From the Eyes of a Medical Student: Homeless in the Hospital

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Learning Objectives

- Understand scope of unhoused individuals' utilization of the emergency room
- Describe patient case from medical student perspective
- Identify how housing status relates to healthcare bias and stigma
- Recognize disproportionate burden of illness for unhoused individuals

Rate of ED Visits by Homeless Status and Geographic Region– National Hospital Ambulatory Medical Care Survey, US, 2015-2018



QuickStats: Rate of Emergency Department (ED) Visits, by Homeless Status and Geographic Region — National Hospital Ambulatory Medical Care Survey, United States, 2015–2018. MMWR Morb Mortal Wkly Rep 2020;69:1931. DOI: <u>http://dx.doi.org/10.15585/mmwr.mm6950a8external icon</u>.

Case 1: DH, June 2023, GW Hospital

- Chief Complaint: Lower Extremity Wounds
- Additional information: Patient complains of chronic wounds to bilateral lower extremities *infested with maggots*. Denies fevers/chills. Unknown past medical history.
- History of present illness: "58 year old male with history of mental health not on medications, homelessness who presents to the ER with chronic LE bilateral wounds. Patient states he self cares for his wounds and does dressing changes when he is able. Said he has not been seen for these wounds for multiple years. Is not sure that they have gotten so bad. Patient denies f/c/n/v/CP/SOB. Does not take any medications at this time."

Physical Exam in ED

- General: Alert, no acute distress.
- Skin: Warm, Bilateral lower extremities with notable chronic wrapping, when wrapping is removed there is *profuse maggots noted on erythematous skin that is broken down, with evidence of purulence*.
- Head: Normocephalic, atraumatic.
- Cardiovascular: Regular rate and rhythm, No edema.
- **Respiratory:** Respirations are non-labored, Symmetrical chest wall expansion.
- Gastrointestinal: Soft, Nontender.
- Neurological: Alert and oriented to person, place, time, and situation.

Admission Note (by medical student)

- 58 year old male with PMH of PVD, severe depression, EtOH use and heroin use presented to ED after a bystander nurse passed him on the street, noted his severe leg wounds and recommended hospitalization.
- On arrival to ED, patient reported diffuse pain "all over my body" dull pain in both legs, subjective chills, and mild abdominal cramping
- States that lower extremity wounds have been present for a few months, and he has tried his best to clean them on his own. He is currently undomiciled and living on the street which has made maintaining nutrition and cleaning his wounds very difficult.
- Admits to alcohol use of 6+ drinks per day, and daily heroin use (via snorting) with his last use on 6/1. Denies injection drug use.
- Stated that he has not been to a doctor in many years. Has not had ageappropriate cancer screenings completed in the past few years.

Hospital Course

- Patient incidentally found to have elevated liver enzymes during initial work up→ admitted to hospital, GI consult, imaging
- Wound care consult, treated for infection
- Started Suboxone for opioid use disorder (treatment can be initiated while inpatient)
- Peer recovery consult
 - Provided patient with resources for substance use as well as information on outpatient Suboxone clinics
- 7 day hospital stay

Takeaways

- Bias in documentation
 - Initial ED note \rightarrow no mention of pain
 - Stigma of unhoused status and ability to care for oneself → where is blame placed?
- Stigma of treatment of SUD (suboxone debate)
- Disproportionate prevalence of substance use disorder among unhoused individuals
- Experiencing homelessness → increased risk for other medical conditions

Maggots

- Maggots are the larvae of flies
- Human infestation (myiasis) occurs when flies lay new eggs on skin or in wounds
- Classified according to site of infection: cutaneous (most common), nasopharyngeal, ophthalmic, intestinal, urogenital
- Maggots can enter through in tact skin or through a wound



Risk Factors for Maggot Infestations

- Limited ability for self-care, debilitated patient
- Bleeding or odors from decomposition of skin/wound
- Summer season/tropical climate
- Neglect in nursing care
- Experiencing homelessness
 - Increased exposure to flies
 - Soiled bandages and clothing attracts gravid flies
 - Comorbidities that are associated with chronic wounds
 - Diabetes, peripheral vascular disease

Significance

- Deadly if not managed and treated appropriately and timely
- Correct identification of species → pathogenesis of infection and potential invasiveness of species
- Shift in ecology and epidemiology of maggot species causing infections over last 50 years
- Submit maggots to pathology lab, however most are discarded immediately
- Stigma impacts timely and complete care!!

Thank you

• Questions?

Resources

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