

Disseminated Miliary Tuberculosis and Intestinal Tuberculosis Mimicking IBD

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Background

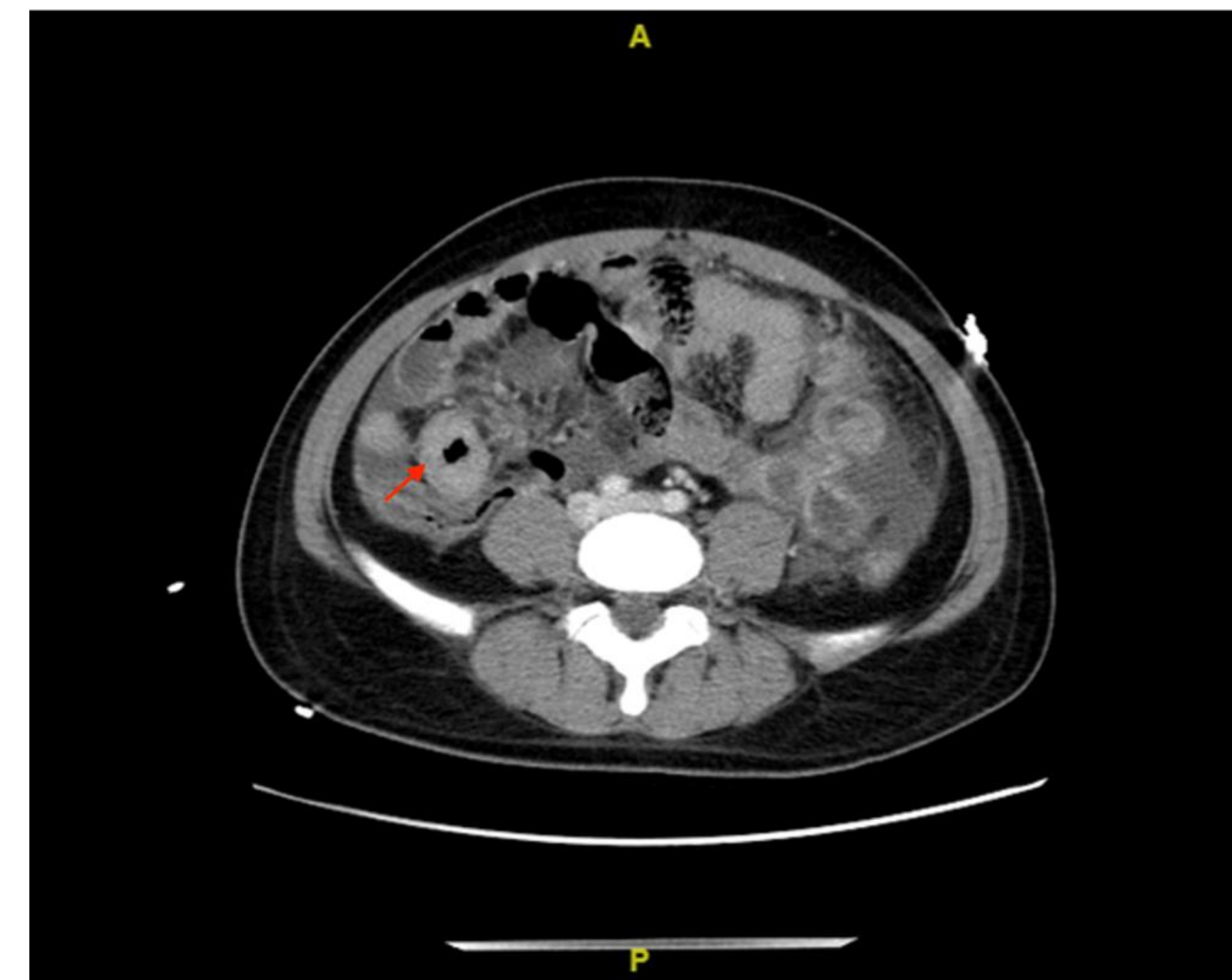
- M. tuberculosis is traditionally thought of as being a pulmonary disease, but it can disseminate hematogenously, causing multisystem disease with various presentations and complications.
- Extrapulmonary Tb accounts for approximately 15% of cases worldwide.¹
- Of those cases, approximately 2% are gastrointestinal cases of Tb. Even less involve the cardiac system, such as in a cardiac tuberculoma.⁵
- A broad differential that includes Tb should be present based on the patient's history and risk factors. Disease specific presentations can mimic other, more common diseases, such as Crohn's disease in this case of gastrointestinal Tb.

Case Presentation

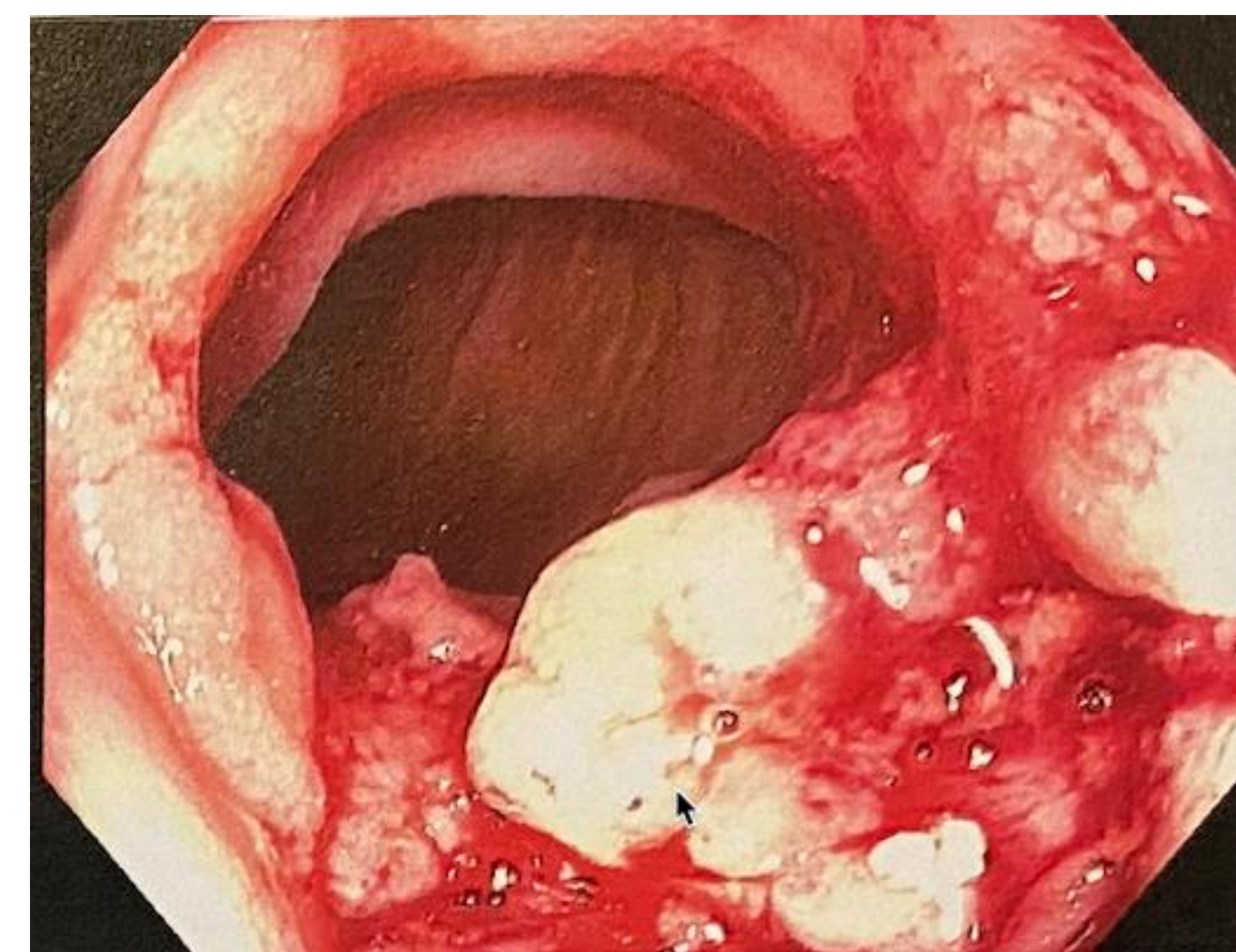
- 21yo M with language barrier (from Guatemala and did not speak traditional Spanish) presented with nausea, vomiting and anorexia.
- Abdominal CT was suspicious for Crohn's disease (figure 1)
- Colonoscopy showed ileitis and skip lesions. Pathology showed necrotizing granulomas. (figure 2)
- AFB of the terminal ileum returned positive 4 weeks after presentation and QuantiFERON-gold returned positive.
- CT chest done for shortness of breath was concerning for an intracardiac mass which was confirmed on cardiac MRI (figure 3)
- Patient was started on RIPE but developed bone marrow suppression from rifampin. He was ultimately discharged on entecavir (co-infection with hepatitis B), prednisone, isoniazid, pyrazinamide, ethambutol and levofloxacin.

Figures

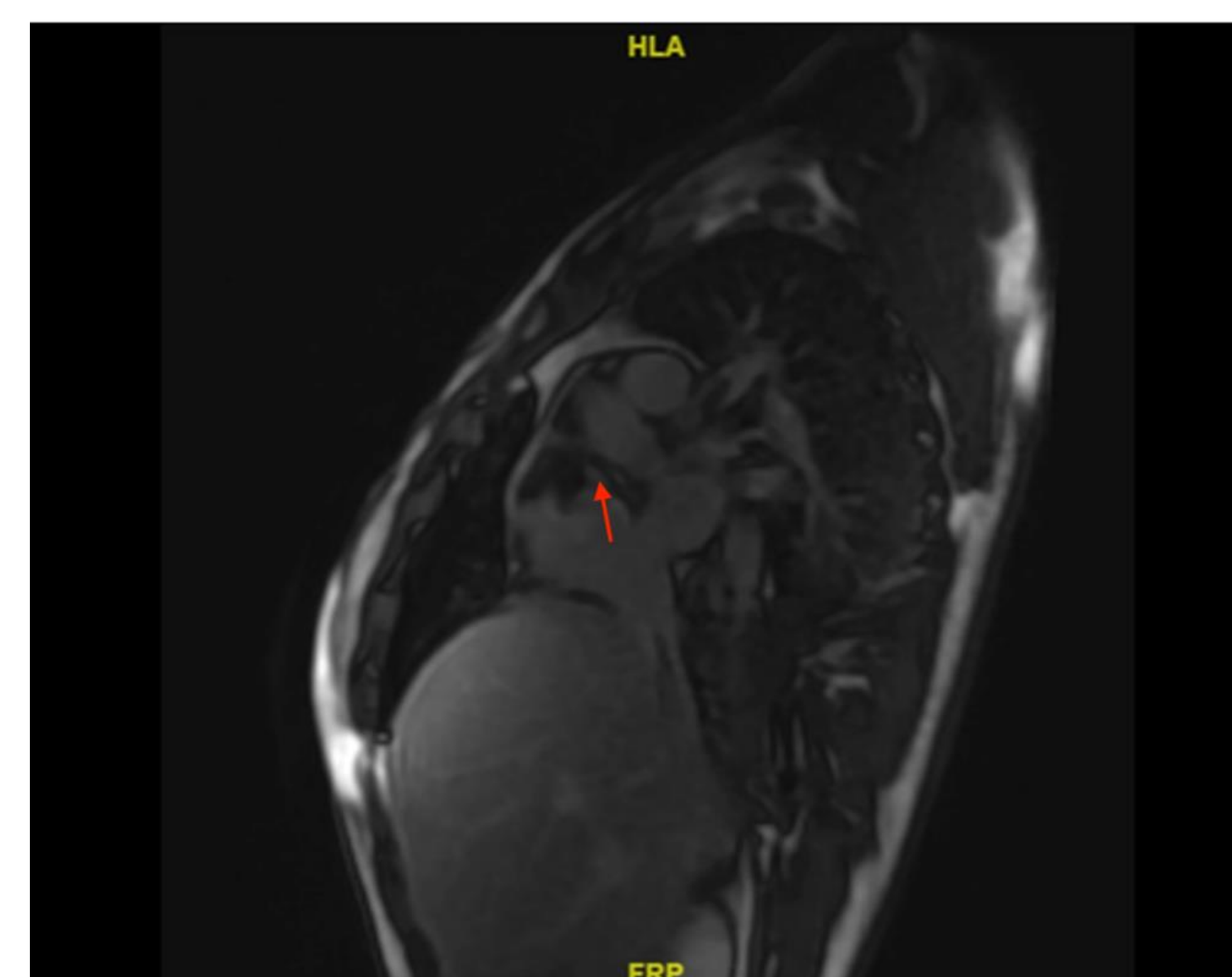
•Figure 1



•Figure 2



•Figure 3



Discussion

- The importance of accurate diagnosis is exemplified in this case as treatment for Crohn's disease diametrically opposes treatment for Tb and could have worsened the patient's disease, ie steroids vs RIPE.
- Recognizing the difference in differential diagnoses between necrotizing and non-necrotizing granuloma formation further supported the diagnosis of Tb even without positive culture data.
- This case also demonstrates the importance of medical translation to obtain an accurate history and physical in addition to being able to explain disease and treatment plan to the patient and their family.

Conclusion

- Gastrointestinal manifestations of M. tuberculosis can mimic other, more common pathologies including Crohn's disease.
- High clinical suspicion is necessary to make the diagnosis of extrapulmonary or disseminate Tb.
- Use of medical translators are exceedingly important in the clinical setting.

References

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 - [3] Khan, Fahmi Y. "Review of literature on disseminated tuberculosis with emphasis on the focused diagnostic workup." *Journal of family & community medicine* vol. 26,2 (2019): 83-91. doi:10.4103/jfcm.JFCM_106_18
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