

Lung ultrasound

EVALUATING FOR OTHER LUNG PATHOLOGIES

Lung ultrasound can allow you to identify other lung pathologies, such as:



Pulmonary embolism



Acute respiratory distress syndrome (ARDS)



Pulmonary contusion



Influenza

Pulmonary embolism

Normal lung appearance is the most common finding associated with pulmonary embolism. Seeing the appearance of normal lung on ultrasound, in a patient with dyspnea or hypoxia, raises the concern for pulmonary embolus. Consider integrating the lung ultrasound with an echocardiogram and a deep vein thrombosis (DVT) study.

Subpleural consolidations can be seen in patients with pulmonary embolus. This likely reflects a small lung infarct. Pay particular attention to points of pleuritic pain.

Acute respiratory distress syndrome (ARDS)

Patients with ARDS typically have diffuse sonographic B lines. The presence of other findings helps differentiate ARDS from cardiogenic pulmonary edema. The following table outlines the likelihood of seeing each finding in ARDS versus pulmonary edema.

	ARDS (%)	Pulmonary edema (%)
B lines	100	100
Irregular pleura	100	25
Reduced lung sliding	100	0
Spared areas	100	0
Consolidations	83	0
Pleural effusion	66	95



Pulmonary contusion

Chest trauma resulting in a pulmonary contusion produces focal B lines. There may also be an associated pleural effusion or a thickened pleura.

Influenza

Lung ultrasound findings in influenza may range from normal lung to a diffuse B line profile with subpleural consolidations. The latter has potential for overlap with ARDS; as always, consider the lung ultrasound findings in light of the clinical presentation.