

- that can be rapidly diagnosed using urine-based assays. *Sci Rep* 2017. <https://doi.org/10.1038/c41598-017-09895-7>.
- [4] Brastianos PK, Swanson JW, Torbenson M, Sperati J, Karakousis P. Tuberculosis-associated hemophagocytic syndrome. *Lancet Infect Dis* 2006;6:447–54.
 - [5] Zhang Y, Liang G, Qin H, Li Y, Zeng X. Tuberculosis-associated hemophagocytic lymphohistiocytosis with initial presentation of fever of unknown origin in a general hospital. An analysis of 8 clinical cases. *Medicine* 2017;96(16).
 - [6] Au W-Y, Yuen K-Y. Hemophagocytosis in the peripheral blood due to tuberculosis mycobacteremia. *Am J Med* 2005;118:1298–9.
 - [7] Ngai H, Kurashima A, Yoneda R, Kudou T, Inano H. Miliary tuberculosis complicated with disseminated intravascular coagulation. *Kekkaku* 1987;62:469–74 [Article in Japanese. Abstract in English].
 - [8] Patial T, Sharma K, Jaswal AS, Thakur V, Nedl S. Symmetrical peripheral gangrene and tuberculosis: a rare kinship. *Int J Mycobacteriol* 2017;6:407–9.
 - [9] D'Odemont JP, Montiel V, Philippart I. About an unusual systemic disorder: report of a cryptic miliary tuberculosis. *Acta Clin Belg* 2005;60:36–40.
 - [10] Fountain JR. Blood changes associated with disseminate tuberculosis. Report of four fatal cases and review. *BMJ* 1954;2:76–9.
 - [11] Demiroglu H, Ozcebe OI, Ozdemir O, Sungaur A, Dundar S. Pancytopenia with hypocellular bone marrow due to miliary tuberculosis: an unusual presentation. *Acta Hematol* 1994;91:489–91.
 - [12] Dilber E, Erduran E, Kalyoncu M, Mujgan FM, Okten A, Aynaci FM, et al. Hemophagocytic syndrome as an initial presentation of miliary tuberculosis without pulmonary findings. *Scand J Infect Dis* 2002;34:689–92.
 - [13] Cherif E, Feki NB, Hassine LB, Khalfallah N. Haemophagocytic syndrome with disseminated intravascular coagulation associated with tuberculosis. *BMJ Case Rep* 2013. <https://doi.org/10.1136/bcr-2013-008743>.
 - [14] Chien C-C, Chiou T-J, Lee M-Y, Hsiao L-T, Kwang W-K. Tuberculosis-associated hemophagocytocytic syndrome in a hemodialysis patient with protracted fever. *Int J Hematol* 2004;79:334–6.

Chlamydia and gonorrhea screening in the ED setting: increasing evidence of utility and need for further research



I applaud the work of Garlock et al. in investigating the utility of chlamydia (CT) and gonorrhea (GC) screening in emergency departments (ED). In the time of record levels of these infections and the specter of antimicrobial resistant gonorrhea (AMR GC) on the horizon, new means to identify and treat those at risk are sorely needed [1–3].

I would like to point out that somewhat similar work has been done before, and complements to a large extent the findings presented by this study. Two of our previous studies of prospective screening of emergency department patients found both relatively high rates of infection and individual-level factors suitable to refine screening criteria. The first study of universal urine-based screening of females aged 15–35 years for CT/GC found a disease prevalence of 9.1% (CT only 5.7%; GC only 2.5%; CT and GC 0.9%) [4]. Further, restricting screening to only those “...reporting 2+ male partners in the past year or those who thought their sex partner had other partners resulted in a 52% decrease in the number of tests administered and a 73% increase in screened patient prevalence.” Our second universal screening study, including males and oropharyngeal swabs in addition to urine specimens, found an overall prevalence of 7.7% with similar risk between males and females [5]. Further, 26.3% of infected individuals had an oral infection, and the majority of oral GC infections would not be identified with urine-based screening. Both of these studies were pilots at a single hospital site and require further exploration.

The clinical setting (primary and emergency) has been and will likely continue to be a critical aspect of addressing sexually transmitted disease screening and treatment [6,7]. Still, universal screening in relatively low prevalence settings is not generally considered cost-effective [8].

As Hull et al. describe in their review, there are multiple factors impacting both cost-effectiveness and even full implementation of current guidelines [8]. Of particular concern for emergency department-based screenings is the potential loss to follow up, leading to presumptive treatment as a frequently-preferred paradigm. While efficient from an operations perspective, it is unattractive in terms of waste, potential for inadequate treatment (for those truly infected), and adverse personal and social outcomes (for those not infected). Whereas the primary care setting has an established framework for long-term patient

engagement and follow up, none such exists in the emergency setting. Models of linkages between ED-based screening and other agency follow up and treatment have been explored, and I would suggest that further study in this regard is warranted [9,10]. While truly new strategies for addressing increasing rates of STDs and AMR GC are needed, expanding and refining evidence-based practices in existing clinical sites may be comparably low cost and easily generalized.

Acknowledgements

There is no funding associated with this letter.

Wiley D. Jenkins, PhD, MPH, FACE^{1,2}
 Southern Illinois University, School of Medicine, 201 E. Madison Street,
 Springfield, IL 62794-9664, United States of America
 E-mail address: wjenkins@siumed.edu.

12 September 2018

<https://doi.org/10.1016/j.ajem.2018.10.033>

References

- [1] Garlock J, Lee L, Cucci M, Frazee LA, Mullen C. Suspected gonorrhea and chlamydia: incidence and utilization of empiric antibiotics in a health system emergency department setting. *Am J Emerg Med* Aug 7 2018. <https://doi.org/10.1016/j.ajem.2018.08.015> [pii: S0735-6757(18)30651-X, Epub ahead of print].
- [2] Centers for Disease Control and Prevention. STDs at record high, indicating urgent need for prevention. Available at: <https://www.cdc.gov/media/releases/2017/p0926-std-prevention.html>. (Accessed Sept 12 2018).
- [3] Centers for Disease Control and Prevention. Antibiotic-resistant gonorrhea. Available at: <https://www.cdc.gov/std/gonorrhea/arg/default.htm>. (Accessed Sept 12 2018).
- [4] Jenkins WD, Kovach R, Wold B, Zahnd W. Using patient provided information to refine sexually transmitted infection screening criteria among females presenting in the emergency department. *Sex Transm Dis* Dec 2012;39(12):965–7. <https://doi.org/10.1097/OLQ.0b013e31826e882f>.
- [5] Jenkins WD, Nessa LL, Clark T. Cross-sectional study of pharyngeal and genital chlamydia and gonorrhea infections in emergency department patients. *Sex Transm Infect* May 2014;90(3):246–9. <https://doi.org/10.1136/sextrans-2013-051358> [Epub 2013 Dec 23].
- [6] Jenkins WD, Rabins C, Bhattacharya D. Importance of physicians in chlamydia trachomatis control. *Prev Med* Oct 2011;53(4–5):335–7.
- [7] Jenkins WD, Zahnd W, Kovach R, Kissinger P. Chlamydia and gonorrhea screening in United States emergency departments. *J Emerg Med* Oct 25 2012;44(2):558–67. <https://doi.org/10.1016/j.jemermed.2012.08.022> [pii: S0736-4679(12)01088-8, Epub ahead of print].
- [8] Hull S, Kelley S, Clarke JL. Sexually transmitted infections: compelling case for an improved screening strategy. *Popul Health Manag* Sep 2017;20(S1):S1–S11.
- [9] Irvin CB, Nowak B, Moore M, Flynn K, Vretta C. Emergency department chlamydia screening through partnership with the public health department. *Acad Emerg Med* 2009;16:1217–20.
- [10] Finelli L, Schillinger JA, Wasserheit JN. Are emergency departments the next frontier for sexually transmitted disease screening? *Sex Transm Dis* 2001;28:40–2.

Red cell distribution width and mean platelet volume in carbon monoxide poisoning



Dear Editor,

We read the article “Predicting of neuropsychosis in carbon monoxide poisoning according to the plasma troponin, carboxyhemoglobin (COHb), red cell distribution width (RDW) and mean platelet volume (MPV) levels” by Coskun et al. [1] They aimed to determine the predictivity of neuro psychosis in carbon monoxide poisoning by the admission levels of RDW, MPV and troponin I levels which can be measured quickly and easily in the emergency department (ED). They

¹ Chief, Epidemiology and Biostatistics, Department of Population Science and Policy.

² Associate Professor, Family and Community Medicine.