COVID-19 emergency

The growing outbreak of COVID-19 has generated unprecedented stress on healthcare systems at a global level and the demand on point-of-care US in Emergency Department, ICU, and CCU departments has dramatically increased due to the unexpected number of critical patients to be monitored. Interstitial lung disease is a life-threatening complication of COVID infection. The first reports from different parts of the world indicate that lung US can document signs suggestive of interstitial-alveolar damage. Another severe COVID complication is perimyocarditis, which can be also easily diagnosed by US during the same examination. An advantage of lung and cardiac US in the current epidemiological situation is that it can be performed directly at the bedside by the same evaluating clinician, thus reducing the number of health professionals potentially exposed to the patient.

Benefits	Warnings
Sensitivity and specificity in lung-imaging	Qualified operators required
Agile, immediate, and mobile	Result interpretation
No ionizing radiation	Cleaning and disinfection

Antero/Lateral Lung







*Drawings from Richelle Kruisselbrink et al, I-AIM (Indication, Acquisition, Interpretation,

Lung Ultrasound Normal and Abnormal Patterns



A-lines



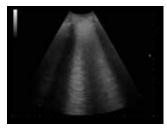
Regular pleural line, B-lines



Large pleural effusion, lung consolidation

Normal findings "SPAA"

- Lung **S**liding
- Lung **P**ulse
- A-Lines
- Short Vertical Artifacts



Irregular pleural line, B-lines

Abnormal findings Pneumothorax "3A-2P"

- Absence of Lung Sliding
- Absence of Lung Pulse
- Absence of Comete Tail/ Vertical Artifacts
- **P**resence of Lung Point
- Presence of A-Lines

Increased Lung Density"ABC"

- Absence of A-Lines
- **B**-lines
- **C**onsolidation

Pleural Effusion "CSF"

- Negative **C**urtain Sign
- Positive **S**pine Sign
- Presence of Fluid



Our best proposal to fight against Covid-19



MyLab[™] **OMEGA**





Complete	Fast	Compact	Connected
High performance in all the applications	2 probe connectors, up to 4 with multiconnector	Full screen mode	Follow-up & Multi-modality options to retrieve other imaging modalities
Large probe portfolio, convex, linear and phased-array	Touchscreen with intuitive menus	Swivelling monitor	eStreaming for real-time imaging streaming
Advanced configurations, including TE probe or Strain package	Long-duration battery and quick boot-up time (15")	Maneuverable trolley with 4 swivelling wheels	eTablet & MyLab™Remote for remote storage and control



Low-frequency probe to scan lung parenchyma and commonly used in emergency for abdominal organs



High-frequency probe to scan pleural area and superficial structures. Commonly used to scan vessels and support line placement



Low-frequency phased-array probe to scan the lung and commonly used for heart functionality monitoring

System/Transducer cleaning & disinfection:

Dedicated guidelines developed to avoid cross-contamination of patients or staff

Scientific references

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