Dispatch of the Medical Force from Wuhan to Beijing: City-wide nucleic acid census

Editor

On June 20, 2020, the city of Wuhan-the initial epidemic outbreak city-sent six medical teams to Beijing to assist in local medical functions to perform nucleic acid screening tests¹. It is reported that the total number of medical teams dispatched was 70, with a mean age of approximately 27 years, with the main responsibility of performing nucleic acid testing. At that time, Beijing was already carrying out a city-wide nucleic acid census program. As of June 22, 2020, 237 people had active COVID-19 in Beijing, with a total of 830 confirmed, 584 cured and 9 dead^2 .

During the pandemic, China devoted the majority its national efforts to support the Hubei province health care system, achieving notable containment. However, at the moment when China was about to declare success against COVID-19, on June 11, 2020, a smaller-scale COVID-19 outbreak was detected in Beijing³. Given the high density of people in Beijing and the functional importance of the capital, the local government immediately conducted a fact-finding COVID-19 nucleic acid test in a specific area. In order to reserve and strengthen the nucleic acid detection force in Beijing and achieve the goal of carrying out widespread nucleic acid detection, the national health and Health Commission of China dispatched personnel from various provinces including Hubei and Liaoning to create ten teams of 212 people to provide assistance in

the nucleic acid detection work in ten hospitals in Beijing^{4,5}. At the same time, many regional hospitals were transformed into fixed-point units for nucleic acid detection. As of June 20, 2020, the number of nucleic acid detection tests performed per day in Beijing was 230,000, with a total of $2 \cdot 3$ million tests performed⁶.

Through nucleic acid testing and screening, the health authorities of Beijing have established the source of the outbreak. According to the results, they tailored the emergency response level to various regions, so as to allow a maximal re-establishment of economic activities while preventing further spread of the virus. Due to timely initiation of nucleic acid test screening, the response was successful with the daily number of new confirmed cases already dropping by June 14.

From this, we can draw the following conclusions: in the case of an outbreak in a certain region, early nucleic acid testing should be carried out first in order to identify the concentrated outbreak point. Restrictions and treatment can thus be focused and further expansion of the pandemic avoided. Furthermore, nucleic acid test results can accurately assess the extent and impact of regional outbreaks, so as to guide development of relevant prevention and control measures. In addition, this measure can also guide local governments to better allocate limited medical resources optimizing their use, thus achieving a positive medical resource cycle. Given the current worldwide pandemic, we recommend that nucleic acid testing is carried out at the initial stage of all regional outbreaks,

which we are confident may be the key to controlling the pandemic, restoring the economy and stabilizing society.

Chenchen Yan¹, Yuan Xiong¹, Adriana C. Panayi², Bobin Mi¹ and Guohui Liu¹ CY and YX contributed equally to this work.

¹Department of Orthopedics, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430022, China and ²Division of Plastic Surgery, Brigham and Women's Hospital, Harvard Medical School, Boston, 02115, USA

DOI: 10.1002/bjs.11935

- Khan S, Mian A. Medical education: COVID-19 and surgery. *Br J Surg* 2020; **107**: e269.
- 2 Farid Y, Schettino M, Kapila AK, Hamdi M, Cuylits N, Wauthy P et al. Decrease in surgical activity in the COVID-19 pandemic: an economic crisis. Br J Surg 2020; 107: e300.
- 3 Kadhum M, Farrell S, Hussain R, Molodynski A. Mental wellbeing and burnout in surgical trainees: implications for the post-COVID-19 era. Br J Surg 2020; 107: e264.
- 4 Spinelli A, Pellino G. COVID-19 pandemic: perspectives on an unfolding crisis. *Br J Surg* 2020; **107**: 785–787.
- 5 COVIDSurg Collaborative,Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans. *Br J Surg* 2020; 107: 1440–1449.
- 6 Duggan EAH, Appleton SG, Mikhail MM. Comment on: COVID-19 pandemic: perspectives on an unfolding crisis - a UK perspective. Br J Surg 2020; 107: e199.