An Old Foe: Differentiating between early and late latent syphilis in the primary care setting

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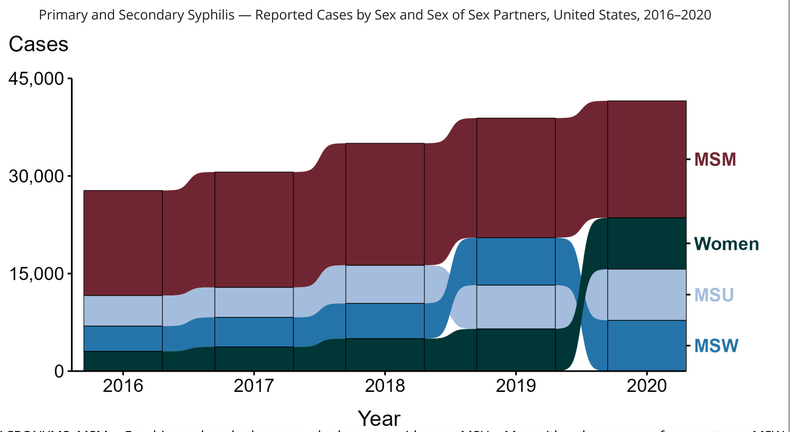
Background

- The Incidence of syphilis continues to rise in the US, with incidence doubling between 2014 and 2019 and increasing a further 7% by 2021
- MSM rates have decreased in recent years but this community is still disproportionately impacted, accounting for 53% of all male primary and secondary syphilis cases



ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

Data courtesy of the CDC updated April 2022

Case

A 33y/o gentleman presents to establish with PCP after an unprotected sexual encounter. Reports no urogenital sx but declines exam

Screening labs reveal positive RPR and direct positive treponemal test c/w syphilis

However, unclear if late latent vs new early syphilis

Patient called back for re-assessment with plan for 3 weeks of IM penicillin

Appearance of new shallow nonpainful ulcer is suggestive of chance. New concern is for primary syphilis

24 hours after receiving single dose of IM Penicillin G, patient reports fever, muscle aches, headache. He inquires about allergy

He is diagnosed with a Jarisch-Herxheimer reaction

His overall picture, including his chancre-like rash and the suspicion his JH reaction was a surrogate for a high treponemal count leads to diagnosis of primary syphilis. He will be retested in 6 months

The patient's lab testing confirmed syphilis but did NOT clarify the stage. The serologic 1:1 RPR testing and absence of local or systemic infection initially led to suspicion for late latent syphilis

Discovery of the chancre-like lesion at a later visit redirected focus to primary syphilis which **reduced treatment duration**

The finding of the chancre helped explain the unusual titer level as it takes 1-3 weeks after chancre formation for RPR titers to become more strongly positive

The patient's phone call to the office after their dose of IM penicillin and description of symptoms raised worry for a systemic infection. When put together with recent treatment, a Jarisch-Herxheimer reaction was suspected

The patient was counseled over the phone and advised to use ibuprofen. His symptoms improved by the following day

This recognition **saved the patient an ED visit**

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Jarisch-Herxheimer reaction vs Allergy

	Jarisch-Herxheimer	Allergy/Intolerance
Onset	24-72 hours after 1st antibiotic dose	Minutes to hours after initiation of medication
Symptoms	Fevers Chills Rigors Headache Tachycardia Worsening of pre-existing rash	Itchy throat/ears Stomach upset Diarrhea Facial swelling and edema Hypotension Hives Shock
Treatment	NSAIDS, fluids	May require anti-histamines and potentially emergency treatment with epinephrine & steroids for anaphylaxis
Resolution	Often within 1 day	Ranges from hours to days. In anaphylaxis, may require weeks
Prevention	Unfortunately not preventable. Patients with spirochetal infections being treated should be monitored	Avoid repeated allergens/triggers

Traditional Screening Result and Titer Responses