

THE IMPORTANCE OF PULMONARY ULTRASONOGRAPHY FOR THE DIAGNOSIS OF COVIDATE PNEUMONIA IN THE CONDITIONS OF A RURAL POLYCLINIC

Nasrillo Khakimov, Ruzikhon Khakimova, Shukhrat Gulamov

Andijan State Medical Institute, Uzbekistan

E-mail: shaqfiz@mail.ru

Relevance: during the COVID-19 pandemic, complications of this viral infection in the form of pneumonia, which pose a threat to the patient's life, began to be identified in almost all countries of the world. To diagnose pneumonia, various methods of radiation diagnostics, radiographs, multispiral tomograms, etc. are used today. However, in rural clinics, this is not possible. Currently, each polyclinic has a specialist in ultrasound diagnostics, who have been trained online on ultrasonography of the lungs with COVID-19. General practitioners are faced with the important problem of early diagnosis of pneumonia and determination of management and treatment tactics for this category of patients. Ultrasound examination (ultrasound) of the lungs demonstrates a high diagnostic value in the assessment of various lung diseases and surpasses X-ray examination of the chest organs in sensitivity and specificity. Over the past decades, one of the widely studied issues of ultrasound diagnostics is the assessment of the diagnostic information value of ultrasound in lung diseases. Based on many years of research, specialists from Germany have drawn up a BLUE protocol - urgent lung sonography in acute respiratory failure, in conditions such as pneumothorax, pulmonary edema, pneumonia, emphysema, peripheral masses, pleural diseases. These nosological forms require emergency diagnostics in a critical situation, which is possible with ultrasound of the lungs (Chuyashenko E.V.)

Many researchers cite data that ultrasound can compete with computed tomography (CT) in terms of accuracy in diagnosing pneumonia. R. Copetti in his appeal to the medical community called ultrasound of the lungs a stethoscope of the new millennium and called for the use of this method in ordinary practice. The study of domestic and foreign literature made it possible to conclude that today, ultrasound sonography of the lungs is indispensable, safe and highly informative in the early diagnosis of pneumonia in COVID-19.

The aim of this study was to study the informativeness of ultrasonography (BLUE protocol) in the early diagnosis of pneumonia in COVID-19 in a rural polyclinic.

Materials and research methods. The study included 28 patients who went to the polyclinic and who were suspected of having covid pneumonia. In order to diagnose pneumonia, all patients underwent ultrasound of the lungs using urgent sonography (BLUE protocol) of the lungs, the severity of acute respiratory failure was determined and the patient's condition was monitored.

Research results and their discussion. The analysis established that among the surveyed people prevailed young people up to 35 years old - 20, elderly patients were only 3. There were 19 men, 9 women (and 2 women were pregnant with a period of up to 20 weeks).

Studies according to the BLUE protocol, in 16 patients, changes were detected on both sides in the posterior-basal parts of the lungs, and the greatest number of B-lines was noted locally in the area of the lesion. From the echo of signs of pneumonia in COVID-19, it was revealed: in 13 patients - thickening, unevenness of the pleural line; variants of B-patterns - focal, confluent or multifocal B-lines in 18; consolidations - subpleural, lobar - in 10. Thus, the detection of a large number of confluent B-lines is a consequence of an infectious-inflammatory process affecting the interstitium, which corresponds to the phenomenon of "ground glass" on CT. In 10 patients, the identified unevenly distributed focal B-lines corresponded to the initial stage of pneumonia, in 14 patients, the



revealed alveolar-interstitial changes were a phase of progression; 4 patients had A-lines in the affected area, which corresponded to the phase of pneumonia resolution.

Conclusions: the results of the study showed that the main advantage of the ultrasound method was the possibility of diagnosing coronavirus pneumonia even in pregnant women. Based on various echo signs, it is possible to establish the phase of pneumonia in a rural polyclinic.