Attention should be paid to the “cases to be checked” in the screening of COVID-19

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Several patients with viral pneumonia in December 2019 were identified to be related to the Huanan seafood market in Wuhan, China (1,2). The virus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has spread so fast that it has swept the whole of China and some other countries in the world (3). The Chinese government of the national health commission has formed and formulated the diagnosis and treatment plan of the 2019 novel coronavirus disease (COVID-19). So far, it has been updated to the fifth edition, which divided the screening of COVID-19 pneumonia into two parts: suspected cases and confirmed cases (4). However, in the clinical practice of the COVID-19 screening, we found that there were some perplexities. A few patients did not meet the standard of suspected cases but they have some problems in epidemiological history, clinical symptoms or imaging examination so that physicians were afraid of letting them go home or admitting them to the hospitalization in general ward. In view of this situation, we defined this kind of patients as “cases to be checked”, and established a screening process.

The screening process of the “cases to be checked” in fever clinic

Patients in the fever clinic were divided into four categories. The first was the patients who can be excluded SARS-CoV-2 infection. The second was the cases to be checked. The third was the suspected SARS-CoV-2 infection patients. The fourth was confirmed patients with COVID-19. The category of “cases to be checked” was divided into general patients and critical patients, and the two parts of patients were isolated respectively. The general patients were arranged individually in the ordinary quarantine screening room, and the critical patients were arranged in the isolation ward with first aid equipment. The virus nucleic acid tests were carried out in these patients and if the result was negative, the test will be done again. If the two test results were negative, the isolation will be released and the patient will enter the normal medical treatment process. If positive, they will be treated in accordance with the confirmed patient treatment process. Before the patients to be checked were released quarantine, their companions were also regarded as cases to be checked.

The screening process of the “cases to be checked” in patients needed to be hospitalization

Suspected and confirmed patients should be admitted to designated quarantine hospitals, except for patients who need emergency surgery or pregnant women who were about to give birth. However, some of the “cases to be checked” were admitted to the general ward. In view of this situation, our hospital requires each department to keep one or two relatively independent rooms for screening and isolation of these patients and special health care personnel were needed to take care of these patients in order to minimize the number of medical staff exposed to the same patient.

As of February 16, 2020, initial screening was offered to
a total of 1,567 patients in the fever clinic, in which 31 cases were confirmed SARS-CoV-2 infection and 132 cases were suspected. Meanwhile, 76 cases were listed as “cases to be checked”, in which four patients were identified COVID-19 at last.

We found that if we only screening COVID-19 pneumonia in suspected cases, we can not make sure that all of these infected patients were identified, for there were also some SARS-CoV-2 infected patients hidden in the “cases to be checked”. So, we should pay attention to the population with a large base of “cases to be checked” in order to avoid missed diagnoses. In addition, it is of great clinical significance to set up a reasonable screening process for the “cases to be checked”.

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Footnote

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