Cutaneous Manifestations of Disseminated Gonococcal Infection: Petechiae, Pustules, and Purpura

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Case Presentation

A 35 year-old man with a 5-year history of untreated human immunodeficiency virus (HIV) had urogenital gonococcal exposure two weeks prior to presentation. A week prior, he received single doses of intramuscular ceftriaxone and oral azithromycin for presumed pharyngeal gonococcal infection.

He presented to the emergency department with fever, sweats, left dorsal foot and ankle pain, and a rash on his bilateral lower extremities (Images 1 & 2) for 1 week.

Exam was notable for petechiae and tenosynovitis of dorsal left foot. The CD4 count was 264 per cubic mm with a viral load of 26,000 copies per mL. Nucleic acid amplification test (NAAT) for gonococcal infection of the throat, rectum, and urine were negative as were blood cultures. He was treated for presumptive disseminated gonococcal infection. With intravenous ceftriaxone, all presenting symptoms resolved.

Cutaneous manifestations of disseminated gonococcal infection include abscesses, cellulitis, petechiae and purpura, bullae, necrotizing fasciitis, and vasculitis (not just pustules!).

Gonococcal infections are on the rise, especially among men who have sex with men (MSM).

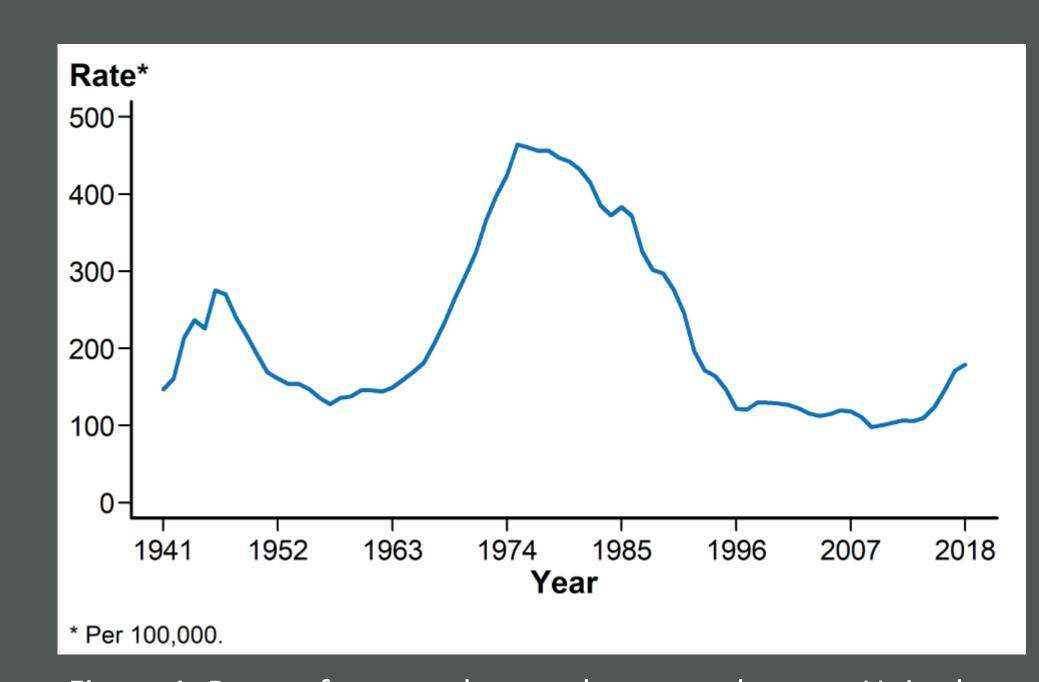
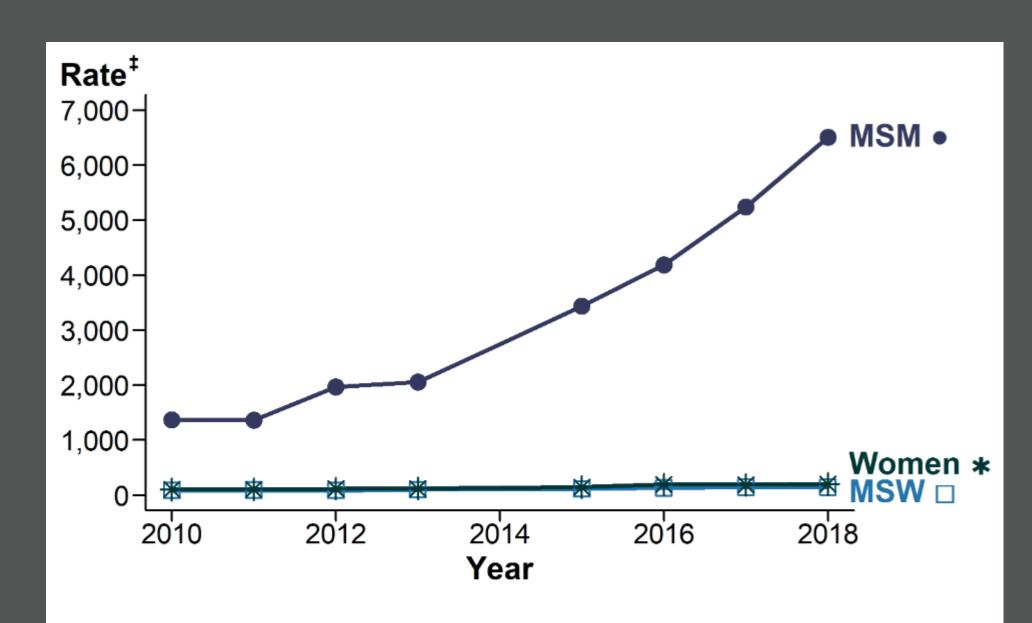


Figure 1. Rates of reported gonorrhea cases by year, United States 1941-2018 (Source: CDC)



* Estimates based on interviews among a random sample of reported cases of gonorrhea (n=21,417); cases weighted for analysis. Data not available for 2014; 2013–2015 trend interpolated; trends lines overlap for MSW and women in this figure.
† Sites include Baltimore, Philadelphia, New York City, Washington State, San Francisco, and California (excluding San Francisco).

† Per 100,000.

Figure 2. Gonorrhea cases by MSM, MSW, and Women, STD Surveillance Network[†], 2010-2018 (Source: CDC)





Image 1. Image of petechiae on the medial aspect of the right lower leg.



Image 2. Image of petechiae on the medial aspect of the left knee and proximal left lower leg.

Discussion

Disseminated gonococcal infection (DGI) frequently presents with a dermatitis syndrome, classically characterized by pustules.

However, cutaneous manifestations may be highly variable in DGI.

Clinicians should be mindful of gonococcal infections, especially in at-risk populations, given the rising incidence of disease (Figures 1 & 2).

References

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