

H1N1-Infected Patient in Intensive Care Unit

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Dear Editor,

The recent report on an H1N1-infected patient in intensive care unit (ICU) is an interesting report.^[1] Kumar *et al.*^[1] reported that "Fever and breathlessness were the main presenting complaints"^[1] and "Serum procalcitonin (PCT) level estimation is useful in determining outcome".

Of interest, the clinical finding of the ICU patients in this case series is not different from other reports in any groups of patients. However, 100% of the two main complaints (fever and breathlessness) seem extremely high compared to the Indian multi-center data.^[2] In addition, a very high death rate in this report might reflect the severity of the disease, with some possible relationship with the clinico-geographical determinant, the delay in case presentation and admission into ICU, or the limitation of the advanced medical care service in the studied ICU. In Thailand, the problem of severe H1N1 infection can also be seen. The high mortality rate can be seen in a report from a rural hospital among the patients with co-infection, underlying medical conditions, or delayed presentation.^[3] Indeed, a global report also showed that the death rate of the epidemic H1N1 infection was not different from that of classical influenza.^[4]

Focusing on the serum PCT, there are some reports on possible clinical usefulness in the management of H1N1-infected cases.^[5,6] However, the important consideration is the lack of the cost-effectiveness evaluation of this new laboratory test. To get this information, the cost of serum PCT test and the diagnostic properties (true positivity, true negativity, and accuracy) in each setting should be determined. The simple cost per an accurate diagnosis can be calculated and can be further used as a rough indicator for cost-effectiveness of the test.

References

1. Kumar TC, Shivakumar NS, Deepak TS, Krishnappa R, Goutam MS, Ganigar V. H1N1-infected patients in ICU and their clinical outcome. *North Am J Med Sci* 2012;4:394-8.
2. Ramakrishna K, Sampath S, Chacko J, Chacko B, Narahari DL, Veerendra HH, *et al.* Clinical profile and predictors of mortality of severe pandemic (H1N1) 2009 virus infection needing intensive care: A multi-centre prospective study from South India. *J Glob Infect Dis* 2012;4:145-52.
3. Chaiwarith R, Prommee N, Liwsrisakun C, Oberdorfer P, Nuntachit N, Pothirat C. A novel influenza A H1N1 clinical manifestations in patients at Chiang Mai University Hospital. *J Med Assoc Thai* 2011;94:908-15.
4. van Kerkhove MD, Vandemaele KA, Shinde V, Jaramillo-Gutierrez G, Koukounari A, Donnelly CA, *et al.* Risk factors for severe outcomes following 2009 influenza A (H1N1) infection: A global pooled analysis. *PLoS Med* 2011;8:e1001053.
5. Piacentini E, Sánchez B, Arauzo V, Calbo E, Cuchi E, Nava JM. Procalcitonin levels are lower in intensive care unit patients with H1N1 influenza A virus pneumonia than in those with community-acquired bacterial pneumonia. A pilot study. *J Crit Care* 2011;26:201-5.
6. Javadi AA, Ataei B, Khorvash F, Babak A, Rostami M, Mostafavizadeh K, *et al.* Clinical features of novel 2009 influenza A (H1N1) infection in Isfahan, Iran. *J Res Med Sci* 2011;16:1550-4.

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