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International experts call for enhanced COVID-19 Therapy - CNSystems provides tailor-made solution

International experts treating COVID-19 patients have concluded that hemodynamic optimization plays a major role in the management of the complex interaction of respiratory and cardiovascular factors. CNSystems, a global market-leader for noninvasive hemodynamic monitoring, provides a tailor-made solution to support the diagnostic and therapy-guiding functional hemodynamic tests as recommended by COVID-19 frontline experts and global guidelines.

In recent educational webinars hosted by the European Society of Intensive Care Medicine (ESICM)^{1,2}, experts from the COVID-19 plagued countries Italy, Spain, UK, France and Brazil exchanged their findings emphasizing the hemodynamic management of COVID-19 patients. Apart from therapies for stabilizing respiratory function, hemodynamic optimization has proven extremely important as instabilities account for a large number of complications in this patient group.

Dr. Antonio Messina from the Anesthesia and ICU Department of the Humanitas Clinical and Research Centre in Milan, Italy, suggests different functional tests such as “Passive Leg Raising” or “Mini Fluid Challenge” to optimize the hemodynamic status of COVID-19 patients depending on conditions. Messina explicitly states that reliable hemodynamic markers such as Pulse Pressure Variation (PPV) and Stroke Volume (SV) are necessary for a fast and accurate assessment of fluid status and cardiac condition.¹ The experts also emphasize that the hemodynamic status should be checked from the first clinical examination as most patients present dehydrated; later on, a daily assessment is considered essential since hemodynamics may change very quickly in COVID-19 patients and easily lead to dramatic deterioration. Prof. Jean-Louis Teboul from the ICU Department of the Hôpital de Bicêtre in France calls for precise and real-time monitoring to better manage the “therapeutic conflict”² between restrictive fluid administration as recommended by the guidelines to unburden the lungs versus dehydration and organ damage caused by too little fluid.

CNAP® HD monitoring by CNSystems is a non-invasive, easy-to-use and accurate solution using only a finger sensor for measuring all the parameters in real-time as suggested by the experts. It can be applied by doctors or nurses to support the daily indicated functional hemodynamic tests being recommended by the experts. The big advantage of CNAP® monitoring is to enhance the treatment of COVID-19 with hemodynamic optimization without any burden to the patient also at bedside regardless of ventilation to enable individualized therapy. All CNAP® parameters for guiding fluid management are internationally approved (FDA, CFDA, CE, ANVISA and others).

1 https://esicm-tv.org/webinar7_live_27-haemodynamic-management-in-covid-19-patients.html?fbclid=IwAR0NbnD5vH5zM_wsKvtP4j31KOwtKKfIOuEHLjXZtx_t7WMCV9zmIE0y9O4

2 https://esicm-tv.org/webinar11_live_32-haemodynamic-management-of-covid-19-septic-shock.html