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LETTER TO THE EDITOR

Identify methicillin-resistant *Staphylococcus aureus* nasal carriers in hemodialysis patients

Wang et al¹ reported in the *Journal of the Formosan Medical Association* the prevalence rate of methicillin-resistant *Staphylococcus aureus* (MRSA) nasal colonization in hemodialysis (HD) patients in Taiwan was 5.9%, which was nearly one-half of those reported by Lederer *et al.*² from Germany. However, the methods of detecting MRSA carriage were different in these two studies: the former used one single nasal swab culture, while the later used at least two (varied between two and 10) nasal swab screenings. It is inappropriate to compare a prevalence rate by using different detecting strategies.

Our previous report detected MRSA carriers by performing two consecutive nasal swab cultures obtained at a 1-week interval in another tertiary medical center in northern Taiwan.³ Those who had at least one positive culture of MRSA were defined as MRSA carriers. We found the prevalence of MRSA nasal carriage in HD patients was 9.48%. In detail, there were 13 (4.25%) persistent carriers and 16 (5.23%) intermittent carriers. Following this paper, serial annual surveillance of MRSA nasal carriage in our HD patients still identified these two patterns of MRSA carriers (Table 1). Using only one examination may fail to identify

a significant portion of MRSA carriers. Similar findings were also shown in other studies to detect *S. aureus* carriage.^{4,5} Therefore, we suggest screening of MRSA nasal carriage in HD patients should be carried out by at least two consecutive weekly nasal swab cultures in order to maximize the probability of identifying all MRSA carriers.

References

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Chun-Fu Lai

Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan

Hon-Yen Wu

Yu-Sen Peng*

Department of Internal Medicine, Far Eastern Memorial Hospital, Taipei, Taiwan

*Corresponding author. Far Eastern Memorial Hospital, Number 21, Section 2, Nanya S. Road, Banciao District, New Taipei City 220, Taiwan.

E-mail address: taan70@yahoo.com.tw (Y.-S. Peng)

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Table 1 Prevalence rate of MRSA nasal carriers in hemodialysis patients.^a

Year	2007	2008	2009	2010
MRSA carriage ^b				
MRSA carrier	9.48%	5.04%	5.57%	3.51%
Persistent carrier	4.25%	2.10%	4.11%	2.92%
Intermittent carrier	5.23%	2.94%	1.47%	0.58%

MRSA = methicillin-resistant *Staphylococcus aureus*.

^a Annually survey in the outpatient hemodialysis unit of Far Eastern Memorial Hospital. Decolonization therapy by mupirocin was adapted since 2008.

^b Carriage was detected by performing two consecutive nasal swab cultures obtained at a 1-week interval. Those who had at least one positive culture of MRSA were defined as a MRSA carrier. A person was classed as a persistent carrier when both of the cultures were positive in that survey. The person was considered an intermittent carrier when only one of the cultures was positive.