Letters to the Editor

Broad Screening Is Needed for All Patients at Risk of Syphilis

Original Article: Syphilis: Far from Ancient History

Issue Date: July 15, 2020

Available at: https://www.aafp.org/afp/2020/0715/p91.html

To the Editor: Drs. Ricco and Westby provide a timely review of syphilis as a rising public health concern. The authors describe two subpopulations with the highest prevalence—men who have sex with men and patients who are HIV positive.[1] However, highlighting these populations for increased scrutiny may lead to under surveillance and missed opportunities for detection and treatment in other patients who are at high risk. It also adds to the stigma that men who have sex with men and HIV-positive populations face when seeking health care.

People who exchange sex for money, formerly incarcerated people, and people with substance use disorders are among the populations who also warrant syphilis screening.[2] Stigma surrounding syphilis can compound these populations' already existing health inequities. Stigma is a significant contributor to health inequities in marginalized populations, including people with minority sexual or gender orientation and those who are HIV positive.[3] Additionally, stigmatization in health care of lesbian, gay, bisexual, transgender, and queer people, and of patients who are HIV positive further exacerbates low rates of engagement with primary care because of perceived or actual judgment from health care professionals.[4,5]

To address this crisis, we must make care accessible to all patient populations. Maintaining appropriately broad screening for all patients at increased risk of syphilis infection reduces the stigmatization of this diagnosis in men who have sex with men and in patients who are HIV positive and is essential to reducing syphilis transmission rates.

Paula Amin, MD
Columbus, Ohio
Email: paula.pranay.amin@gmail.com

Author disclosure: No relevant financial affiliations.

The author thanks Dr. Jennifer Middleton for help preparing this Letter to the Editor. Dr. Middleton is a contributing editor for *AFP*.

References

1. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2018. October 2019. Accessed July 31, 2020. https://www.cdc.gov/std/stats18/STDSurveillance2018-full-report.pdf
2. Centers for Disease Control and Prevention. Syphilis surveillance supplement 2013–2017. February 2019. Accessed August 17, 2020. https://www.cdc.gov/std/stats17/syphilis2017/Syphilis-Surveillance-Supplement-2013-2017.pdf
3. Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health*. 2013;103(5):813-821.
4. Whitehead J, Shaver J, Stephenson R. Outness, stigma, and primary health care utilization among rural LGBT populations. *PloS One*. 2016;11(1):e0146139.
5. Beckerman A, Fontana L. Medical treatment for men who have sex with men and are living with HIV/AIDS. *Am J Mens Health*. 2009;3(4):319-329.

In Reply: We thank Dr. Amin for the thoughtful and patient-oriented letter about broad screening for syphilis in all patients. We agree that stigma toward marginalized populations can contribute to increased health inequities and is a barrier to seeking health care. Our intention was to highlight recommendations from the Centers for Disease Control and Prevention and the U.S. Preventive Services Task Force about specific high-risk subpopulations based on the best available evidence.[1-3] Table 2 in our article highlights additional subpopulations at increased risk of syphilis; however, the data for some of these at-risk groups are less clear regarding the frequency of screening. Additionally, because syphilis is often transmitted within small social networks, a history of syphilis should be considered a significant risk factor for future infection.

We attempted to balance a broad approach to screening while also providing specific evidence-based guidance for health care professionals in a clinical setting. We agree that future recommendations should cast a wide net to identify the highest-risk populations while attempting to

Email letter submissions to afplet@aafp.org. Letters should be fewer than 400 words and limited to six references, one table or figure, and three authors. Letters submitted for publication in *AFP* must not be submitted to any other publication. Letters may be edited to meet style and space requirements.

This series is coordinated by Kenny Lin, MD, MPH, deputy editor.

Downloaded from the American Family Physician website at www.aafp.org/afp. Copyright © 2021 American Academy of Family Physicians. For the private, noncommercial use of one individual user of the website. All other rights reserved. Contact copyrights@aafp.org for copyright questions and/or permission requests.

avoid contributing to stigma and bias toward particularly vulnerable groups.

Jason Ricco, MD, MPH
Minneapolis, Minn.
Email: ricco004@umn.edu

Andrea Westby, MD
Minneapolis, Minn.

Author disclosure: No relevant financial affiliations.

References

1. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2018. October 2019. Accessed March 7, 2020. https://www.cdc.gov/std/stats18/STDSurveillance2018-full-report.pdf
2. Cantor AG, Pappas M, Daeges M, et al. Screening for syphilis: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2016;315(21):2328-2337.
3. Bibbins-Domingo K, Grossman DC, Curry SJ, et al; US Preventive Services Task Force. Screening for syphilis infection in nonpregnant adults and adolescents: US Preventive Services Task Force recommendation statement. *JAMA*. 2016;315(21):2321-2327.

Case Report: DKA with Lower-than-Expected Blood Glucose in the Setting of SGLT2 Inhibitor Use

To the Editor: A 45-year-old patient presented to the emergency department after three days of generalized weakness. The patient's medical history was significant for type 2 diabetes mellitus that was diagnosed at age 40. The patient was prescribed 10 units of insulin glargine (Lantus) nightly, 10 mg of empagliflozin (Jardiance) per day, and 5 mg of saxagliptin (Onglyza) per day. The patient reported insulin nonadherence for one month before presentation to the emergency department, although the patient had continued taking oral agents daily. The patient's laboratory results were significant for the following: blood glucose of 220 mg per dL (12.2 mmol per L), anion gap of 19 mEq per L (19 mmol per L), serum bicarbonate of 6 mEq per L (6 mmol per L), osmolality of 299 mOsm per kg (299 mmol per kg), A1C of 15.2% (mean plasma glucose of 390 mg per dL [21.6 mmol per L]), and beta-hydroxybutyrate of 103 mg per dL. The patient was diagnosed with diabetic ketoacidosis (DKA) and treated per hospital DKA protocols. Within six hours of starting the insulin drip, the patient's glucose levels dropped, requiring continual dextrose supplementation. The patient was treated for approximately 52 hours before the resolution of DKA and transition to subcutaneous insulin. Treatment also included three doses of sodium bicarbonate infusions administered over three days.

DKA associated with sodium-glucose cotransporter 2 (SGLT2) inhibitor use is well documented; however, it is unclear whether SGLT2 inhibitors are a direct precipitating factor for DKA. One proposed mechanism is that the glucose-lowering effect of SGLT2 inhibitors causes a decrease in insulin levels and subsequent increase of glucagon production, which increases lipolysis, beta-oxidation, and ketone body production.[1] Patients prescribed SGLT2 inhibitors who develop DKA often present with lower-than-anticipated (i.e., euglycemic) glucose levels, leading to delayed diagnosis and mismanagement of DKA.

The most effective means of preventing SGLT2 inhibitor-associated DKA is to withhold SGLT2 inhibitors during situations that may precipitate DKA.[2] The half-life of SGLT2 inhibitors is 11 to 13 hours; therefore, these medications may have effects several days after discontinuation.[2] SGLT2 inhibitors should be discontinued three days before an anticipated stressful event such as surgery.[2] It is also crucial for patients to avoid missing or inappropriately reducing insulin doses, including days in which they are acutely ill.[2] If DKA is diagnosed, the SGLT2 inhibitor should be stopped immediately. Clinicians evaluating patients treated with SGLT2 inhibitors who present with DKA signs and symptoms should not rule out the diagnosis based on lower-than-expected glucose levels.

Armen Voskertchian, DO
Fresno, Calif.

Liana Milanes, MD
Fresno, Calif.
Email: lmilanes@fresno.ucsf.edu

Author disclosure: No relevant financial affiliations.

References

1. Ogawa W, Sakaguchi K. Euglycemic diabetic ketoacidosis induced by SGLT2 inhibitors: possible mechanism and contributing factors. *J Diabetes Investig*. 2016;7(2):135-138.
2. Goldenberg RM, Berard LD, Cheng AYY, et al. SGLT2 inhibitor-associated diabetic ketoacidosis: clinical review and recommendations for prevention and diagnosis. *Clin Ther*. 2016;38(12):2654-2664.e1.

Case Report: Back Pain as a Presenting Symptom of Systemic Mastocytosis

To the Editor: A 51-year-old man with a history of hypertension, depression, and anxiety presented with low back pain at rest that increased with movement. The pain began when the patient was coughing during a mild cold that had already been remitted at the time of the examination. The patient had no recent history of trauma.

The physical examination showed localized tenderness to palpation over the lumbosacral spine. Conservative treatment was initiated with nonsteroidal anti-inflammatory drugs. When the pain persisted after six weeks, magnetic resonance imaging of the lumbosacral spine was performed that showed loss of height in the L3 vertebral body suggesting a fracture or intravertebral disc herniation.

Laboratory test results showed normal red and white blood cell and platelet counts, liver function, renal function, electrolytes, C-reactive protein, 25-hydroxyvitamin D,

sedimentation rate, and thyroid and parathyroid function. Urine calcium concentration was high at 24.6 (normal range = 6.8 to 21.3). Bone densitometry showed a lumbar bone mass of 0.662 (traumatic disc extrusion = 4.5) and a femoral neck bone mass of 0.595 (traumatic disc extrusion = 3.6). The patient was diagnosed with lumbar and femoral neck osteoporosis with L3 vertebral fracture and hypercalciuria. Treatment was initiated with alendronate/cholecalciferol (Fosamax Plus D), with repeat densitometry in two years showing a clear improvement in bone mass. During this time, the patient reported worsening anxiety and depression, asthenia, anhedonia, and recurrent presyncope episodes. The patient also developed small hyperpigmented, pruritic papules, most predominantly above the waist, that became more noticeable after exercise or abrupt temperature changes.

Elements of the patient´s clinical history suggested systemic mastocytosis; therefore, serum tryptase levels were measured with a positive result of 23.6 ng per dL (normal range = less than 20 ng per mL). A hematologist performed a bone biopsy and confirmed the diagnosis. Disodium cromoglycate was added to the patient's regimen of alendronate/cholecalciferol, resulting in the progressive improvement of symptoms.

The diagnosis of systemic mastocytosis requires a high index of clinical suspicion because of the nonspecific nature of its symptoms. In this case, an osteoporotic vertebral fracture in an atypically young patient, in addition to psychiatric and dermatologic symptoms, provided important clues to the eventual diagnosis.

Carmen Marcos Alonso, MD
Seville, Spain
Email: risi_92@hotmail.es

Joaquín Batista Cruzado, MD
Seville, Spain

Author disclosure: No relevant financial affiliations.

Case Report: Limitations of Virtual Care in Older Adults with Functional and Cognitive Impairment

To the Editor: An 85-year-old patient with hypertension, coronary artery disease, peripheral vascular disease, vascular dementia, diabetes mellitus, and chronic kidney disease was residing in an assisted living facility due to dementia and care dependency. The patient's family was fully involved in care before but could not visit once the coronavirus disease 2019 pandemic began. Facility staff noted the new onset of reddish discoloration of the left great toe with drainage and a cold foot and notified the patient's primary care physician. Triage staff arranged a same-day urgent virtual visit, during which the physician noticed erythema from the base of the toe to the midfoot but was unable to visualize drainage because of its location on the plantar aspect in a patient with limited mobility. The diagnosis was foot cellulitis with possible deeper infection, and oral doxycycline was initiated with an in-person follow-up scheduled for the next day. At the in-person appointment, the patient was diagnosed with a toe ulcer and eschar in the plantar aspect with brownish serous drainage complicated by cellulitis of the foot and was referred to the emergency department.

The patient was evaluated by vascular surgery and was diagnosed with a plantar ulcer with necrotizing soft tissue infection of the foot and subcutaneous gas on imaging. The patient had a below-knee guillotine amputation and was discharged to a subacute rehabilitation facility after a prolonged hospitalization complicated by delirium, dysphagia, and aspiration pneumonia.

Virtual care has increased immensely during the pandemic in all specialties, including geriatrics.[1] Virtual visits for skin conditions that require special positioning can be challenging in patients with dementia. In this case, the virtual visit critically delayed a time-sensitive diagnosis, despite appropriate triaging and subsequent care. This case illustrates the limitations of virtual care for patients with cognitive and functional impairment in alternative living environments. Clinicians should understand the limitations of virtual care in older adults and expedite in-person care as appropriate. We also recommend that practices identify a list of inappropriate virtual visit scenarios to guide the triaging staff.

Evan S. Morrison, MD
Ann Arbor, Mich.
Email: mevan@med.umich.edu

Shenbagam Dewar, MD
Ann Arbor, Mich.

Author disclosure: No relevant financial affiliations.

Reference

1. Dewar S, Lee PG, Suh TT, et al. Uptake of virtual visits in a geriatric primary care clinic during the COVID-19 pandemic. *J Am Geriatr Soc.* 2020;68(7):1392-1394. ■