002