MA Advanced LTBI ECHO Session Summary #3
2/16/23

1. **In older people, risks of TB reactivation must be weighed against risks of medication use.** The presenter ran this case through TSTin3D (http://tstin3d.com/en/calc.html) which suggested that, while there is a 98% chance this test is a true positive, it is associated with an 0.27% chance of active TB, but a 5% chance of drug-induced hepatitis if treated with INH. The patient does not have any hepatic comorbidities that would put him at higher risk of INH hepatotoxicity, but it is still important to consider this risk in the elderly.
    a. **Immunosenescence with advancing age is a risk factor for conversion to active TB.** We must weigh this against the fact that **risk for conversion from latent to active TB is highest in the first 2 years after contact with active TB.** In an elderly patient who moved to the US in 1975 and may not have had much epidemiologic risk since then, it could be reasonable to defer treatment. (By contrast, if we knew he had been in contact with active TB during his visit to Venezuela in 2021, he would certainly be a priority to treat!)
    b. **Shared decision-making is critical when considering treatment.** Here, the patient was counseled by a prior trusted PCP regarding treatment, and although he initially declined, he ultimately came to the conclusion that he did want treatment. It is important to honor the patient's decisions; given that he is committed to treatment and quite concerned about possible conversion to active TB, it was appropriate to offer treatment.
2. **Starting with the shortest-course, least hepatotoxic regimen is good practice in older patients.** If after risk/benefit discussion and shared decision-making, the patient we discussed elected to be treated, rifampin would be a good choice rather than starting with INH.
3. **Check drug interactions before starting rifampin.** This patient does not have any absolute contraindications to rifampin, but some of his medications do interact (notably risperidone, levels of which can decrease in the presence of rifampin, as well as levothyroxine). In such a patient it is important to ensure close follow-up for monitoring (e.g. decreased effect of risperidone, TSH levels, etc).
    a. **Use any approved interaction checker, or review the recently published Rifamycin DDI Guide**, available at https://www.currytbcenter.ucsf.edu/products/rifamycin-drugdrug-interactions-a-guide-for-primary-care-providers-treating-latent-tuberculosis.
4. **Nitrosamine contamination of rifamycins presents an ongoing challenge.** Shared decision-making about choosing a regimen is key. We have found this resource helpful in framing patient counseling: https://www.treatmentactiongroup.org/wp-content/uploads/2021/02/nitrosamine_technical_brief_2021.pdf.

5. **Stop medication and have patient follow up in the event of side effects that may be related to liver injury.** Here, our presenter appropriately brought the patient in for his concern of diarrhea and stopped rifampin.
6. **Pull in TB specialist colleagues when needed.** The patient in question had COVID and then a pneumonia during the time he was between treatment regimens. Our presenter reviewed his chest x-rays personally and together with a local TB specialist prior to starting therapy.