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ANNOUNCEMENT: ADVANTAGES OF LUNG ULTRASOUND IN COVID-19 TRIAGE & SCREENING OF ALL RESPIRATORY DISORDERS

In response to the current Coronavirus pandemic, the international medical community has increased its united efforts to seek solutions targeting all forms of treatment, prevention as well as safety measures for medical personnel. From the radiological society, recent reports show the use of Lung Ultrasound in TRIAGE situations and present significant benefits in identifying respiratory disorders that may be related to Covid-19.

To clarify, Lung Ultrasound technology is not a direct diagnostic solution for the Coronavirus. However portable ultrasound scanners are proven to visually indicate stages of Pneumonia and other acute respiratory issues in real time. In emergent situations where time is of the extreme essence, this technology could prove highly advantageous.

Reports indicate our European medical allies are now beginning to employ the use of ultrasound equipment in triaging Covid-19 patients “as an effective replacement of the stethoscope”. Many standard models of portable sonographic devices are designed to identify respiratory problems. Applying this modality in the initial screening of respiratory issues (for possible Coronavirus contamination) as well as for periodic checkups of all our medical responders could be a significant upgrade in the battle against this health crisis.

Please review the enclosed article about my European colleagues supporting this protocol. I would be more than happy to discuss this with you in greater detail and explore how we could make real-time respiratory scanning a reality in our current crisis. My team and I are prepared to work with you in developing an educational program as well as a comprehensive plan to supply the ‘battlefield’ with lung ultrasound equipment in all triage settings.

Thank you for your consideration-

Dr. Robert L. Bard, MD, PC, DABR, FASLMS

EUROPEAN MEDICAL EXPERTS CONFIRM ADVANTAGES OF LUNG ULTRASOUND SOLUTION FOR COVID-19 TRIAGE



April 2, 2020- Dr. Robert L. Bard, NYC imaging specialist collaborates with an international group of medical leaders including Dr. Danilo Buonsenso (Rome, Italy) who recently published reports about "ultrasound equipment as an effective replacement of the stethoscope." Dr. Buonsenso's review presents the valid uses and benefits of Lung Ultrasound in identifying respiratory disorders that may be associated with Covid-19.

Currently, front line physicians in Italy and Spain are reportedly triaging with portable ultrasound units that reduce logistical problems of a chaotic environment and healthcare worker exposure. Since imaging with CT or ultrasound is not diagnostic, determining who needs hospitalization is essential in a pandemic overwhelming medical providers. Dr. Buonsenso, at the viral epicenter in Rome, uses sonograms to decide who requires a CT scan.

The use of CT lung imaging for COVID-19 has been recognized as the diagnostic standard during our current epidemic. Meanwhile, experts find CT to have disadvantages like radiation exposure. Respiratory distress creates motion artifacts on images that may simulate pulmonary inflammation. Also, viral pneumonia is not diagnostically distinguishable from other viral inflammations in the lung so the argument for a screening modality is useful to separate the critically ill from those needing outpatient treatment. This review was stated by Dr. Klaus Lessnau, author of "Atlas of Chest Sonography" (Springer 2003), employs both CT and ultrasound imaging in clinical practice.

Dr. Bard reviews international healthcare and technology updates as part of his continued research in the radiological society. This includes Dr. Buonsenso's national reports about the Covid crisis and the expanded use of lung ultrasound as part of his investigation of children as clinically unaffected carriers. "The global pandemic demands effective answers toward a cure as well as protection of healthcare workers on duty", says Dr. Bard. "I have the highest regard for the European approach to problem solving both clinically and technologically... applying Dr. Buonsenso's concept makes perfect sense to me and carries great value in our war against Covid-19."



Cancer imaging expert Dr. Robert Bard supports the use of Advanced 3D Ultrasound Doppler technology for diagnosing some of the most complex health disorders-- and the use of portable lung ultrasound equipment for field applications especially for Covid-19 triage units.

According to Dr. Bard, Lung ultrasound has been used in emergency rooms since it was introduced to the Mt Sinai Medical School in 2014 and is now used nationwide to diagnose pneumonia (viral or bacterial) in children which spares them unnecessary x-rays since it is so accurate. "It is like an electronic stethoscope since lung disease and heart failure producing pulmonary fluid buildup are diagnosed or confirmed with portable ultrasound units at the bedside. This is considered the best imaging tool to diagnose a

collapsed lung in seconds which has proven lifesaving as a time saver for on the spot detection."

In a recent telehealth conference, Dr. Bard explains how ultrasound probes study the lungs between the ribs to read the lung surface where most Covid pathology is situated. Portable units have the advantage of containment within a sterile sleeve, preventing accidental viral spread to imaging equipment necessitating full decontamination procedures. All clinical imaging was correlated with the patient's oxygen saturation and clinical setting. The virus has known cardiac toxicity so the same sonogram unit may image the heart for fluid buildup and weakened contraction. This may differentiate heart failure from pulmonary infection in some cases which may have similar clinical presentations.

About Dr. Bard

Dr. Robert Bard currently runs a private imaging center in NYC specializing in advanced 3-D sonography to detect cancer tumors and other health disorders. He lectures in medical conferences worldwide, runs a cancer awareness program for first responders and is also a publisher of countless educational books and articles about cancer imaging and other health/wellness related materials.

References

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