<u>Title</u>: Murine For a Bad Time: Prehospital Factor Associations With Murine Typhus Related ICU Admission

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Introduction

Across South Texas rates of murine typhus related hospitalization have been on the rise (1). Murine typhus is flea borne febrile illness caused by the bacterium Rickettsia typhi. Murine typhus is easily treated with doxycycline but is commonly underdiagnosed (2). Rarely murine typhus can cause hospitalization and ICU admission (3). To gain a greater understanding of the clinical course of severe murine typhus, our team has set out to identify novel clinical findings associated severe murine typhus courses.

Methods

Medical records were obtained from adults with suspected murine typhus admitted to Doctor's Hospital at Renaissance in Edinburg, Texas, between 01/01/2010 to 05/31/2020. Authors performed manual chart review on the patients meeting the inclusion criteria and documented aspects of the patient's medical history. Descriptive statistics were calculated with a χ^2 test, were P values =0.05 were considered statistically significant.

Results

We enrolled 198 hospitalized adults with suspected murine typhus in our study, 22 requiring ICU admission. No statistically significant relationships were found between ICU admission and PMH indications of: CKD, T2D, HTN, CAD or liver disease. Our results did not show significant relationships between ICU admission and sex, age, or insurance status.

Conclusion

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Our study did not identify statistically significant relationships between adults admitted to the ICU with suspected murine typhus and health history. The findings of our study may be useful for clinicians who practice in regions endemic to murine typhus. Our team will continue to attempt to identify clinical and laboratory findings associated with a more severe disease course of murine typhus.

References

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