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# COMMENT LETTERS

# Large-Scale Isolation Facilities and Potential for Secondary Infectious Disease Outbreak

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**To the Editor:** Singapore has instituted large-scale isolation facilities similar to those detailed by Choi et al. (1) for patients with mild coronavirus disease. We highlight the risk for transmission of secondary infectious diseases by sharing our experience with a varicella outbreak.

Three patients, all migrant workers housed in the same isolation hall, were seen for vesicular eruptions, later laboratory confirmed as varicella, within the span of 9 days. The first patient's symptoms were truncal erythematous-based vesicles and erosions after a prodrome of fever and headache. He was promptly transferred for further hospital isolation. As part of a ring vaccination strategy, we offered 200 close contacts postexposure vaccination. However, 2 other patients, not close contacts of the first, had similar eruptions; for the second patient, 7 days later with a rash duration of 2 days, and for the third, 8 days after, with a rash duration of 6 days (Figure). After these additional cases, vaccination was offered to all remaining patients in the isolation facility.

All 3 patients probably contracted varicella from unidentified persons with varicella or zoster infection, given that illness onset fell short of the usual 10–21-day incubation period (2). Although varicella seroprevalence among adults in Singapore is high (88%), data on seroprevalence among migrant workers remain limited (3).

Although isolation facilities obviate the capacity constraints of hospital isolation, our experience highlights the potential for secondary outbreaks, which are disruptive and costly to investigate and control. To mitigate this risk, preentry screening inquiring about previous chickenpox infection or vaccination should be considered. Serologic screening is ideal but challenging to implement. Among patients, social distancing and face coverings should be enforced. We also recommend active surveillance for vesicular rash and fever, prompt isolation of patients with suspected cases, and vaccination of identified close contacts without previous infection, vaccination, or contraindications to vaccination, as



**Figure.** Vesicle on an erythematous base (arrow), commonly described as "dewdrop on rose petal", over the forehead of a patient with varicella, Singapore, 2020.

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well as temporarily halting patient flow while these measures are implemented.

The initial patient described in this article has given his consent for his image and other clinical information to be reported. The patient understands that his name and initials will not be published, and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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# Relative Bradycardia in Patients with Mild-to-Moderate Coronavirus Disease, Japan

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**To the Editors:** Ikeuchi et al. (*1*) described the phenomenon of relative bradycardia in patients as an adjunct to the clinical diagnosis of mild-to-moderate coronavirus disease (COVID-19). Relative bradycardia is defined as an increase in pulse rate of <18 bpm for each 1°C rise in body temperature or a body temperature >38.9°C and pulse rate <120 bpm (*2*). We performed a retrospective study comparing COVID-19 and influenza patients in a tertiary hospital in Singapore. Our study was reviewed and approved by the National Healthcare Group Domain Specific Review Board (reference no. 2020/00324)

We reviewed medical records of patients with COVID-19 or influenza, confirmed by reverse transcription PCR, who were treated during October 2019–April 2020. Patients on β-blockers were excluded (14 COVID-19 patients and 25 influenza patients). Eighty-six patients with COVID-19 and 74 patients with influenza were included; 73 influenza cases were influenza A and 1 influenza B. For COVID-19 patients, median age was 40.6 (range 18–72) years and 49/86 (57%) were male; for influenza patients, median age was 54 (range 22–85) years and 34/74 (45.9%) were male. Fourteen (16.3%) COVID-19 patients and 29 (39.2%) influenza patients had fever >38.9°C; only 4 (13.8%) influenza patients and 0 COVID-19 patients had pulse rates >120 bpm. Median pulse rate was 98.5 (interquartile range 94–101) bpm for COVID-19 patients and 99 (interquartile range 97–116) bpm for influenza patients. Linear regression of the peak temperature and the associated pulse rate of the patient predicted an increase in pulse rate of 11.12 (95% CI 7.65–14.60) bpm for COVID-19 patients and 9.5 (95% CI 5.86–13.14) bpm for influenza patients for each 1°C increase in body temperature.

Our data support the observations by Ikeuchi et al. (*1*) of relative bradycardia in COVID-19 patients. However, results from our cohort demonstrate relative bradycardia in patients with both viral illnesses, indicating that this phenomenon cannot be used to reliably distinguish COVID-19 from influenza and has limited clinical utility in patients who have acute respiratory illnesses.

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