
Bronchoalveolar specimen can help detect COVID-19 in suspicious case with negative PCR for nasopharyngeal specimen test

Sir,
Coronavirus disease-19 (COVID-19) is a new emerging coronavirus infection. The disease firstly affected China before it spread to more than 45 countries at present (March 1, 2020).^[1] Thailand is the second country where the disease has occurred since January 2020.^[2] In Thailand, the gold standard for diagnosis of COVID-19 is molecular diagnosis using polymerase chain reaction (PCR) test, for SAR-CoV2. Here, the authors would like to share an observation from Thailand on PCR diagnosis of COVID-19. From 43 COVID-19 cases in Thailand (March 2, 2020), all were confirmed for infection by PCR test. Regarding PCR diagnosis, 42 cases were based on nasopharyngeal specimens and the remaining 1 case (2.3%) was based

on bronchoalveolar (BAL) lavage specimen. Regarding the case with BAL diagnosis, the patient was a Chinese male, aged 28 years, presenting with fever, cough, running nose, and respiratory difficulty. The patient had no underlying personal illness.

He went to the hospital and had COVID-19 suspicious pneumonia on chest radiography investigation. At first, the PCR tests on nasopharyngeal specimen were done two times and the results were negative. Nevertheless, the physician in-charge performed an additional RT-PCR test on BAL specimen. Repeated BAL PCR tests were performed three times before there was a final positive result for COVID-19. The patient was hospitalized on

January 21, 2020, and admitted for intensive respiratory care in a negative-pressure isolation room. Supportive treatment (antipyretic drug, oxygen therapy, and mucolytic drug) was given to patient without the use of any antiviral drug. The patient improved within 1 week and finally was discharged with complete recovery status on February 13, 2020. There was no local transmission from this person. Our observation demonstrates that RT PCR performed on a BAL specimen might return positive for SARS CoV 2 when nasopharyngeal specimens are negative. Thus we recommend that RT PCR of adequately obtained BAL specimens can be considered for diagnosis of SARS CoV2 if the diagnosis is strongly suspected clinically but nasopharyngeal specimens are for the virus.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Submitted: 06-Mar-2020 **Revised:** 10-Mar-2020

Accepted: 11-Mar-2020 **Published:** 10-Apr-2020

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Access this article online

Quick Response Code:



Website:

www.lungindia.com

DOI:

10.4103/lungindia.lungindia_126_20

How to cite this article: Joob B, Wiwanitkit V. Bronchoalveolar specimen can help detect COVID-19 in suspicious case with negative PCR for nasopharyngeal specimen test. *Lung India* 2020;37:286-7.

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